

## W0. Introduction

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### W0.1

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

Mars has been proudly family owned for over 100 years. It's this independence that gives us the gift of freedom to think in generations, not quarters, so we can invest in the long-term future of our business, our people and the planet — all guided by our enduring Principles. We believe the world we want tomorrow starts with how we do business today. Our bold ambitions must be matched with actions today from our more than 115,000 Associates in 80 countries around the world. Some of our current initiatives are:

- Investing \$1 billion over the next several years to become [sustainable in a generation](#)
- Working to improve the [wellbeing for families](#) around the world
- Leveraging and sharing our research to create a [better world for pets](#)

Every day we are one step closer to the world we want tomorrow, through our steadfast commitment to action today.

Our business and the actions we take every day are founded on The Five Principles. They're at the heart of everything we do, no matter what — making sure we don't just talk about a better future, but work towards it every day.

Through our Sustainable in a Generation Plan, we aim to grow our business in ways that are good for people, good for the planet and good for our business. The Plan sets new goals in three key areas: Healthy Planet, Thriving People and Nourishing Wellbeing. Within the Healthy Planet area, our ultimate water stewardship goal is to **eliminate water use in excess of sustainable levels throughout our value chain.**

We have a diverse global business comprised of four segments: Mars Petcare, Mars Wrigley, Mars Food, and Mars Edge. Our portfolio of brands offers quality and value to consumers around the world and includes PEDIGREE®, WHISKAS®, M&M'S®, SNICKERS®, MARS®, EXTRA®, ORBIT®, UNCLE BEN'S® and many more.

### W-FB0.1a

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**(W-FB0.1a) Which activities in the food, beverage, and tobacco sector does your organization engage in?**

Processing/Manufacturing

### W0.2

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**(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 2019	December 31 2019

### W0.3

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

Argentina  
Australia  
Austria  
Belgium  
Brazil  
Canada  
China  
Colombia  
Czechia  
Egypt  
France  
Germany  
Hungary  
India  
Indonesia  
Japan  
Kenya  
Lithuania  
Mexico  
Netherlands  
New Zealand  
Philippines  
Poland  
Russian Federation  
Saudi Arabia  
South Africa  
Spain  
Taiwan, Greater China  
Thailand  
United Arab Emirates  
United Kingdom of Great Britain and Northern Ireland  
United States of America

**W0.4**

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

USD

**W0.5**

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

Companies, entities or groups over which operational control is exercised

**W0.6**

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

Yes

**W0.6a**

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

Exclusion	Please explain
Offices with fewer than 80 associates	We do not currently record water use at smaller office buildings, as their impact is not material compared with factories and larger offices.
Banfield Veterinary Hospitals	We do not currently record water use at these small veterinary hospitals. We expect their impact to be minimal compared with factories and larger offices.
Cocoa plantation, Ecuador	Small research and development operation not yet incorporated into Mars sustainability reporting. We expect its impact to be minimal compared with factories, especially as cocoa produced in this location is not irrigated.
VCA pet health care services	Recent acquisition not yet incorporated into Mars sustainability reporting.

**W1. Current state**

## W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Vital	All manufacturing sites depend on freshwater for direct use. Our primary direct use of good quality freshwater is as an essential ingredient in our products and for manufacturing in line with food safety regulations. It is also necessary for providing associates at our sites with facilities for eating and washing. Water stress could seriously affect our ability to operate, by causing quality problems, production downtime, poor relationships with communities sharing our water sources, or even site closure. Food safety and hygiene regulations determine our need for good quality freshwater, and therefore the vital level of importance to the business. Using lower quality water is not an option. In terms of availability, we use the WRI Aqueduct V3.0 tool to identify sites that operate in areas of water stress or which are likely to face stress in the future, as these are the sites where the importance of securing supplies of good quality freshwater is highest. We are working to increase water efficiency at these sites and expect their water dependency to reduce in the future. In terms of indirect use, water is essential for growing and processing the crops we rely on as raw materials for our products, and for the health of the farming communities who grow them. The level of dependence within our supply chain varies based on the crop, location and farming method used. Changing weather patterns as a result of climate change are already threatening farmers' ability to grow some crops in some regions and will continue to do so, threatening security of supply, farmer incomes and well-being. We use the WRI Aqueduct tool to assess which of the areas we source our raw materials from are water stressed, to determine the importance of securing adequate supplies. We are working with our supply chain to increase water efficiency, starting with priority locations which are highly water-stressed and where we source large quantities of irrigated materials like rice and mint.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Not very important	The level of dependency on recycled water for direct use in our operations varies based on the level of water stress, which is determined using the WRI Aqueduct tool and local watershed data, where available. Using recycled water in our manufacturing operations (where food safety regulations allow it) is an important way to improve water efficiency and reduce dependency in water-stressed areas. Sites are beginning to quantify the recycled water they use so we can monitor and report on this more fully in the future. For example, our Janaszowek site in Poland recycles treated waste water to reduce fresh water usage within its cooling towers which are the largest water user on the site. In addition, Mars Wrigley factories across Asia reuse treated waste water for onsite amenities, to lessen the burden on municipal treatment systems. We expect water dependency to reduce in future as more sites implement similar measures. Our assessments of water impacts in our supply chain show that blue water use and baseline water stress in the catchments where we source raw materials are our most material water impacts. We do not consider indirect use of recycled, brackish and/or produced water to be material.

## W-FB1.1a

### (W-FB1.1a) Which water-intensive agricultural commodities that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodities	% of revenue dependent on these agricultural commodities	Produced and/or sourced	Please explain
Rice	10-20	Sourced	Rice is a key ingredient for brands including UNCLE BEN'S and ROYAL CANIN pet foods. We source rice from the United States, southern Europe, India, Pakistan and South East Asia. Most rice that we source is irrigated. We work with rice farmers to use alternate wetting and drying (AWD), an irrigation technique that reduces both water use and GHG emissions with little or no impact on yields. We prioritize our engagement on rice sourced from stressed locations.
Maize	41-60	Sourced	Maize is an important ingredient in our pet foods. We source maize from a number of countries globally. Our impact factors from the World Food Lifecycle database indicate that a portion of maize cultivation is irrigated, though we have limited location information on irrigation practices.
Sugar	41-60	Sourced	Sugar is an important ingredient for our Mars Wrigley brands. We source sugar globally, with our largest countries of supply being Brazil, Myanmar and China for sugarcane, and the United States, Netherlands and Russia for sugar beet. As we engage with our suppliers, we are further refining our data to understand the specific water risks within our sugar supply chain.
Other, please specify (Mint)	10-20	Sourced	Mint is a crucial ingredient for Mars Wrigley. We source mint in the United States, Canada and India. All mint sourced is irrigated, and we work with farmers to reduce water use, with a focus on India where mint is sourced from an area of high baseline water stress.
Other, please specify (Peanuts)	10-20	Sourced	Peanuts are an important ingredient for our SNICKERS brand. We source peanuts primarily in the United States, from irrigated sources.

## 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	All our manufacturing sites and large offices report water withdrawal data every four weeks through our Enablon system, as part of our regular corporate reporting program. This helps us to maintain an accurate water footprint, to monitor areas that may become water-stressed in the future, and to ensure sites are on track to achieve the site-level water efficiency targets within our Sustainable in a Generation Plan. By 2020, we aim to improve water intensity (m3/tonne) by 15% at factories in water-stressed locations compared with 2015 levels.
Water withdrawals – volumes by source	76-99	Our manufacturing sites collect withdrawal data from four sources: municipal, ground, surface and rainwater. This helps us to better understand our water footprint, and informs our target to ensure water use in our value chain is within annually renewable limits. Some manufacturing sites in the network use surface or ground water in closed cooling systems, with all water returned to source with a very small temperature elevation. We believe this non-consumptive use has a reduced environmental impact and separate this from consumptive usage in our reporting. This information is collected every four weeks through our Enablon system, as part of our regular corporate reporting program.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	76-99	We require manufacturing sites to report water withdrawal quality incidents annually through our Enablon system, as part of our annual site water risk assessment process, so we can ensure that adequate mitigation measures are in place. Sites also monitor water withdrawals quality as part of their food safety procedures.
Water discharges – total volumes	76-99	We ask all our manufacturing sites to report water discharge volume data and 45% now have metering capabilities in place to measure this. Thirty-four percent of sites rely on utility invoicing for this data, and the remainder estimate their wastewater volumes. Where meters are in place, this data is provided every four weeks. Where no meters are in place, the frequency of measurement depends on the frequency at which utility invoices are received.
Water discharges – volumes by destination	76-99	We ask manufacturing sites to report their wastewater discharge volume by destination every four weeks through our Enablon system, as part of our regular corporate reporting program. However, some sites do not yet have the metering capabilities to measure this. The data help ensure our sites are staying within regulatory limits and to take action where needed.
Water discharges – volumes by treatment method	76-99	We ask manufacturing sites to report the level of wastewater treatment they apply on-site (primary, secondary or tertiary/advanced treatment) every four weeks through our Enablon system, as part of our regular corporate reporting program. We also request total wastewater discharge volumes. Generally, all discharged water reported from a site would flow through the indicated wastewater treatment process. Every manufacturing site monitors this information at the local level and reviews wastewater destinations as part of our environmental compliance program. At a corporate level, we have chosen to focus our targets on reducing water intake to factories, which we believe is more material to our business, rather than beginning with an “end of pipe” approach focused on treating wastewater.
Water discharge quality – by standard effluent parameters	76-99	We collect data on manufacturing site water discharge quality parameters every four weeks through our Enablon system, as part of our regular corporate reporting program. We also monitor site compliance with our corporate waste water management standard. This requires sites to carry out twice-yearly sampling of wastewater at each discharge location, or more frequently where required. Sampling should include, but is not limited to: temperature, oil and grease, BOD5, COD and TSS.
Water discharge quality – temperature	100%	Manufacturing sites monitor water discharge temperature as a requirement of our Environmental Wastewater Management Standard. This requires sites to carry out twice-yearly sampling of wastewater at each discharge location, or more frequent where required. Sampling should include but is not limited to temperature, oil and grease, BOD5, COD and TSS.
Water consumption – total volume	76-99	We calculate consumption data as [total water intake] - [wastewater], based on the data that our manufacturing sites provide in these two categories every four weeks through our Enablon system, as part of our regular corporate reporting program.
Water recycled/reused	76-99	We ask all manufacturing sites to report the volume of water recycled or reused every four weeks through our Enablon system, as part of our regular corporate reporting program. In 2019, three sites reported using reused or recycled water. This is independent of sites using rainwater for irrigation or other on-site purposes.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Access to safe drinking water and proper sanitation is a fundamental part of our food manufacturing business. It is monitored as part of our quality and food safety program and as part of our Responsible Workplace program. These programs fall under our Site Integrated Governance process, which ensures all sites undergo a third-party audit at least every three years.

**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	30351.3	Higher	Total water withdrawals across Mars, Incorporated increased by 4% in 2019 vs 2018. Municipal water withdrawals actually reduced by 690 ML from 2018 to 2019, as our manufacturing sites implemented water efficiency measures. However, this was negated by an increase of 1,754 ML in non-consumptive withdrawals at two sites that withdraw canal and river water for cooling chillers, before returning all the water withdrawn to the original source with a marginal increase in temperature. Mars does not target the reduction of these non-consumptive withdrawals, which are determined by external temperatures and factory production demand. We expect further decreases to our overall withdrawals in future, as our manufacturing sites continue to implement water stewardship programs and the resulting improvements outweigh our non-consumptive use.
Total discharges	8170.9	Higher	There was an increase in total wastewater discharge (3.8%) in 2019 compared with 2018. Our manufacturing sites are increasing their focus on wastewater treatment and wastewater flows. This has improved our measurement and estimation, leading to an increase in reported wastewater flows. Coupled with the reduction in withdrawals of municipal water, this has resulted in the overall increase. We expect reductions in future as our sites continue to implement water stewardship programs.
Total consumption	4681.2	Much lower	We define Water Consumption as [Water Withdrawal (excluding non-consumptive surface water & non-consumptive ground water)] - [Water Discharge]. We exclude non-consumptive withdrawals at two sites that withdraw canal and river water for cooling chillers, before returning all the water withdrawn to the original source with a marginal increase in temperature. Mars does not target the reduction of these non-consumptive withdrawals, which are determined by ambient temperatures and factory production demand. This year's consumption declined (-18%) due to a decrease in water withdrawals (excluding non-consumptive withdrawals) and an increase in wastewater discharge. We expect further decreases in future as our sites continue to implement water stewardship programs.

## W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	26-50	Higher	WRI Aqueduct	We identify direct operations at high or extreme risk of water stress using the WRI Aqueduct tool. Based on Aqueduct, we consider a manufacturing site in an area with a baseline water stress (BWS) of 40% or above to be water-stressed. On this basis, in 2019, 32.5% of water withdrawals for our manufacturing sites was from water-stressed areas (BWS 40% or above), compared with 25.1% in 2018. This rise was due to increased usage in some water-stressed areas, for new products, quality transformation, and for cooling during a warmer than average summer. This adversely affected our water efficiency.

## W-FB1.2e

(W-FB1.2e) For each commodity reported in question W-FB1.1a, do you know the proportion that is produced/sourced from areas with water stress?

Agricultural commodities	The proportion of this commodity produced in areas with water stress is known	The proportion of this commodity sourced from areas with water stress is known	Please explain
Rice	Not applicable	Yes	We map our supply chains and know the specific farm areas or growing regions for 90% of our rice supply. We also know the country of origin for the remaining 10%. Based on these known locations and using an internal GIS system that draws water-stress data from WRI's Aqueduct V3.0 tool, as well as crop-specific location maps from Earthstat (2000) and Mapspam (2010), we have calculated that 34% of sourcing is in water-stressed areas. Our methodology is similar to that used by WRI's Aqueduct Food tool.
Maize	Not applicable	Yes	We map our supply chains and know the growing region or farm collection point for 99.5% of our supply. Based on these known locations and using an internal GIS system that draws water-stress data from WRI's Aqueduct V3.0 tool, as well as crop-specific location maps from Earthstat (2000) and Mapspam (2010), we have calculated that 41% of sourcing is in water-stressed areas. Our methodology is similar to that used by WRI's Aqueduct Food tool.
Sugar	Not applicable	Yes	We map our supply chains and know the town or region for 94% of our sugar supply and the country only for 6%. Based on these known locations and using an internal GIS system that draws water-stress data from WRI's Aqueduct V3.0 tool, as well as crop-specific location maps from Earthstat (2000) and Mapspam (2010), we have calculated that 29% of sourcing is in water-stressed areas. Our methodology is similar to that used by WRI's Aqueduct Food tool.
Other commodities from W-FB1.1a, please specify (Mint)	Not applicable	Yes	We map our supply chain and know the exact farm location for 49% of our mint supply, and the town or region for 51%. Based on these known locations and using an internal GIS system that draws water-stress data from WRI's Aqueduct V3.0 tool, as well as crop-specific location maps from Earthstat (2000) and Mapspam (2010), we have calculated that 57% of sourcing is in water-stressed areas. Our methodology is similar to that used by WRI's Aqueduct Food tool.
Other commodities from W-FB1.1a, please specify (Peanuts)	Not applicable	Yes	We map our supply chain and know the exact farm location for 24% of our peanut supply and the town or region for 76%. Based on these known locations and using an internal GIS system that draws water-stress data from WRI's Aqueduct V3.0 tool, as well as crop-specific location maps from Earthstat (2000) and Mapspam (2010), we have calculated that 15% of sourcing is in water-stressed areas. Our methodology is similar to that used by WRI's Aqueduct Food tool.

## W-FB1.2g

(W-FB1.2g) What proportion of the sourced agricultural commodities reported in W-FB1.1a originate from areas with water stress?

Agricultural commodities	% of total agricultural commodity sourced from areas with water stress	Please explain
Rice	26-50	This is calculated using the percentage by weight of rice coming from areas with baseline water stress (BWS) of 40% or above from WRI Aqueduct 3.0. We don't have specific origin coordinates for 9% of our rice, or we know the location but it may cover a number of watersheds with varying levels of water stress. In these cases, our internal GIS system draws water-stress data from WRI Aqueduct 3.0 and crop-specific location maps from Earthstat (2000) and Mapspam (2010). We estimate crop-specific average BWS values for the identified country/region/supply shed, and for the proportion of the material sourced from the area that is likely to have originated in a water-stressed location, assuming our sourcing is evenly spread over the areas identified. This 9% of rice makes up only 2.1% of the assumed gap to sustainable water use, as the countries mostly have low average BWS. We are working to improve origin specificity and BWS averaging capabilities to improve data accuracy. Our GIS system will help our buyers to understand how crops from water-stressed locations affect our water target. We expect this increased visibility to halve the tonnage of materials including broken rice sourced from water-stressed areas by 2025. For materials including whole rice, we expect the proportion sourced from water-stressed areas to remain the same in the medium term as it is not possible to source from other areas. Our sustainable agriculture programs are reducing water use in these locations.
Maize	26-50	This is calculated using the percentage by weight of maize coming from areas with baseline water stress (BWS) of 40% or above from WRI Aqueduct 3.0. We don't have specific origin coordinates for 11% of our maize, or we know the location but it may cover a number of watersheds with varying levels of water stress. In these cases, our internal GIS system draws water-stress data from WRI Aqueduct 3.0 and crop-specific location maps from Earthstat (2000) and Mapspam (2010). We estimate crop-specific average BWS values for the identified country/region/supply shed, and for the proportion of the material sourced from the area that is likely to have originated in a water-stressed location, assuming our sourcing is evenly spread over the areas identified. This 11% of maize makes up only 0.5% of the assumed gap to sustainable water use, as the countries mostly have low average BWS. We are working to improve origin specificity and BWS averaging capabilities to improve data accuracy. Our GIS system will help our buyers to understand how crops from water-stressed locations affect our water target. We expect this increased visibility to halve the tonnage of materials including maize sourced from water-stressed areas by 2025.
Sugar	26-50	This is calculated using the percentage by weight of sugar coming from areas with baseline water stress (BWS) of 40% or above from WRI Aqueduct 3.0. We don't have specific origin coordinates for 6.5% of our sugar, or we know the location but it may cover a number of watersheds with varying levels of water stress. In these cases, our internal GIS system draws water-stress data from WRI Aqueduct 3.0 and crop-specific location maps from Earthstat (2000) and Mapspam (2010). We estimate crop-specific average BWS values for the identified country/region/supply shed, and for the proportion of the material sourced from the area that is likely to have originated in a water-stressed location, assuming our sourcing is evenly spread over the areas identified. This 6.5% of sugar makes up only 2.7% of the assumed gap to sustainable water use, as the countries mostly have low average BWS. We are working to improve origin specificity and BWS averaging capabilities to improve data accuracy. Our GIS system will help our buyers to understand how crops from water-stressed locations affect our water target. We expect this increased visibility to halve the tonnage of materials including sugar sourced from water-stressed areas by 2025.
Other sourced commodities from W-FB1.2e, please specify (Mint)	51-75	This is calculated using the percentage by weight of mint coming from areas with baseline water stress (BWS) of 40% or above from WRI Aqueduct 3.0. 100% of our mint comes from areas where suppliers have provided coordinates, which we combine with a radius or state / province to calculate the average BWS. We use an internal GIS system that draws water-stress data from WRI Aqueduct 3.0 and crop-specific location maps from Earthstat (2000) and Mapspam (2010). Our GIS system will help our buyers to understand how crops from water-stressed locations affect our water target. We expect this increased visibility to halve the tonnage of some raw materials sourced from water-stressed areas by 2025. For materials including mint, we expect the proportion sourced from water-stressed areas to remain the same in the medium term as it is not possible to source from other areas. Our sustainable agriculture programs are reducing water use in these locations.
Other sourced commodities from W-FB1.2e, please specify (Peanuts)	11-25	This is calculated using the percentage by weight of mint coming from areas with baseline water stress (BWS) of 40% or above from WRI Aqueduct 3.0. 100% of our peanuts come from areas where suppliers have provided coordinates which we combine with a radius or state / province to calculate the average BWS. We use an internal GIS system that draws water-stress data from WRI Aqueduct 3.0 and crop-specific location maps from Earthstat (2000) and Mapspam (2010). Our GIS system will help our buyers to understand how crops from water-stressed locations affect our water target. We expect this increased visibility to halve the tonnage of some raw materials sourced from water-stressed areas by 2025.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	15459.88	Higher	Treated fresh surface water is relevant as it can be used in our products and processes, depending on the site. Consumptive fresh surface water use actually reduced by 58 ML in 2019, as our sites implemented water efficiency measures. However, this was negated by an increase of 15,039 ML in non-consumptive withdrawals at two sites that withdraw canal and river water for cooling, before returning all the water withdrawn to source with a marginal temperature increase. Mars does not target the reduction of these non-consumptive withdrawals, which have minimal impact. We expect further decreases to overall withdrawals in future, as sites implement water efficiency programs and the improvements outweigh our non-consumptive use. For example, in 2019 our Guadalajara site in Mexico improved cooling cycles and temperature controls, and began recirculating water used for a vacuum seal in the pet food manufacturing process. The program will improve water efficiency at this site by >20% by 2021.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	We had no withdrawals from this source.
Groundwater – renewable	Relevant	4752.71	About the same	Treated groundwater is relevant as it can be used in our products and processes, depending on the site. This value includes non-consumptive groundwater used for cooling (2,461 ML), which is returned to the source.
Groundwater – non-renewable	Relevant	393	Higher	Treated groundwater is relevant as it can be used in our products and processes, depending on the site. Our withdrawals of groundwater - non-renewable - increased in 2019 because of higher production volumes at sites taking groundwater from non-renewable sources. Mars is working to better understand groundwater status and ensure that sites are correctly designated as using either renewable or non-renewable groundwater sources. This will help us put in place measures to prevent further increases in withdrawals from non-renewable sources.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	Produced/entrained water is not used in our manufacturing processes.
Third party sources	Relevant	9745.67	Lower	Water from third-party sources is relevant as it can be used in our products and processes, depending on the site. Water from third-party sources was lower in 2019, as a result of sites implementing water efficiency measures. We expect further decreases to overall withdrawals in future, as sites implement water efficiency programs. For example, in 2019 our Guadalajara site in Mexico improved cooling cycles and temperature controls, and began recirculating water used for a vacuum seal in the pet food manufacturing process. The program will improve water efficiency at this site by >20% by 2021.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	492.8	Higher	This figure is 1.8% higher than last year. This is relevant because some manufacturing sites may discharge treated production water to fresh surface water. Sites discharging to surface water tend to be newer sites where production volumes are increasing, with a commensurate increase in wastewater discharges.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	We make no discharges to this source. We expect this to remain the case in future.
Groundwater	Relevant	634.6	Much higher	This is relevant because some sites may discharge treated production water to groundwater sources. This figure is 40% higher than last year due to improved wastewater data collection.
Third-party destinations	Relevant	7043.5	Higher	This is relevant because some sites may discharge treated production water to third-party destinations. This figure is 1.5% higher than last year. Our manufacturing sites are increasing their focus on wastewater treatment and wastewater flows. This has improved our measurement and estimation, leading to an increase in reported wastewater flows. Coupled with the reduction in withdrawals of municipal water, this has resulted in an overall increase.

**W-FB1.3**

**(W-FB1.3) Do you collect/calculate water intensity for each commodity reported in question W-FB1.1a?**

Agricultural commodities	Water intensity information for this produced commodity is collected/calculated	Water intensity information for this sourced commodity is collected/calculated	Please explain
Rice	Not applicable	Yes	Generally, our water intensity data for crops is derived using values from the World Food Lifecycle Database (WFLDB) or other similar LCA databases such as Ecoinvent. Wherever possible, we aim to improve the specificity and relevance of this data for our own supply chains by engaging with suppliers to understand the specific water intensities of their products. This is very much the case with rice, where we are engaging with suppliers and farmers in high-impact locations like Southern Spain, India and Pakistan. We are obtaining high-quality water-efficiency data through scientific study and agronomy, especially related to how sustainable agricultural techniques like Alternate Wetting and Drying and laser leveling is reducing water usage.
Maize	Not applicable	Yes	Generally, our water intensity data for crops is derived using values from the World Food Lifecycle Database (WFLDB) or other similar LCA databases such as Ecoinvent. Wherever possible, we aim to improve the specificity and relevance of this data for our own supply chains by engaging with suppliers to understand the specific water intensities of their products.
Sugar	Not applicable	Yes	Generally, our water intensity data for crops is derived using values from the World Food Lifecycle Database (WFLDB) or other similar LCA databases such as Ecoinvent. Wherever possible, we aim to improve the specificity and relevance of this data for our own supply chains by engaging with suppliers to understand the specific water intensities of their products.
Other commodities from W-FB1.1a, please specify (Mint)	Not applicable	Yes	Generally, our water intensity data for crops is derived using values from the World Food Lifecycle Database (WFLDB) or other similar LCA databases such as Ecoinvent. Wherever possible, we aim to improve the specificity and relevance of this data for our own supply chains by engaging with suppliers to understand the specific water intensities of their products. This is very much the case with mint, where we are engaging with suppliers and farmers in high-impact locations like Northern India and obtaining high quality water efficiency data through scientific study and agronomy.
Other commodities from W-FB1.1a, please specify (Peanuts)	Not applicable	Yes	Generally, our water intensity data for crops is derived using values from the World Food Lifecycle Database (WFLDB) or other similar LCA databases such as Ecoinvent. Wherever possible, we aim to improve the specificity and relevance of this data for our own supply chains by engaging with suppliers to understand the specific water intensities of their products.

**W-FB1.3b**

**(W-FB1.3b) Provide water intensity information for each of the agricultural commodities identified in W-FB1.3 that you source.**

**Agricultural commodities**

Rice

**Water intensity value (m3)**

1691.57

**Numerator: Water aspect**

Freshwater withdrawals

**Denominator**

Tons

**Comparison with previous reporting year**

Lower

**Please explain**

Water intensity is calculated as blue water withdrawals (m3) per metric tonne of commodity produced. This is a weighted average of all of our sourcing of this commodity, so may include both irrigated and rain-fed crops, in water stressed and non-stressed locations. We also source different material fractions / co-products derived from the crop, and these are included with their appropriate water allocation within this calculation (economic approach). Our strategy to reduce water intensity includes engaging with suppliers to improve our data accuracy and reduce water withdrawals in stressed areas. As a result, we expect that the water intensity associated with this commodity will decrease over time. Water intensity for rice was lower this year, at 89% of 2018 levels, reflecting associated reductions in irrigation intensities due to our rice water programs in India and Pakistan, shifts in sourcing locations, as well as improvements in location data accuracy.

#### Agricultural commodities

Maize

#### Water intensity value (m3)

48.05

#### Numerator: Water aspect

Freshwater withdrawals

#### Denominator

Tons

#### Comparison with previous reporting year

Much lower

#### Please explain

Water intensity is calculated as blue water withdrawals (m3) per metric tonne of commodity produced. This is a weighted average of all of our sourcing of this commodity, so may include both irrigated and rain-fed crops, in water stressed and non-stressed locations. We also source different material fractions / co-products derived from the crop, and these are included with their appropriate water allocation within this calculation (economic approach). Our strategy to reduce water intensity includes engaging with suppliers to improve our data accuracy and reduce water withdrawals in stressed areas. As a result, we expect water intensity associated with this commodity to decrease over time. Water intensity for corn was much lower this year, at just 27% of 2018 levels. This is primarily due to better data on which suppliers' farms are irrigated in the United States, reducing the proportion of our global corn supply that is irrigated to 39%. Increased location accuracy also contributed.

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#### Agricultural commodities

Sugar

#### Water intensity value (m3)

180.18

#### Numerator: Water aspect

Freshwater withdrawals

#### Denominator

Tons

#### Comparison with previous reporting year

About the same

#### Please explain

Water intensity is calculated as blue water withdrawals (m3) per metric tonne of commodity produced. This is a weighted average of all of our sourcing of this commodity, so may include both irrigated and rain-fed crops, in water stressed and non-stressed locations. We also source different material fractions / co-products derived from the crop, and these are included with their appropriate water allocation within this calculation (economic approach). Our strategy to reduce water intensity includes engaging with suppliers to improve our data accuracy and reduce water withdrawals in stressed areas. As a result, we expect that the water intensity associated with this commodity will decrease over time. Water intensity for sugar was slightly lower this year, at 98% of 2018 levels, reflecting shifts in sourcing locations and the associated changes in irrigation intensities for different locations. Increased location accuracy also contributed.

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#### Agricultural commodities

Other sourced commodities from W-FB1.3, please specify (Mint)

#### Water intensity value (m3)

28675.65

#### Numerator: Water aspect

Freshwater withdrawals

#### Denominator

Tons

#### Comparison with previous reporting year

Much lower

#### Please explain

Water intensity is calculated as blue water withdrawals (m3) per metric tonne of commodity produced. This is a weighted average of all our sourcing of this commodity, so may include irrigated and rain-fed crops, in water-stressed and non-stressed locations. We source mint oil, the primary end product of mint cultivation, which is highly concentrated. This explains why water intensity per tonne of mint oil is very high in comparison to other crops. Our strategy to reduce water intensity includes engaging with suppliers to improve data accuracy and reduce water withdrawals in stressed areas. As a result, we expect that the water intensity associated with this commodity will decrease over time. Water intensity for mint was much lower this year, at 64% of 2018 levels, reflecting associated reductions in irrigation intensities due to our water stewardship program for mint in India, which expanded to cover all mint sourced from that country (about half of total mint sourced).

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#### Agricultural commodities

Other sourced commodities from W-FB1.3, please specify (Peanuts)

#### Water intensity value (m3)

541.49

#### Numerator: Water aspect

Freshwater withdrawals

#### Denominator

Tons

#### Comparison with previous reporting year

About the same

#### Please explain

Water intensity is calculated as blue water withdrawals (m3) per metric tonne of commodity produced. This is a weighted average of all of our sourcing of this commodity, so may include both irrigated and rain-fed crops, in water stressed and non-stressed locations. We source the primary end product of mint cultivation, mint oil, which is

highly concentrated. This explains why the water intensity for this commodity (per tonne of mint oil) is very high in comparison with other crops. Our strategy to reduce water intensity includes engaging with suppliers to improve our data accuracy and reduce water withdrawals in stressed areas. As a result, we expect that the water intensity associated with this commodity will decrease over time. Water intensity for peanuts was slightly higher this year, at 103% of 2018 levels. The small increase reflects shifts in sourcing locations and associated changes in irrigation intensities for different locations. Increased location accuracy also contributed.

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## W1.4

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### (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

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### (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

76-100

##### % of total procurement spend

76-100

#### Rationale for this coverage

Our Supplier Code of Conduct articulates our expectations, including for water, of 100% of first-tier suppliers. Mars expects all suppliers to share information regarding their relevant supply chain policies and practices, conditions or risks. In 2019, we began assessing the sustainability performance of prioritized suppliers using the EcoVadis online platform, which asks whether they disclose water impacts through CDP. As part of our Sustainable in a Generation Plan, our goal is to ensure water use is within annually renewable levels. We mapped total water use across our global supply chain and assessed whether that water comes from rainfall or irrigation. Where we rely on irrigation, we are prioritizing suppliers operating in watersheds under the most stress and where our agricultural water use is greatest. These watersheds are in Australia, India, Pakistan, Spain and the United States. We use direct engagement to incentivize suppliers using irrigated crops in these locations.

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

In 2019, 34% of the suppliers assessed through EcoVadis reported on their water consumption, and 9% had disclosed water impacts through CDP. As we implement our Sustainable in a Generation Plan, we are integrating sustainability into the Mars Strategic Sourcing Methodology. Our rice and mint procurement teams have strategies in place to address water use associated with growing these crops in locations with high baseline water stress. The process enables our teams to benchmark suppliers against optimal local blue water consumption based in part on data suppliers provide, and recommend improvements. We are also conducting field studies with suppliers of rice in India and Pakistan, and mint in India. We develop metrics for suppliers on a program-by-program basis. For example, our mint program in India involves over 22,000 farmers, who reported combined water use reductions of almost 27 million m<sup>3</sup> from 2015 to 2019, reducing their gap to sustainable water use levels by 62%.

#### Comment

## W1.4b

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

**Type of engagement**

Innovation & collaboration

**Details of engagement**

Encourage/incentivize innovation to reduce water impacts in products and services  
Encourage/incentivize suppliers to work collaboratively with other users in their river basins  
Provide training and support on sustainable agriculture practices to improve water stewardship  
Educate suppliers about water stewardship and collaboration

**% of suppliers by number**

1-25

**% of total procurement spend**

26-50

**Rationale for the coverage of your engagement**

Through our Sustainable in a Generation program, we are prioritizing 10 raw materials with the greatest environmental impacts. Suppliers of these materials represent 16% of our total suppliers and 44% of direct spending, but 78% of the total unsustainable water use in our value chain. To prioritize suppliers to engage on water, we mapped total water use across our global supply chain and assessed whether that water comes from rainfall or irrigation. Where we currently rely on irrigation, we assessed whether the watersheds used are experiencing stress, and are prioritizing those watersheds under the most stress and where our agricultural water use is greatest. These watersheds are in Australia, India, Pakistan, Spain and the United States. We also encourage priority suppliers to reduce water impacts as part of our assessment of their sustainability performance using the EcoVadis online platform. The EcoVadis questionnaire asks suppliers whether they disclose water impacts through CDP.

**Impact of the engagement and measures of success**

We develop metrics for suppliers on a program basis. For example, as a leading member of the Sustainable Rice Platform (SRP), with partners such as UN Environment, the International Rice Research Institute and WWF, we're supporting over 2,700 rice farmers in Pakistan, India, Spain, Italy and the USA to improve productivity and reduce water use. Mars is committed to ensuring that 100% of our Food segment rice farmers are working towards the standard by 2020: 99% of rice farmers globally and 100% of highest risk farmers growing basmati rice in India and Pakistan were doing so at the end of 2019. In Pakistan, pilots have shown a 30% increase in farming household income and a 30% reduction in water use since the project began. Rice represents >75% of the reductions needed in stressed locations to meet our water target. As a result of our successful supplier partnerships, our Food business reduced its gap to sustainable water use levels for sourced rice by 9% between 2015 and 2019.

**Comment**

Additional examples of supplier innovation and collaboration include our work with tomato suppliers to develop regional blue water footprint benchmarks for Australia, Greece, Spain and the USA. This helps us understand supplier and farmer performance against a regional benchmark, so we can recommend how to close the gap to sustainable water use levels for their region.

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**Type of engagement**

Incentivizing for improved water management and stewardship

**Details of engagement**

Offer financial incentives to suppliers improving water management and stewardship across their own operations and supply chain

**% of suppliers by number**

Unknown

**% of total procurement spend**

Unknown

**Rationale for the coverage of your engagement**

We've mapped the total water use across our global supply chains and assessed whether that water comes from natural rainfall or irrigation. Where we currently rely on irrigation, we've assessed whether the watersheds used for that water are experiencing stress, and we're prioritizing those watersheds under the most stress and where our agricultural water use is greatest. These watersheds include India and Pakistan, both important rice-sourcing locations.

**Impact of the engagement and measures of success**

Since 2016, Mars Food's partnerships with basmati rice farmers in India and Pakistan have increased incomes by reducing water use. The results have boosted quality and productivity, enabling farmers to earn a \$54 per tonne premium for producing Sustainable Rice Platform verified rice. This is particularly important in India, where rice farmers must more than double their household incomes to rise above the World Bank poverty line. The Mars procurement team's role has broadened to facilitate partnerships across the value chain, in order to catalyze investment and create the mechanisms required for systemic change. Mars is now investing in a comprehensive resilience framework that will enable rice growers to sustain their increased incomes by adapting to climate change and absorbing markets shocks.

**Comment**

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**W1.4c**

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

As we work towards our goal to ensure water use in our value chain is within annually renewable levels by watershed, we are engaging with major retail customers to understand how we can work together toward a common goal.

Examples of methods and strategies for engagement: we participate in Walmart's annual supplier scorecard process, and have partnered with a wide range of corporates and NGOs to support the development of a methodology to quantify the benefits of water stewardship. We connect with these partners via the Alliance for Water Stewardship and the CEO Water Mandate to identify potential collaborations. In celebration of World Water Day, we joined the METRO Water Initiative for the third year, to engage the public and create awareness of water stewardship. Specifically, our UNCLE BEN'S® and EXTRA® displays in METRO stores in 15 markets showed consumers how our sourcing practices are saving water. As a measure of success, our participation led to a 66% increase in net sales for EXTRA® and a 25% increase for UNCLE BEN'S®, across participating markets.

Our Mars Facility Water Risk Assessment Process assesses how sites engage with key partners in their watershed and how they ensure that any significant water-related decisions take into account other basin actors, such as regulators, river basin management authorities and local communities. Our supply chain risk assessments calculate how much of the water available in a catchment area is needed to grow our raw materials, and how much remains for other users. At factories with high water risk, we are conducting Water Stewardship reviews based on steps 1 and 2 of the Alliance for Water Stewardship's International Standard. These involve engagement with local stakeholders to understand priorities and catchment status.

We select expert partners for our water stewardship activities, such as UN Environment, the International Rice Research Institute and WWF, our partners in the Sustainable Rice Platform.

**W2. Business impacts**

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**W2.1**

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

Yes

**W2.1a**

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

**Country/Area & River basin**

Australia	Murray - Darling
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**Type of impact driver & Primary impact driver**

Physical	Inadequate infrastructure
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**Primary impact**

Reduction or disruption in production capacity

**Description of impact**

A reduction in water pressure caused by poor infrastructure interrupted this manufacturing site's cleaning schedules and gum-coating operations, causing a disruption to production. Maintaining cleaning schedules is critically important for compliance with food-safety regulations and with our internal food-safety standards. The impact on the business was substantive but short-term, lasting less than one week.

**Primary response**

Improve maintenance of infrastructure

**Total financial impact**

10000

**Description of response**

The site improved the quality of its water infrastructure and maintenance procedures to prevent further interruptions to cleaning schedules and operations. The financial impact disclosed is an estimate of the capital and operational costs of making these improvements, and was provided by the affected site's industrial engineering team.

**Country/Area & River basin**

Mexico	Santiago
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**Type of impact driver & Primary impact driver**

Reputation & markets	Inadequate access to water, sanitation, and hygiene services
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**Primary impact**

Reduction or disruption in production capacity

**Description of impact**

An interruption to this manufacturing site's water supply interrupted access to WASH services, and operations had to be shut down. However, the shutdown lasted for only one shift and did not result in a loss of sales, so the overall reputational and financial impacts were minor.

**Primary response**

Engage with suppliers

**Total financial impact**

10000

**Description of response**

The site engaged with transport suppliers and the municipal water supplier to secure water tanker trucks to supply water to the site so operations could quickly resume. The financial impact disclosed is an estimate of the operational cost of securing these tankers, and was provided by the management of the affected site.

**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

Yes, enforcement orders or other penalties

**W2.2a**

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

Row 1

Total number of fines

10

Total value of fines

70000

% of total facilities/operations associated

4.8

Number of fines compared to previous reporting year

Much lower

Comment

W2.2b

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

Type of penalty

Fine

Financial impact

50000

Country/Area & River basin

Australia	Murray - Darling
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Type of incident

Spillage, leakage or discharge of potential water pollutant

Description of penalty, incident, regulatory violation, significance, and resolution

The penalty was a high biological oxygen demand (BOD) surcharge. The site has requested capital for a trade waste treatment plant to remedy the water quality issue.

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W3. Procedures

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W-FB3.1

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**(W-FB3.1) How does your organization identify and classify potential water pollutants associated with its food, beverage, and tobacco sector activities that could have a detrimental impact on water ecosystems or human health?**

Our corporate waste water management standard requires sites to identify potential water pollutants associated with our manufacturing operations and sets out our requirements for water discharge quality. The standard requires our facilities to manage wastewater in a manner which achieves the following: 1) protection of human health, 2) protection of the environment, 3) meets applicable regulatory compliance requirements, and 4) adheres to the minimum requirements as set forth in the standard. It also requires each facility to establish and maintain a current facility-wide inventory identifying all sources of wastewater including a qualitative description of the characteristics, management method and presence or absence of flow measuring devices. Each facility shall establish and maintain a wastewater discharge monitoring program to document the nature of wastewater effluent discharged from the site (e.g., to the local municipal treatment works or surface water body).

We have defined the key wastewater characteristics most material to our manufacturing operations, which can impact the wider environment. Our program therefore includes periodic sampling of wastewater characteristics before and after any on-site wastewater treatment process at each discharge location, including but not limited to the following identified pollutants: temperature, pH, Oil & Grease (O&G), Biochemical Oxygen Demand (BOD5) and/or Chemical Oxygen Demand (COD), and total suspended solids (TSS) concentration, or as specified in a discharge permit.

We require our sites to report on these water discharge quality parameters within our corporate reporting program. Our Global Water Team continues to develop our thinking and action plans for waste water impact reduction.

Our value chain water target is focused on reducing absolute water withdrawals in stressed watersheds, and this is our key area of focus. However, when we become aware of adverse water quality impacts that are material to our sourcing activities we will work with our suppliers to address them.

For example, rice represents over 75% of the water savings required in stressed locations to meet our Sustainable in a Generation Plan water target, and so is the primary focus of our supply chain water work. Mars partnered with around 30 other organizations to create the Sustainable Rice Platform standard for rice cultivation. The standard is based on peer reviewed best practices for rice cultivation and includes a strong focus on sustainable water withdrawals and pollution control, seeking to ensure that "inbound water is obtained from clean sources that are free of biological, saline, and heavy metal contamination." It also covers the need to manage drainage in such a way to ensure that contamination of surface water with fertilizers and pesticides through run off is avoided. Mars is committed to ensuring that 100% of our Food segment rice farmers are working towards the standard by 2020: 99% of our rice suppliers globally and 100% of our highest risk farmers growing basmati rice in India and Pakistan were doing so at the end of 2019.

**W-FB3.1a**

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**(W-FB3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your food, beverage, and tobacco sector activities.**

**Potential water pollutant**

Chemicals formed during processing, storage and distribution (e.g., acrylamide, aflatoxins)

**Activity/value chain stage**

Manufacturing – direct operations

**Description of water pollutant and potential impacts**

Based on Environmental Impact Assessments of new capital investments, our sites ensure that environmental risks are properly managed through plant design and operational procedures. This includes preventing the accidental release or spillage of hazardous materials such as cleaning chemicals, oils or liquid fuels. The assessment process is also used to ensure that effective treatment systems are installed to treat factory waste water. Our manufacturing sites monitor and treat wastewater before discharge to address pollution impacts including but not limited to: temperature, pH, Oil and Grease, Biochemical Oxygen Demand (BOD5) and/or Chemical Oxygen Demand (COD), and total suspended solids (TSS) concentration, or as specified in a discharge permit. The majority of sites pre-treat their waste water and send it to municipal treatment facilities, however a number fully treat their waste water for discharge to surface water, these sites apply rigorous monitoring and management practices to control pollution risks to avoid pollution of rivers and streams with fat, grease, dissolved sugars and other by-products of food production processes.

**Management procedures**

Waste water management  
Follow regulation standards

**Please explain**

Controls to manage potential water pollution risks are included in the design of our facilities and by defining operational procedures at the environmental impact assessment stage of capital investment projects. These controls include precautions such as bunding of storage tanks, provision of automatic monitoring systems, drainage segregation and collection tanks, inspection and testing of drainage systems, staff training, waste water treatment plants. Our corporate waste water management standard sets out our requirements for water discharge quality. The standard requires our facilities to manage wastewater in a manner which achieves the following: 1) protection of human health, 2) protection of the environment, 3) meets applicable regulatory compliance requirements, and 4) adheres to the minimum requirements as set forth in the standard. It also requires each facility to establish and maintain a current facility-wide inventory identifying all sources of wastewater including a qualitative description of the characteristics, management method and presence or absence of flow measuring devices. Each facility shall establish and maintain a wastewater discharge monitoring program to document the nature of wastewater effluent discharged from the site (e.g., to the local municipal treatment works or surface water body). The program should include periodic sampling of wastewater characteristics before and after any on-site wastewater treatment process at each discharge location. To measure success, sites complete a scored assessment of their level of maturity in implementing our waste water management standard. These scores are centrally collected every two years and are subject to on-site monitoring by an independent auditor at least every three years as part of our Site Integrated Governance program.

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**Potential water pollutant**

Pesticides and other agrochemical products

**Activity/value chain stage**

Agriculture – supply chain

**Description of water pollutant and potential impacts**

Water pollution from agrochemical and animal waste runoff are risks from agricultural activities in our extended value chain. Nitrate pollution of water bodies in agricultural areas through excessive fertilizer use or poor management practices can cause toxic algal bloom. Pesticide residues such as organophosphates, organochlorines and pyrethroids can contaminate ground water. Animal waste run off can result in pathogens such as cryptosporidium in surface water.

**Management procedures**

Soil conservation practices  
Crop management practices  
Sustainable irrigation and drainage management  
Fertilizer management  
Pesticide management  
Waste water management  
Follow regulation standards

**Please explain**

Our Sustainable in a Generation Plan (SiG) includes goals for reducing climate, water and land impacts and increasing farmer incomes. Much of our work to achieve these goals focuses on increasing agricultural efficiency. As we work with suppliers and farmers in our supply chain to improve their agricultural practices to grow more with less, we are in some cases reducing inputs, while increasing yields and reducing GHG emissions and water withdrawals. Rice represents over 75% of the water savings required in stressed locations to meet our SiG Plan water target, and so is the primary focus of our supply chain water work. Mars has partnered with around 30 other organisations to create the Sustainable Rice Platform best practice standard for rice cultivation. The standard includes a strong focus on sustainable water withdrawals and pollution control, seeking to ensure that "inbound water is obtained from clean sources that are free of biological, saline, and heavy metal contamination." It also covers the need to manage drainage in such a way to ensure that contamination of surface water with fertilizers and pesticides through run off is avoided. Mars is committed to ensuring that 100% of our Food segment rice farmers are working towards the standard by 2020: 99% of our rice suppliers globally and 100% of our highest risk farmers growing basmati rice in India and Pakistan were doing so at the end of 2019. To measure success, all basmati rice farmers in India and Pakistan that supply Mars are monitored by Helvetas, which measures and reports annually on their water productivity and other metrics, as part of the multi-stakeholder WAPRO (Water Productivity) collaborative program. In addition, our target to reduce unsustainable water use in our agricultural supply chain is designed to ensure we play our part in protecting wider watersheds.

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**W3.3**

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

Yes, water-related risks are assessed

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**W3.3a**

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

## Direct operations

### Coverage

Full

### Risk assessment procedure

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

### Frequency of assessment

Annually

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

More than 6 years

### Type of tools and methods used

Tools on the market  
International methodologies  
Databases

### Tools and methods used

WRI Aqueduct  
WWF Water Risk Filter  
Environmental Impact Assessment  
Life Cycle Assessment  
IPCC Climate Change Projections  
Alliance for Water Stewardship Standard  
Other, please specify (Internal company methodologies)

### Comment

We identify direct operations at high or extreme risk of water stress using the WRI Aqueduct tool. We consider sites in areas with a baseline water stress of 40% or higher, based on Aqueduct, to be water stressed. In addition, all sites complete the Mars Facility Water Stewardship Risk Assessment Questionnaire developed in partnership with WRI, which includes increased water accounting plus assessment of current and future implications, and the site's response. We are also analyzing usage data for comparable sites to prioritize action at less efficient facilities. Our highest priority sites are completing water stewardship reviews based on steps 1-2 of the Alliance for Water Stewardship Standard, to identify water opportunities and challenges inside and outside the site's boundary. Sites use the results of our risk assessments to develop water efficiency programs. For example, our Guadalajara site in Mexico introduced a water efficiency program in 2019. This began with a workshop to identify potential operational and capital improvements, such as improving cooling cycles and temperature controls, and recirculating water used for a vacuum seal in the pet food manufacturing process. The program will improve water efficiency by >20% by 2021.

## Supply chain

### Coverage

Full

### Risk assessment procedure

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

### Frequency of assessment

Annually

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

More than 6 years

### Type of tools and methods used

Tools on the market  
International methodologies  
Databases

### Tools and methods used

WRI Aqueduct  
WWF Water Risk Filter  
Life Cycle Assessment  
IPCC Climate Change Projections  
Alliance for Water Stewardship Standard  
Other, please specify (Impact assessment devised with Quantis)

### Comment

Assessment of water impacts across our value chain shows that raw material sourcing accounts for over 99% of the water used, because of crop irrigation and livestock needs. By overlaying our raw material origins with watersheds, we have cross-referenced water-intensive crops with areas of high baseline water stress to prioritize watersheds for further action. This is done using an in-house GIS system that draws water stress data from WRI Aqueduct 3.0 and crop specific location maps from Earthstat (2000) and Mapspam (2010). This work is informing our sustainable sourcing strategies for raw materials with high water impact, particularly rice and mint. In addition, in 2019 we began assessing the sustainability performance of prioritized suppliers using the EcoVadis online platform and 34% of suppliers assessed using the system reported on water use.

**Other stages of the value chain**

**Coverage**

Partial

**Risk assessment procedure**

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

**Frequency of assessment**

Not defined

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

More than 6 years

**Type of tools and methods used**

Tools on the market  
International methodologies  
Databases

**Tools and methods used**

WRI Aqueduct  
Life Cycle Assessment  
IPCC Climate Change Projections  
Alliance for Water Stewardship Standard

**Comment**

Assessment of water impacts across our value chain shows that raw material sourcing accounts for over 99% of the water used, because of crop irrigation and livestock needs. For this reason, our water stewardship strategy focuses on our agricultural supply chain. We are also taking action in our direct operations, in locations with water-stress risks. Water impacts at other value chain stages such as the consumer use phase are not material to our total value chain water usage, and are not currently a priority within our Sustainable in a Generation Plan, though we do engage with customers to increase awareness of water impacts, as described in W1.4c.

**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	We include water availability in our risk assessments because our factories cannot operate without a continuous clean water supply, both as an ingredient in our products and for use in processes that meet food safety standards. We use WRI Aqueduct to assess water availability at all sites, and The Mars Facility Water Stewardship Risk Assessment Questionnaire to assess water quality and availability issues at all manufacturing sites. These tools help us determine the level of water stress and therefore the relevance of water availability at a particular site. In 2019, we began using water-stress data from Aqueduct V3.0, replacing prior information from Aqueduct V2.0. This has reduced the number of sites considered water-stressed from over 50 to 32. We are reviewing this improved data, in consultation with WRI. Additionally, water reviews have been carried out at 14 high-risk sites, to provide further insights into water status and risk. Mars is developing new site-level water targets for 2025, as our current targets end in 2020. Using Aqueduct V3.0, site water reviews and additional information, we have confirmed six sites facing the greatest water risks, which are likely to be the focus of our new targets. Work is underway to better understand opportunities and challenges in these locations. In our agricultural supply chain, we assess the relevance of water availability by mapping total water use and assessing whether that water comes from rainfall or irrigation. Where we currently rely on irrigation, we use WRI Aqueduct to assess whether the watersheds used are experiencing stress, and prioritize our efforts on those watersheds under the most stress and where water use is greatest. These watersheds are in Australia, India, Pakistan, Spain and the United States. In 2019, our risk assessments highlighted increased water impact due to greater production of products containing almonds. We are working closely with our brands including KIND International and almond growers and handlers in California, and to compare water efficiency of almonds sourced from different locations. Our assessments continue to highlight risks from basmati rice sourced from India. In 2019, Mars and a tier-1 basmati rice supplier joined phase 2 of the WAPRO project in India, in addition to the project's first phase in Pakistan. This project trains farmers on the Sustainable Rice Platform and works to engage stakeholders across government and agriculture on water issues.
Water quality at a basin/catchment level	Relevant, always included	We include water quality in our risk assessments because our manufacturing sites cannot operate without a continuous clean water supply both as an ingredient in our products and for use in processes that meet food safety standards. Our site management teams manage incoming water quality risk assessments locally to ensure food-safe water is available. Water quality risks are also managed locally, to ensure adequate control measures are in place for environmental protection and waste water discharge compliance. This is done by ensuring water quality meets our internal water quality management standard, compliance with which is subject to on-site review by an independent auditor at least every three years as part of our Site Integrated Governance Program. Water quality is relevant in our agricultural supply chain because farmers and communities have a fundamental right to clean water supplies.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Water stewardship is essential for maintaining good stakeholder relationships and a licence to operate, and so is relevant to our water risk assessments. The Mars Facility Water Stewardship Risk Assessment Questionnaire asks each manufacturing site whether it has been involved in water-related disputes with local stakeholders in the past year, so that we can ensure these are resolved and monitor the situation. The questionnaire also identifies issues related to water quantity or quality that could affect the facility or its operations now or in the future. This includes potential stakeholder conflicts, and enables us to monitor and mitigate any areas for concern.
Implications of water on your key commodities/raw materials	Relevant, always included	We include the implications of water impacts on key raw materials in our water risk assessments because water security is critical for maintaining supplies of quality agricultural raw materials. In our agricultural supply chain, we assess the relevance of water availability by mapping total water use and assessing whether that water comes from rainfall or irrigation. Where we currently rely on irrigation, we use WRI Aqueduct to assess whether the watersheds used are experiencing stress, and prioritize our efforts on those watersheds under the most stress and where water use is greatest. These watersheds are currently located in Australia, India, Pakistan, Spain and the United States. WRI Aqueduct takes into account the potential impacts of climate change on water availability, meaning that both current and emerging risks are taken into account.
Water-related regulatory frameworks	Relevant, always included	We consider regulatory frameworks to be relevant in our water risk assessments because increases in water tariffs or regulation could increase our operational costs. To monitor this, the Mars Facility Water Stewardship Risk Assessment Questionnaire asks whether there are any anticipated changes in water governance or regulation that might threaten each manufacturing site, now or in the future. It also asks for the total cost in US\$ paid to the water supplier for the water the facility consumed during the year.
Status of ecosystems and habitats	Relevant, always included	We include risks to ecosystems in our risk assessments at high-risk sites, which we believe are relevant due to the related physical and reputational risks. We have categorized our sites into three levels: low water risk (level 1), sites in water-scarce locations (level 2), and sites where water is a significant business risk (level 3). Over 20 level-3 sites will complete water stewardship reviews before 2020. By year-end 2019, 14 reviews had been completed including at sites in the UK, USA, China and Poland. Part of the scope is to understand all shared water risks in the catchment, including to ecosystems. The water reviews follow the International Water Stewardship Standards core guidelines. One Petcare site (Melton Mowbray, UK) is in dialog with local stakeholders about reducing the level of the river that supplies the plant, to improve wildlife habitat.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	We consider WASH to be relevant to our water risk assessments because the provision of WASH services is an essential part of being a mutual employer and for attracting and retaining talent. WASH facilities are provided as part of our demanding internal framework of quality and food safety standards, which encompass the requirements of international standards, including ISO 9000 (quality), FSSC 22000 (food safety), the British Retail Consortium Global Standards, and the Hazard Analysis Critical Control Point food safety system. As part of the Thriving People pillar of our Sustainable in a Generation Plan, the Mars Responsible Workplace program focuses on ensuring respect for human rights in our own workplaces. Independent auditors assess our human rights performance and, if issues are identified, we work to address them. The provision of potable water and sanitation facilities is one element of this program. Results of assessments are reported back to site and global management teams and corrective actions put in place when required.
Other contextual issues, please specify	Please select	

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

	Relevance & inclusion	Please explain
Customers	Relevant, always included	We consider customers in our water risk assessment processes for both our operations and supply chain because water stress could affect our ability to manufacture our products and maintain supplies. Customer ability to continue stocking our products is an implicit part of our assessment. In addition, Mars participates in sustainability focused collaborative organizations with peers and customers, such as the Consumer Goods Forum and The Sustainability Consortium, as well as water-focused organizations such as the Alliance for Water Stewardship and UN CEO Water Mandate. The insights we gain from our participation helps inform our corporate water risk assessments and water stewardship approach. To better understand and assess the relevance of our customers' water impacts, we engage with customer-led groups such as the Coop's M2030, Asda Exchange and Tesco Supplier Network. These forums help us understand the relevance of water to different customers, now and in the future, and allow best practice to be shared and common approaches to be developed, ensuring our water risk assessment process and water stewardship strategies are effective now and in the future. We respond to customer requests for transparency of our water impacts by responding to the CDP Supply Chain questionnaire each year. The number of customers requesting this information is one measure of the level of interest in water impact among our customers. Three customers have requested this information for 2019.
Employees	Relevant, always included	We consider Mars Associates as part of our water risk assessments to ensure we meet our responsibilities as a mutual employer, and so that we are able to continue to attract and retain the best talent. WASH facilities are provided as part of our demanding internal framework of quality and food safety standards, which encompass the requirements of international standards, including ISO 9000 (quality), FSSC 22000 (food safety), the British Retail Consortium Global Standards, and the Hazard Analysis Critical Control Point food safety system. As part of the Mars Responsible Workplace audit program, we assess our sites on the provision of potable water and sanitation facilities. Employees have the opportunity to comment on water-related topics via our MyMars corporate communications website, where several have raised concerns about how we engage in community-related water challenges in certain areas. This has encouraged us to explore external collaborations to address shared water challenges.
Investors	Relevant, always included	The Mars family, our sole owner, is highly supportive of our water stewardship, as it contributes to the creation of mutual benefits for the business and all its stakeholders, in line with our Five Principles and our Sustainable in a Generation Plan. Meeting their expectations is a key element of our risk assessments and business strategies. The Mars Family is also relevant to our water risk assessments because cost of water consumption, wastewater treatment and any fines or penalties at our manufacturing sites can have a direct impact on our profitability. We assess these risks using the Mars Facility Water Stewardship Risk Assessment Questionnaire. In addition, our water risk assessment processes for both our operations and our supply chain assess the potential for water to impact our business growth and future worth. The Chief Procurement and Sustainability Officer presents our progress against our Sustainable in a Generation Plan goals, including for water stewardship, to the Board at least annually, giving Mars family members on the Board the opportunity to feedback and input into our strategies and risk assessments. Mars Sustainable Solutions is part of our business which is focused on the health of marine ecosystems, and specifically coral reef restoration. This is a particular interest of Mars family members, who have engaged in external events focused on understanding the challenges faced by marine environments. For instance, at the 2019 Lindau Nobel Laureate Meeting, our Board chair hosted a Partner Breakfast to discuss how physics can help us better understand the oceans and, in turn, help ensure a sustainable future for our planet.
Local communities	Relevant, always included	We consider local communities in our water risk assessments because ensuring that adequate water supplies are available for all users within a catchment area is critical to maintaining our licence to operate. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how sites engage with key stakeholders and ensure that any significant water-related decisions take into account the needs and feedback of local communities and other basin actors. In addition, our supply chain risk assessments calculate how much of the water available in a catchment area is needed to grow our raw materials, and whether a sufficient amount remains for local communities and other users. We use WRI Aqueduct to inform this work. As a result of our water risk assessments for the rice we source, for example, we are supporting 2,000 basmati rice farmers in Pakistan and India to improve productivity and reduce water use. In Pakistan, we have already seen a 30% increase in farmer income and a 30% reduction in water use since the project began, and we're working to expand these practices to rice farmers outside our supply chain to the benefit of the wider community. Mars is committed to ensuring that 100% of our Food segment rice farmers are working towards the standard by 2020, with 100% of our highest risk basmati rice farmers in India and Pakistan already having achieved this. In 2019, Mars associates attended a number of community water action groups in Haryana state in India, to hear how local farmers are using water and dealing with water-stress issues. The aim is to understand how Mars, as the end customer for their rice, can better engage with these communities on water-related issues.
NGOs	Relevant, always included	We include input from NGOs in our water risk assessments as we believe they have a role to play in informing our approach and influencing our reputation among wider stakeholders. We take their opinion and influence into account. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how sites engage with key stakeholders and ensure that any significant water-related decisions take into account local NGOs and other basin actors. In addition, our supply chain risk assessments calculate how much of the water available in a catchment area is needed to grow our raw materials, and whether a sufficient amount remains for other users - a key concern of water-focused NGOs. We use WRI Aqueduct to inform this work. We also partner with NGOs to act on the results of our risk assessments. For example, as part of our work to support 2,000 basmati rice farmers in Pakistan and India to improve productivity and reduce water use, we are working through the Sustainable Rice Platform (SRP) with partners such as UN Environment, the International Rice Research Institute and WWF. In Pakistan, we have already seen a 30% increase in farmer income and a 30% reduction in water use since the project began. Mars is committed to ensuring that 100% of our Food segment rice farmers are working towards the standard by 2020, and 99% of our rice farmers globally and 100% of our highest risk basmati rice farmers in India and Pakistan were doing so at the end of 2019. Mars engages with a wide range of NGOs on water-related issues. For instance, CERES critiques Mars water program every three years as part of its "Feeding Ourselves Thirsty" study, and provides feedback to Mars on areas where our water stewardship can be more robust.
Other water users at a basin/catchment level	Relevant, always included	We consider all water users at a catchment level, because ensuring that adequate water supplies are available for all users is critical to maintaining our licence to operate. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how sites engage with key stakeholders and ensure that any significant water-related decisions take into account all other basin actors. An example of is our attendance at an open day run by the South West Rivers Trust in the UK, which focused on farm-based water stewardship in the Tamar river catchment, where we have a manufacturing site.
Regulators	Relevant, always included	We include regulators in our water risk assessments because our ability to operate our factories relies on regulatory compliance. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how sites engage with local water suppliers and how they ascertain the location and source of their water. It also assesses how sites engage with key stakeholders and ensure that any significant water-related decisions take into account the needs and feedback of regulators and other basin actors.
River basin management authorities	Relevant, always included	We include river basin management authorities in our water risk assessments because our ability to operate our factories relies on good management of secure water supplies. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how sites engage with local water suppliers and how they ascertain the location and source of their water. It also assesses how sites engage with key stakeholders and ensure that any significant water-related decisions take into account local authorities and other basin actors. For example, Mars engaged with UK regulators the Environment Agency and South West Water at an open day run by the South West Rivers Trust, which focused on farm-based water stewardship in the Tamar river catchment, where we have a manufacturing site. In our supply chain, we have worked with government agencies in Spain to assess the climate resilience and adaptive capacity of rice farming communities.
Statutory special interest groups at a local level	Relevant, always included	Special interest groups have a role to play in informing our approach and influencing our reputation among local stakeholders. We take their opinion and influence into account in our water risk assessments. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how sites engage with key stakeholders and ensure that any significant water-related decisions take into account local special interest groups and other basin actors.
Suppliers	Relevant, always included	It is critical that suppliers of our agricultural raw materials have access to sustainable water supplies to grow the crops we rely on, while ensuring sufficient supplies remain for other water users in the catchment area. We have mapped total water use in our global supply chain and assessed whether that water comes from rainfall or irrigation. Where we currently rely on irrigation, we used WRI Aqueduct to assess whether the watersheds used are experiencing stress, and are prioritizing our efforts on those watersheds under the most stress and where our agricultural water use is highest. These watersheds are located in Australia, India, Pakistan, Spain and the United States. We have incorporated this information into Mars Strategic Sourcing Methodology, and our buyers are now collaborating with suppliers and farmers to further understand water risks and impacts on all water users within these priority watersheds, and to build appropriate actions into our sourcing strategies for raw materials sourced there. For example, based on the results of our supply chain water risk assessments, we are working with rice suppliers and farmers in Pakistan to improve water stewardship in basmati rice farming, and with tomatoes growers in Australia, Greece, Spain and the USA to understand their water footprint compared with regional benchmarks. WRI Aqueduct takes into account the potential impacts of climate change on water availability, meaning that both current and emerging risks related to our suppliers are taken into account. We also assess the sustainability performance of prioritized suppliers using the EcoVadis online platform, leveraging this widely recognized supplier evaluation tool while unlocking increased visibility and insights. As part of the EcoVadis program suppliers are encouraged to understand their water-related risks and disclose their water impacts to CDP.
Water utilities at a local level	Relevant, always included	Water utilities are key stakeholders in ensuring secure and sustainable supplies of clean water to our individual factories. The Mars Facility Water Stewardship Risk Assessment Questionnaire assesses how manufacturing sites engage with local water suppliers and how they ascertain the location and source of their water. We encourage sites to maintain a constructive dialog with their water suppliers, to ensure they understand the source of the water they receive from external suppliers and the ultimate destination of any discharged waste water that is treated by external suppliers.
Other stakeholder, please specify	Please select	

**(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.**

**Level of coverage**

In establishing our water footprint, our assessment showed that raw material sourcing accounts for over 98% of the water used across our value chain, because of crop irrigation and livestock needs. For this reason, our water risk assessments and stewardship strategy focus on our agricultural supply chain. We also assess risk and take action in our direct operations, where we have the most control. Water impacts at other value chain stages such as consumer use are much less material and not currently a priority within our Sustainable in a Generation Plan.

**Risk assessment process and procedures**

Mars' water risk assessment process uses data from the tools listed in W3.3a, such as WRI Aqueduct, lifecycle assessment and the AWS standard, to inform our target-setting approach and water stewardship strategy. This process applies to our direct operations and agricultural supply chain:

1. We assess the location and volume of water withdrawn for manufacturing sites and sourcing activities, and the water-stress levels in these locations. Generally, we do not have detailed hydrological data for these locations, and so our default approach is to use water-stress data from WRI Aqueduct 3.0 platform. We concentrate on water availability and demand challenges unless stakeholder consultation or other assessments highlight other material risks such as water quality or flooding at that location.
2. Once we understand the source and volume of water used, we determine the sustainable level of water use for each catchment, and how much current usage needs to reduce to reach this level. We estimate this using WRI Aqueduct data unless better local data is available, or there is an established and accepted "desired state" for the watershed.
3. Once we have identified the water withdrawals within a catchment that we regard as unsustainable, we set targets to eliminate them in the long term. In the absence of agreed reductions by sector, we assume that Mars will make the same proportional reduction in water withdrawals as all other water users. We then define local strategies to deliver the required reductions, and track progress.

In addition, all manufacturing sites complete The Mars Facility Water Stewardship Risk Assessment Questionnaire developed in partnership with WRI, which requires increased water accounting, assessment of current and future implications for different water aspects and stakeholders, and the site's response. We use the results to identify high-risk sites and to inform local strategies for reducing water stress and engaging with stakeholders in the catchment area. Our highest priority sites are completing water stewardship reviews based on steps 1-2 of the AWS International Standard, to identify water opportunities and challenges inside and outside the site's boundary.

To assess risk in our global supply chains, we first mapped total water use and assessed whether that water comes from rainfall or irrigation. We estimated the fresh water from rivers, lakes and aquifers (blue water) used in irrigation to grow our raw materials using existing data from initiatives including the World Food Lifecycle Database (lifecycle assessment). Where we currently rely on irrigation, we worked with WRI to assess whether the watersheds used for that water are experiencing stress, and the results inform our strategies for those watersheds under the most stress and where our agricultural water use is greatest. These watersheds are located in Australia, India, Pakistan, Spain and the United States.

**How risks are classified**

We consider three criteria in assessing water-related risks:

1. Whether a manufacturing site is identified as experiencing high water-related risks based on data obtained in our annual Mars Facility Water Risk Assessment Questionnaire.
2. Whether a site or sourcing location has high (>40%) baseline water stress as assessed using the WRI Aqueduct tool.
3. Whether a site produced more than 2% of its business segment's global production volume. Our Food business is an exception where we set the level at 5%, as it has a much smaller number of sites. The proportion of production volume is an indicator of potential business impact in the event of water issues affecting a manufacturing site's ability to operate. Most of our products can be manufactured at multiple sites, reducing business continuity risks in the event of a water-related impact production at one facility. Where a site produces unique products, we may rate the business risk as substantive even if the production volume threshold is not met.

**Response**

As one example of how we are adjusting our sourcing strategies based on water risk, for tomatoes we are developing regional blue water footprint benchmarks for Australia, Greece, Spain and the USA. This helps us understand supplier performance against a regional benchmark, so we can recommend how to close the gap to sustainable water use in their region and adjust our sourcing strategy accordingly.

## 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?

##### Definition, measures, and thresholds used

The Mars Facility Water Stewardship Risk Assessment Process considers three separate criteria to assess the level of water-related risks at our manufacturing sites and whether these could have a substantive strategic business impact. We define a strategic impact on our direct operations as when one or more of the following criteria are met:

1. Sites experiencing the greatest water-related risks and issues are identified based on data obtained in our annual Mars Facility Water Risk Assessment Questionnaire (formerly known as the Mars watershed governance survey) which forms part of a wider sustainability data gathering exercise in support of our Sustainable in a Generation (SiG) Plan.
2. Sites in locations with high (>40%) baseline water stress as per the WRI Aqueduct tool.
3. Sites producing more than 2% of their business segment's global production volume. Our Food business is an exception where we set the level at 5%, as it has a much smaller number of sites. The proportion of production volume is an indicator of potential business impact in the event of water issues affecting a manufacturing site's ability to operate. Most of our products can be manufactured at multiple sites, reducing business continuity risks in the event of a water-related impact production at one facility. Where this is not the case and a site produces unique products, we may rate the business risk as substantive even if the production volume threshold is not met.

Sites identified as having the highest water-related risks are defined as "High Priority" sites within our Water Stewardship program and are the subject of Water Stewardship Reviews based on the Alliance for Water Stewardship Standard. The reviews aim to ensure we build on the information from our Facility Risk Assessments and WRI stress data to build a detailed understanding of local water risks and opportunities. Twenty level-3 sites will complete water stewardship reviews before 2020 year-end, assuming the COVID-19-related restrictions that we currently face are lifted in time. If not, these reviews will be carried forward into 2021. Fourteen reviews had been completed by the end of 2019, at sites in Australia, China, Mexico, Russia, the UK and the USA.

In our supply chain, as part of the accounting process for developing our SiG Plan, we overlaid our raw material origins and volumes with watershed stress maps in our internal Geographic Information System, to cross-reference water-intensive crops with areas of water stress. This allowed us to identify priority watersheds that represent supply risks and therefore substantive strategic impacts. As an example of a substantive risk considered, our assessments have shown that rice represents over 75% of the water savings required in stressed locations to meet our SiG Plan water target, and so is the primary focus of our supply chain water work.

We used the results to develop a context-based target for reducing our most material water impacts in stressed watersheds. More information on this approach is available at [www.wri.org/blog/2016/04/companies-could-profit-setting-water-targets-informed-science](http://www.wri.org/blog/2016/04/companies-could-profit-setting-water-targets-informed-science) and our water position statement on Mars.com (<https://www.mars.com/global/about-us/policies-and-practices/water-stewardship-position-statement>).

### W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	2	1-25	Two sites, both within our Food business, were identified as exposed to potential substantive risks based on the criteria described in W4.1.

### W4.1c

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

**Country/Area & River basin**

South Africa	Other, please specify (Western Cape Water Supply System)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

**% company's total global revenue that could be affected**

Less than 1%

**Comment**

Our Mars Food site in Cape Town, South Africa, did not represent 5% or more of Food segment production in 2019, in line with the threshold for a substantive impact defined in W4.1a . However, the site makes a unique combination of products which cannot easily be manufactured at our other sites, and so the potential strategic impact of disrupted operations is still considered to be high.

**Country/Area & River basin**

United Kingdom of Great Britain and Northern Ireland	Other, please specify (Great Ouse)
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**Number of facilities exposed to water risk**

1

**% company-wide facilities this represents**

Less than 1%

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

<Not Applicable>

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

<Not Applicable>

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

<Not Applicable>

**% company's total global revenue that could be affected**

Less than 1%

**Comment**

Our Kings Lynn Food segment site in the United Kingdom meets all the criteria for a substantive financial or strategic impact on our business defined in W4.1a. A water stewardship review based on the AWS International Standard has confirmed stress in the watershed.

**W4.2**

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

**Country/Area & River basin**

South Africa	Other, please specify (Western Cape Water Supply System)
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**Type of risk & Primary risk driver**

Physical	Drought
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**Primary potential impact**

Increased operating costs

**Company-specific description**

Our Mars Food site in Cape Town was heavily impacted by the Cape Town drought in 2017, and was forced to respond in order to secure a reliable water supply and ensure production continuity for Royco-branded products. Additionally, known water quantity and stress issues in the catchment are expected to impact the municipal water supply system. Recurring droughts are likely and have the potential to cause further disruptions to the site's water supply and related cost increases. The site also anticipates changes in pricing, discharge or quality standards in the short term.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

Low

**Likelihood**

Virtually certain

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

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

100000

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

200000

**Explanation of financial impact**

The estimated range shows the inherent financial impact of recurring droughts in Cape Town, before taking into consideration the controls we have in place to mitigate this impact. The minimum financial impact figure provided assumes that the site would have to fund water tanker deliveries by road for six months; the maximum figure assumes 12 months of deliveries.

**Primary response to risk**

Increase capital expenditure

**Description of response**

In response to the Cape Town drought, in 2018 the site made a \$350,000 (4.5 million rand) capital investment in a ground water supply, treatment and storage system, to enable a transition to ground water use in preference to the municipal supply. This will ensure the site can continue to operate if the municipal water supply is interrupted. While the installation took place in 2018, there were ongoing operational costs in 2019. A water stewardship review of the site based on the AWS International Standard is planned, and our South African business has begun to explore increased participation in the Local CEO Water Mandate Action hub, potentially allowing for future collaboration on water stewardship with other businesses in the country.

**Cost of response**

100000

**Explanation of cost of response**

The cost of response in 2019 related to the depreciation and operational cost of the incoming ground water supply and treatment system the site has now installed to mitigate business interruption risks resulting from future droughts.

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**Country/Area & River basin**

United Kingdom of Great Britain and Northern Ireland	Other, please specify (Great Ouse)
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**Type of risk & Primary risk driver**

Regulatory	Regulation of discharge quality/volumes
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**Primary potential impact**

Increased compliance costs

**Company-specific description**

Our Mars Food manufacturing site in Kings Lynn, which produces UNCLE BEN'S branded products, is in a water-stressed area where demand for water is growing driven by an increasing population, economic development and agricultural irrigation. Potential regulatory changes could be put in place to manage increasing demand and reduced supply. The site has been focused on increasing its water efficiency and has installed a system to recycle process water, this has diverted water from the effluent stream which has led to increased pollutant concentration in the site effluent. This has led to some issues for the site in terms of meeting its effluent discharge consent, which poses both operational and financial risks. The site has an annual water allocation, and potentially expects changes in water rights, permits or allocation. The site is also in an area which experiences occasional flooding, which can impact vehicle movements to and from the site.

**Timeframe**

Current up to one year

**Magnitude of potential impact**

High

**Likelihood**

Virtually certain

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

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

500000

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

900000

**Explanation of financial impact**

The estimated range shows the inherent financial impact of increasing compliance costs, before taking into consideration the controls we have in place to mitigate this impact. It is the estimated cost of separately collecting and disposing of the most polluted wastewater from the site. The figures provided reflect the minimum and maximum volumes of water that might need to be separately handled in this way.

**Primary response to risk**

Increase capital expenditure

**Description of response**

Between 2018 and 2019, the site spent \$2.6m (£2.0m) on new wastewater handling and treatment equipment to ensure its wastewater meets its discharge consent in all circumstances. This equipment is now installed and the site is in the process of bringing the new treatment plant online. The site has conducted a water stewardship review based on the AWS International Standard. Following that review, the site has focused on improved plant operation, water efficiency and recycling and well as wastewater treatment.

**Cost of response**

2600000

**Explanation of cost of response**

The cost of response in 2019 is the capital cost of installing the new treatment plant.

## W4.2a

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

**Country/Area & River basin**

Spain	Guadalquivir
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**Stage of value chain**

Supply chain

**Type of risk & Primary risk driver**

Physical	Increased water stress
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**Primary potential impact**

Increased production costs due to changing input prices from supplier

**Company-specific description**

We have mapped the total water use across our global supply chains and assessed whether that water comes from rainfall or irrigation. Where our direct and indirect suppliers rely on irrigation, we've assessed whether the watersheds involved are experiencing stress. As a result, we are prioritizing our efforts on crops which we or our suppliers source at large volumes from watersheds where water is especially scarce and water use is high, such as parts of Australia, India, Pakistan, Spain and the United States. As we work toward our ultimate goal of zero unsustainable water use in our value chain, our interim target is to cut unsustainable water use by half by 2025, in close collaboration with our suppliers and others across our extended value chain. Our analysis shows that water stress in the Guadalquivir river basin in Spain is the basin in our value chain with the largest gap between the current situation and sustainable water withdrawals. This poses the risk of increased costs in the rice supply chain for our Food Business and brands including Uncle Ben's, due to rice suppliers passing on increased operating costs to their customers, or due to reduced availability of quality rice from this region.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium-high

**Likelihood**

Unlikely

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

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

4000000

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

12000000

**Explanation of financial impact**

We worked with government agencies in Spain on a pilot project to assess the climate resilience and adaptive capacity of Spanish rice farming communities over the next 10-20 years, to increase our understanding of the likelihood of our supply chain being impacted. We assessed the likelihood of water stress impacting our rice supply in Spain as low because of the mitigation measures we already have in place. However, if our mitigation proves unsuccessful we may face significant potential costs from rice suppliers passing on increased operating costs to their customers, or due to reduced availability of quality rice from this region causing price spikes. We estimate these costs at between \$4,000,000 and \$12,000,000, based on the tonnes of rice that Mars purchases from this water-stressed region and the potential range of market price premiums that water-balance issues could cause in in this location.

**Primary response to risk**

Supplier engagement	Promote the adoption of sustainable irrigation practices among suppliers
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**Description of response**

We are assisting with farmer training and technology that helps advance more sustainable water use for the rice we source. Mars has partnered with around 30 other organizations from a range of sectors to develop the Sustainable Rice Platform (SRP), a best-practice standard for rice cultivation that has shown the potential to reduce

water use and increase yield and farmer income. We have committed to ensuring that all the rice farmers in food supply chain are working towards this standard by 2020. In Spain specifically, we have worked with government agencies on a pilot project to assess the climate resilience and adaptive capacity of rice farming communities over the next 10-20 years, to increase our understanding of the likelihood of our supply chain being impacted and inform our sourcing strategy accordingly. Where we can't reduce water use to sustainable levels, we may engage in activities, such as landscape restoration, to recharge water levels to the point necessary to meet our targets. If interventions can't help relieve stress on a watershed where we source, we are prepared to change where we source from to protect that watershed.

**Cost of response**

150000

**Explanation of cost of response**

We estimate the annual cost of deploying the SRP standard among rice farmers in our supply chain to be \$150,000, based on the organizational costs of trained sustainable sourcing staff that support SRP deployment and other water aspects of our Sustainable in a Generation Plan in this basin.

**Country/Area & River basin**

India	Ganges - Brahmaputra
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**Stage of value chain**

Supply chain

**Type of risk & Primary risk driver**

Physical	Increased water stress
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**Primary potential impact**

Increased production costs due to changing input prices from supplier

**Company-specific description**

We have mapped the total water use across our global supply chains and assessed whether that water comes from rainfall or irrigation. Where our direct and indirect suppliers rely on irrigation, we've assessed whether the watersheds involved are experiencing stress. As a result, we are prioritizing our efforts on crops which we or our suppliers source at large volumes from watersheds where water is especially scarce and water use is high, such as parts of Australia, India, Pakistan, Spain and the United States. As we work toward our ultimate goal of zero unsustainable water use in our value chain, our interim target is to cut unsustainable water use by half by 2025, in close collaboration with our suppliers and others across our extended value chain. The Ganges river basin in India is an important source of Basmati rice for the Mars Food business and brands including Uncle Ben's, but unfortunately our analysis shows that it is water stressed. This poses the risk of increased costs in the rice supply chain for our Food Business and brands including Uncle Ben's, due to rice suppliers passing on increased operating costs to their customers, or due to reduced availability of quality rice from this region.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium-high

**Likelihood**

Unlikely

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

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

7500000

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

22500000

**Explanation of financial impact**

We have assessed the likelihood of water stress impacting our rice supply in India as low because of the mitigation measures we already have in place. However, if our mitigation proves unsuccessful we may face significant potential costs from rice suppliers passing on increased operating costs to their customers, or due to reduced availability of quality rice from this region causing price spikes. We estimate these costs at between \$7,500,000 and \$22,500,000.

**Primary response to risk**

Supplier engagement	Promote the adoption of sustainable irrigation practices among suppliers
---------------------	--

**Description of response**

We are assisting with farmer training and technology that helps advance more sustainable water use for the rice we source. Mars has partnered with around 30 other organizations from a range of sectors to develop the Sustainable Rice Platform (SRP), a best-practice standard for rice cultivation that has shown the potential to reduce water use and increase yield and farmer income. We have committed to ensuring that all the rice farmers in food supply chain are working towards this standard by 2020 and this has already been achieved for our basmati farmers in India and Pakistan. As a leading SRP member, with partners such as UN Environment, the International Rice Research Institute and WWF, we're supporting 2,000 basmati rice farmers in Pakistan and India to improve productivity and reduce water use. In Pakistan, pilots have shown a 32% increase in farmer income and a 30% reduction in water use since the project began. Where we can't reduce water use to sustainable levels, we may engage in activities, such as landscape restoration, to recharge water levels to the point necessary to meet our targets. If interventions can't help relieve stress on a watershed where we source, we are prepared to change where we source from to protect that watershed.

**Cost of response**

1000000

**Explanation of cost of response**

We estimate that the annual cost of deploying SRP, and the organizational costs of sustainable sourcing roles that support water aspects of our Sustainable in a Generation Plan in this basin, to be approximately \$1,000,000.

## Country/Area & River basin

Pakistan	Indus
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## Stage of value chain

Supply chain

## Type of risk & Primary risk driver

Physical	Increased water stress
----------	------------------------

## Primary potential impact

Increased production costs due to changing input prices from supplier

## Company-specific description

We have mapped the total water use across our global supply chains and assessed whether that water comes from rainfall or irrigation. Where our direct and indirect suppliers rely on irrigation, we've assessed whether the watersheds involved are experiencing stress. As a result, we are prioritizing our efforts on crops which we or our suppliers source at large volumes from watersheds where water is especially scarce and water use is high, such as parts of Australia, India, Pakistan, Spain and the United States. As we work toward our ultimate goal of zero unsustainable water use in our value chain, our interim target is to cut unsustainable water use by half by 2025, in close collaboration with our suppliers and others across our extended value chain. The Indus river basin in Pakistan is an important source of Basmati rice for the Mars Food business and brands including Uncle Ben's, but unfortunately our analysis shows that it is water stressed. This poses the risk of increased costs in the rice supply chain for our Food Business and brands including Uncle Ben's, due to rice suppliers passing on increased operating costs to their customers, or due to reduced availability of quality rice from this region.

## Timeframe

More than 6 years

## Magnitude of potential impact

Medium-high

## Likelihood

Unlikely

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

Yes, an estimated range

## Potential financial impact figure (currency)

<Not Applicable>

## Potential financial impact figure - minimum (currency)

7500000

## Potential financial impact figure - maximum (currency)

22500000

## Explanation of financial impact

We have assessed the likelihood of water stress impacting our rice supply in Pakistan as low because of the mitigation measures we already have in place. However, if our mitigation proves unsuccessful we may face significant potential costs from rice suppliers passing on increased operating costs to their customers, or due to reduced availability of quality rice from this region causing price spikes. We estimate these costs at between \$7,500,000 and \$22,500,000.

## Primary response to risk

Supplier engagement	Promote the adoption of sustainable irrigation practices among suppliers
---------------------	--

## Description of response

We are assisting with farmer training and technology that helps advance more sustainable water use for the rice we source. Mars has partnered with around 30 other organizations from a range of sectors to develop the Sustainable Rice Platform (SRP), a best-practice standard for rice cultivation that has shown the potential to reduce water use and increase yield and farmer income. We have committed to ensuring that all the rice farmers in food supply chain are working towards this standard by 2020 and this has already been achieved for our basmati farmers in India and Pakistan. As a leading SRP member, with partners such as UN Environment, the International Rice Research Institute and WWF, we're supporting 2,000 basmati rice farmers in Pakistan and India to improve productivity and reduce water use. In Pakistan, pilots have shown a 32% increase in farmer income and a 30% reduction in water use since the project began. Where we can't reduce water use to sustainable levels, we may engage in activities, such as landscape restoration, to recharge water levels to the point necessary to meet our targets. If interventions can't help relieve stress on a watershed where we source, we are prepared to change where we source from to protect that watershed.

## Cost of response

1000000

## Explanation of cost of response

We estimate that the annual cost of deploying SRP, and the organizational costs of sustainable sourcing roles that support water aspects of our Sustainable in a Generation Plan in this basin, to be approximately \$1,000,000.

## Country/Area & River basin

Australia	Murray - Darling
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## Stage of value chain

Supply chain

## Type of risk & Primary risk driver

Physical	Increased water stress
----------	------------------------

**Primary potential impact**

Supply chain disruption

**Company-specific description**

We have mapped the total water use across our global supply chains and assessed whether that water comes from rainfall or irrigation. Where our direct and indirect suppliers rely on irrigation, we've assessed whether the watersheds involved are experiencing stress. As a result, we are prioritizing our efforts on crops which we or our suppliers source at large volumes from watersheds where water is especially scarce and water use is high, such as parts of Australia, India, Pakistan, Spain and the United States. As we work toward our ultimate goal of zero unsustainable water use in our value chain, our interim target is to cut unsustainable water use by half by 2025, in close collaboration with our suppliers and others across our extended value chain. Mars Petcare sources broken rice from the Murray basin, a water-stressed area, as ingredients for pet food brands including PEDIGREE and WHISKAS. This poses the risk of disruption in these supply chains for our Petcare business, as it may not be possible to source these ingredients from this region in future or higher costs may be incurred to source the material from further afield.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Low

**Likelihood**

Unlikely

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

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

250000

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

500000

**Explanation of financial impact**

We are improving the resolution and completeness of our supply chain mapping data for cereals in order to better understand how water risks could impact supply and how we can address our own impacts of cereal irrigation. We are starting this work in the USA, where we source greater volumes of broken rice and as reported in the next row.

**Primary response to risk**

Upstream	Map supplier water risk
----------	-------------------------

**Description of response**

We are assessing the impacts of the broken rice used by our Petcare business, by mapping the supply chains we use.

**Cost of response**

20000

**Explanation of cost of response**

Our response is currently to establish better supply mapping data working with a supply chain mapping vendor, at a cost of between \$5000 and \$20,000.

**Country/Area & River basin**

United States of America	Mississippi River
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**Stage of value chain**

Supply chain

**Type of risk & Primary risk driver**

Physical	Increased water stress
----------	------------------------

**Primary potential impact**

Supply chain disruption

**Company-specific description**

We have mapped the total water use across our global supply chains and assessed whether that water comes from rainfall or irrigation. Where our direct and indirect suppliers rely on irrigation, we've assessed whether the watersheds involved are experiencing stress. As a result, we are prioritizing our efforts on crops which we or our suppliers source at large volumes from watersheds where water is especially scarce and water use is high, such as parts of Australia, India, Pakistan, Spain and the United States. As we work toward our ultimate goal of zero unsustainable water use in our value chain, our interim target is to cut unsustainable water use by half by 2025, in close collaboration with our suppliers and others across our extended value chain. The Mississippi basin in the USA is an important source of irrigated corn, wheat, rice (brown and broken) and sugar beet, which are ingredients in a variety of Mars Petcare brands such as Pedigree and Whiskas, as well as some Mars Food brands. Of these materials, only brown rice - which represents 10% of our gap to sustainable water use - had a program to tackle water use up and running in 2017. This poses the risk of disruption in these supply chains, as it may not be possible to source these ingredients from this region in future.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium

**Likelihood**

Unlikely

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

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

2500000

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

7500000

**Explanation of financial impact**

The range provided is the estimated potential financial impact for the rice we source from the Mississippi basin. While we regard the risk of water stress disrupting this rice supply in the USA as unlikely because of the mitigation approaches we are taking, we believe that we face significant potential costs from reduced raw material availability if our mitigation work proves unsuccessful. These costs could lie in the \$2,500,000 to \$7,500,000 range.

**Primary response to risk**

Supplier engagement	Promote the adoption of sustainable irrigation practices among suppliers
---------------------	--

**Description of response**

We are assisting with farmer training and technology that helps advance more sustainable water use for the rice we source. Mars has partnered with around 30 other organizations from a range of sectors to develop the Sustainable Rice Platform (SRP), a best-practice standard for rice cultivation that has shown the potential to reduce water use and increase yield and farmer income. We have committed to ensuring that all the rice farmers in food supply chain are working towards this standard by 2020. Where we can't reduce water use to sustainable levels, we may engage in activities, to recharge water levels to the point necessary to meet our targets. If interventions can't help relieve stress on a watershed we are prepared to change where we source from to protect that watershed.

**Cost of response**

195000

**Explanation of cost of response**

We have allocated the annual costs associated with deploying the SRP standard, and the organizational costs of our sustainable sourcing roles to support water aspects of our Sustainable in a Generation Plan, in proportion to the amount of unsustainable water use in this catchment. On this basis, total response costs for this catchment are estimated in the range of \$65,000 to \$195,000.

**W4.3**

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

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

**W4.3a**

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

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Cost savings

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

All of our factories worldwide rely on water for food-safe manufacturing processes, and as an ingredient in brands as diverse as Uncle Ben's rice and Pedigree dog food. Reducing water withdrawals and the risks associated with water scarcity presents a strategic opportunity to reduce both operating costs and fines and penalties resulting from regulatory non-compliance. In water-scarce areas, we can also maintain good relationships with local communities by being a good water steward and ensuring our usage does not impact on their needs. This in turn may help us secure our license to operate and recruit and retain talented associates. We call our strategy for realizing these opportunities our Sustainable in a Generation (SiG) Plan. Based on the best-available scientific data, SiG aims to decouple the environmental impacts of our business, including water impacts, from business growth. Within our direct operations, we're focused on using water efficiently, promoting water reuse and recycling, and preventing pollution through responsible waste water management. Our focus is on locations where water is scarce and the associated risks and opportunities are greatest. Our target for our factories is to improve water efficiency in water-scarce areas by 15% by 2020 from a 2015 baseline. Our highest priority sites are completing water stewardship reviews structured around steps 1-2 of the AWS Standard. These reviews give visibility of water opportunities and challenges both within and outside the site's boundary. Two of our UK sites have benefited from opportunities to reduce water impacts identified during these water stewardship reviews. One site uses reverse osmosis to treat incoming water, and an opportunity was identified to significantly increase the efficiency of these units. At the second site, the review identified that the utility tariff was based on an incorrect maximum flow value, allowing billing arrangements to be changed with immediate cost savings.

**Estimated timeframe for realization**

1 to 3 years

**Magnitude of potential financial impact**

Low-medium

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

Yes, a single figure estimate

**Potential financial impact figure (currency)**

1000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

#### Explanation of financial impact

Reducing our water usage and maintaining high-quality water discharges will reduce usage costs and potential regulatory and compliance costs. \$1,000,000 represents the potential annual global operational savings from delivering our site water strategy. It includes the sum of expected reduced water costs and water treatment costs.

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#### Type of opportunity

Resilience

#### Primary water-related opportunity

Increased supply chain resilience

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

Our long-term water goal is to ensure water use in our value chain is within annually renewable levels by watershed. We see this as an effective and strategic way to mitigate the impacts of water stress on our supply chain, especially the risks associated with sourcing agricultural commodities, as over 99% of the water used in our value chain is for growing crops. Our impact assessments have identified a number of water-intensive agricultural raw materials in our supply chains that are grown in areas of high baseline water stress. These supply chains can be strengthened and made more resilient through better water management. Rice for Mars Food brands including Uncle Ben's rice is the raw material with the largest gap between the current situation and sustainable usage. Our strategy is to partner with suppliers, farmers and expert organizations to improve water stewardship and ensure all our rice suppliers have implemented the Sustainable Rice Platform standard by 2020. Mars is a founding SRP member. Through the SRP, we are working with basmati rice farmers in Pakistan to introduce alternate wetting and drying, an irrigation technique that reduces water and GHG emissions and improves yields, and is considered ground-breaking water management practice in the rice industry. We're also taking part in a project led by the Swiss development organization, Helvetas, which aims to improve water efficiency and productivity for rice growers in Asia. In Pakistan, pilots have shown a 30% increase in farmer income and a 30% reduction in water use since the project began, and we're working to expand these practices to rice farmers outside our supply chain. In Spain, we have worked with the government to conduct a study into the impact of climate change, resilience and adaptive capacity of water-stressed rice supply chains.

#### Estimated timeframe for realization

More than 6 years

#### Magnitude of potential financial impact

High

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

Yes, an estimated range

#### Potential financial impact figure (currency)

<Not Applicable>

#### Potential financial impact figure – minimum (currency)

60000000

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

180000000

#### Explanation of financial impact

Only 2% of the total green and blue water needed in our extended value chain is what we regard as "usage in excess of sustainable levels". However, we believe this 2% usage represents a long-term resilience risk to our business as increased water stress threatens raw material supplies, and that significant work is required via the deployment of our Sustainable in a Generation Plan to mitigate this risk over the coming years. If we do not mitigate these risks throughout our value chain, we estimate potential increased raw material costs of \$60,000,000 to \$180,000,000 per year, caused by a combination of increased production costs, reduced supply to meet demand pushing up prices, and/or the cost of switching to alternative sources elsewhere.

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#### Type of opportunity

Markets

#### Primary water-related opportunity

Increased brand value

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

Mars helps increase scientific understanding of water impacts and stewardship by contributing to initiatives such as the multi-agency collaborative work on context-based water targets that is now part of the Science Based Targets Initiative. Mars is also a premium partner of the World Food Life Cycle database project part III. This project is developing a water impact factor methodology for key agricultural commodities, in partnership with other global businesses. Mars also support the AWS, UN CEO water mandate, WRI and others to develop science and water stewardship. Mars supported WRI/Limnotech/Quantis/Valuing Nature in developing the Water stewardship benefit Accounting Methodology in 2019. Our strategic involvement in these initiatives not only helps to increase scientific understanding of water impacts in agricultural supply chain, but also helps strengthen Mars' reputation as a responsible and sustainable business. This in turn can help make our brands and business more attractive to customers, consumers and potential employees, and increase our ability to work with preferred suppliers and partners. The Mars purpose, "The world we want tomorrow begins with how we do business today" and our commitment to sustainable business through our Sustainable in a Generation plan are instrumental in providing a business case for the billion-dollar investment Mars is making in the first phase of delivering our sustainability targets.

#### Estimated timeframe for realization

4 to 6 years

#### Magnitude of potential financial impact

Low

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

Yes, an estimated range

#### Potential financial impact figure (currency)

<Not Applicable>

#### Potential financial impact figure – minimum (currency)

80000000

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

120000000

#### Explanation of financial impact

The impact of our water programs on brand value is difficult to estimate. However, we have provided an approximate assessment based on our \$1 billion investment in

implementing the first phase of our Sustainable in a Generation plan, assuming that Mars sees a return on this investment in brand value, and that water represents between 8-12% of these reputational and brand benefits.

## W5. Facility-level water accounting

### W5.1

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

**Facility reference number**

Facility 1

**Facility name (optional)**

Cape Town Mars Food site

**Country/Area & River basin**

South Africa	Other, please specify (Western Cape Water Supply System)
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**Latitude**

-33.87152

**Longitude**

52.742303

**Located in area with water stress**

Yes

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

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

5.54

**Comparison of total withdrawals with previous reporting year**

Lower

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

1.48

**Withdrawals from groundwater - non-renewable**

3.6

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

0.46

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

4.95

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

Lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

4.95

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

0.59

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

About the same

**Please explain**

While water consumption remained about the same as the previous year at our Cape Town site, this was achieved alongside an increase in production tonnage, leading to a 21% improvement in water intensity. Wastewater is presently not metered at the Cape Town Mars Food site, but is instead estimated using the global wastewater intensity reported by Mars' other Food factories. In 2020 the Cape Town Mars Food facility is: - Developing a better, process-based estimate of wastewater - Pursuing adding metering as part of the site's master plan.

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**Facility reference number**

Facility 2

**Facility name (optional)**

King's Lynn Mars Food site

**Country/Area & River basin**

United Kingdom of Great Britain and Northern Ireland	Other, please specify (Great Ouse)
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**Latitude**

52.742303

**Longitude**

0.410887

**Located in area with water stress**

Yes

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

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

224.98

**Comparison of total withdrawals with previous reporting year**

Higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

224.98

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

50.73

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

Much lower

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

50.73

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

174.25

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

Much higher

**Please explain**

The increased water consumption directly corresponds to an increase in the manufacturing site's production volume in 2019.

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W5.1a

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

**Water withdrawals – total volumes**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water withdrawals – volume by source**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water withdrawals – quality**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water discharges – total volumes**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water discharges – volume by destination**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water discharges – volume by treatment method**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water discharge quality – quality by standard effluent parameters**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water discharge quality – temperature**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water consumption – total volume**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

**Water recycled/reused**

% verified  
Not verified

What standard and methodology was used?  
<Not Applicable>

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**W6. Governance**

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**W6.1**

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	The scope of our public Water Stewardship Position Statement is company-wide, because our water stewardship goal applies to our entire value chain and because our internal policies and procedures relating to water apply throughout our business. Our position statement sets out our current situation with regards to water impacts, including both our dependence and impacts on water. For example, it acknowledges that agriculture accounts for 70% of global freshwater withdrawals and 99% of water use in our extended global value chain. It describes our company-wide targets and goals for ensuring water use in our value chain is within annually renewable levels by watershed, our theory of change and our water action strategy for achieving these targets and goals. It also sets out our commitment to align with public policy initiatives including the SDGs and the UN CEO Water Mandate. The position statement also explains how we determined our context-based water goal, and examples of the strategies we are employing in our direct operations and supply chain. We updated our position statement early in 2020 to reflect developments in our water risk assessment, strategy and supplier engagement, to affirm our commitment to WASH, and to more clearly acknowledge environmental linkages. Internally, our position statement is supported by standards for the management of waste water and water quality at our manufacturing sites, and as part of the Mars Strategic Sourcing Methodology. This process supports our buyers globally to develop effective and sustainable sourcing strategies for our raw materials.

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 Chair	Our water stewardship strategy, targets and performance are core elements of the Mars Sustainable in a Generation (SiG) Plan: our plan for growing in ways that are good for people, good for the planet and good for our business. The plan was approved by the Board in 2017. Performance against the context-based, value-chain-wide water target and operational water-use reduction targets within the SiG Plan are tracked by the CEO and Mars Leadership Team as part of our quarterly corporate scorecard. The CEO sits on the Board and is responsible for delivering all targets within the scorecard, and reports progress at Board meetings. In addition, progress against all our SiG Plan targets, including our water targets, is presented to the Board at least annually. The Board chair personally oversees the work of Mars Sustainable Solutions to protect coral reefs in the coral triangle in Indonesia, as well as in Australia and Mexico, from impacts such as watershed alteration and runoff. In 2019, the Board chair approved the signing of an agreement between Mars Australia and James Cook University (JCU) to partner on a variety of tropical research projects that involve water aspects, including work to protect Australia's iconic Great Barrier Reef.

**W6.2b**

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	Our water stewardship strategy, targets and performance are core elements of the Mars Sustainable in a Generation (SiG) Plan: our plan for growing in ways that are good for people, good for the planet and good for our business. Performance against the context-based, value-chain wide sustainable water use target and operational water reduction targets within the SiG Plan are tracked as a matter of course by the CEO and the Mars Leadership Team as part of our quarterly corporate scorecard. The CEO sits on the Board and is responsible for delivering all targets within the scorecard, and reports progress at Board meetings. In addition, progress against all our SiG Plan targets, including our water targets, is presented to the Board at least annually. The Leadership Team reviews and guides our strategy, plans, policies, and budgets as necessary to ensure we remain on track, with oversight and approval where necessary from the Board. During 2019, the threat posed to the oceans by plastic pollution was a significant driver of Board-level decisions to refine and develop Mars' plastic packaging commitments. Additionally, the Board chair personally oversees the work of Mars Sustainable Solutions to protect coral reefs in the coral triangle in Indonesia, as well as in Australia and Mexico, from impacts such as watershed alteration and runoff. In 2019, the Board chair approved the signing of an agreement between Mars Australia and James Cook University (JCU) to partner on a variety of tropical research projects that involve water aspects, including work to protect Australia's iconic Great Barrier Reef.

**W6.3**

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

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

Chief Executive Officer (CEO)

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

More frequently than quarterly

**Please explain**

Our water stewardship strategy, targets and performance are core elements of the Mars Sustainable in a Generation (SiG) Plan: our plan for growing in ways that are good for people, good for the planet and good for our business. Performance against the context-based, value-chain-wide sustainable water-use target and operational water-reduction targets within the SiG Plan are tracked as a matter of course by the CEO and Mars Leadership Team, as part of our quarterly corporate scorecard. The CEO sits on the Board and is responsible for delivering all targets within the scorecard. In addition to this quarterly reporting, the Chief Procurement and Sustainability Officer presents our progress against our SiG Plan goals including for water stewardship to the Board at least annually. The Leadership Team delegates responsibility for our water strategy to the Sustainability Steering Group (SSG). See next row for more details.

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

Sustainability committee

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

Quarterly

**Please explain**

The Leadership Team delegates responsibility for our Water Stewardship Strategy to the Sustainability Steering Group (SSG), which meets quarterly, is chaired by the CSO and comprises senior managers representing each main business segment (Mars Petcare, Mars Wrigley and Mars Food) and each main business function (Procurement, Manufacturing and Public Affairs). The SSG is the center of our sustainability thought leadership and is where priorities, principles, policies, positions are developed, often in collaboration with external stakeholders and experts. The SSG ensures the Leadership Team is fully briefed on potential courses of action and strategic issues, and that the implications of strategies, targets and potential courses of action are investigated and understood.

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

Business unit manager

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

Quarterly

**Please explain**

The targets in our Corporate Scorecard and SiG Plan are cascaded by the Mars Leadership Team to the leadership teams of each business segment for implementation. The Segment General Managers (Business unit managers) for our main Mars Petcare, Mars Wrigley, and Mars Food segments are accountable for deploying related strategies within their businesses and for reporting their segment's performance via our corporate reporting system. Segment Sustainability teams liaise with Segment Leadership Teams and Regional Leadership Teams to develop detailed strategies for deliver the required impact improvements.

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**W6.4**

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

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	

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**W6.4a**

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

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	No one is entitled to these incentives	<Not Applicable>	There is not yet a specific financial incentive linked to water stewardship, though our Sustainable in a Generation (SiG) Plan goals are included on our Corporate Scorecard and are a factor in assessing the overall performance of our manufacturing and procurement functions. In particular, we are introducing leading KPIs for each of our SiG Plan goals, including water stewardship, to further incentivize our buyers to drive sustainability performance in our supply chains. These KPIs are not yet linked to monetary rewards, though we plan to do this in future.
Non-monetary reward	Corporate executive team Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO) Chief Purchasing Officer (CPO) Chief Sustainability Officer (CSO)	Reduction of water withdrawals Improvements in efficiency - direct operations Improvements in efficiency - supply chain Improvements in waste water quality - direct operations Supply chain engagement	Our Sustainable in a Generation (SiG) Plan goals, including our context-based water stewardship target, are included on our Corporate Scorecard and are a factor in assessing the overall performance of our manufacturing and procurement functions, upon which the performance of our Leadership Team is assessed.

**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
- Yes, other

**W6.5a**

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

Mars participates in all policy engagement and research that it supports, enabling us to ensure these direct activities remain consistent with our Water Stewardship Position Statement and commitments. As paying members of the organizations we support, we can influence their positions, policies and research objectives, including on water security and stewardship. We work with many trade associations around the world, and hold leadership positions in some of them. On the rare occasions our views differ and we cannot reach a compromise, we are willing to advocate independently or adopt internal policies to govern our activities. Our Sustainability and Corporate Affairs teams work closely with our businesses to ensure our indirect activities are consistent with our Position Statement. Examples include collaboration with our Sales teams on brand campaigns such as our major customer Metro's World Water Day promotion.

The Mars Associates who work on policy initiatives are involved with multiple organizations, ensuring our positions are consistently communicated across all activities. The selection of the organizations and policy initiatives we support is managed by our internal Sustainability Steering Group.

In all external engagements, we follow the policies in the Mars Guide to Global Standards, Policies and Practices, which help us to act with integrity, honesty and in line with The Five Principles. We make sure all relevant Associates understand and abide by these policies.

**W6.6**

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

- Yes (you may attach the report - this is optional)
- Mars SIG\_Scorecard.pdf

**W7. Business strategy**

**W7.1**

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	21-30	Water stewardship is one of three priorities within the Healthy Planet pillar of the Mars Sustainable in a Generation Plan – our plan for decoupling business growth from environmental impact. Performance against our SIG Plan targets is tracked by the CEO and Mars Leadership Team as part of our quarterly Corporate Scorecard and progress is reported to the Board. Agriculture is the biggest user of water, which means to manage water sustainably we need to focus on where and how the ingredients for our confectionery, food and pet food brands are grown. Guided by science, our long-term goal is to eliminate water use in excess of sustainable levels in our value chain. We have not yet set a date for this to be achieved as we recognize that value chain water targets is an emerging area and dependent on data and accounting approaches that are still developing. Our interim target is to halve unsustainable water use by 2025, in close collaboration with our suppliers and others in our extended value chain. For the irrigated raw materials we source with the greatest impacts on water stress (mint and rice), we invest in strategies to deliver quantified reductions in water withdrawals in stressed sourcing areas as an integrated part of The Mars Strategic Sourcing Methodology. This is our company-wide process for assessing, selecting, contracting and monitoring suppliers to secure cost-effective and sustainable raw materials in the medium and long-term.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	21-30	All our water stewardship strategies and programs are long-term in nature. Our integrated Water Action Strategy is to “understand, eliminate, reduce, reuse, treat and recycle” water, both in our manufacturing operations and supply chain. We understand water impacts by supporting research into the water impacts of e.g. rice cultivation in Southern Spain, tomato farms, and almond cultivation in central California. We eliminate water impacts by sourcing high water-use materials such as rice from regions of lower water stress, or using alternative materials with lower water use. We reduce water use by developing detailed SIG playbooks for production facilities to follow. These activities are included in the design and operation of new facilities. Examples include optimizing cleaning cycles and improved water treatment techniques to reduce steam boiler and cooling tower blowdown. We reuse water by encouraging suppliers to use sustainability standards such as SRP that promote rainwater harvesting for irrigation, and by using rainwater capture or grey-water systems for toilet flushing, cooling towers and irrigation in our facilities. We treat and recycle water by encouraging suppliers to use sustainability standards such as SRP that address sectoral challenges such as run off and pollution control, and by setting minimum requirements for wastewater management in Mars facilities. Our updated Water Position Statement gives more details.
Financial planning	Yes, water-related issues are integrated	5-10	Over the three years to 2018 we almost tripled our sustainability investments (today a little shy of \$200M/year). Our investment between 2016 and 2019 was approximately \$1 billion. The investments are roughly equal across our Healthy Planet, Thriving People and Nourishing Wellbeing pillars. A proportion of the investment in the Healthy Planet pillar is in water stewardship initiatives. The business case for this investment is based on four long-term benefits: - Cost savings, e.g. from reduced water use in operations, longer-term supply contracts and lower water inputs in agriculture. - Risk reduction through e.g. avoiding business interruption and increased water supply costs. - Increased recruitment and retention of top talent based on our reputation for sustainability. - Sustainable business growth through improved customer engagement and trust.

**W7.2**

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

**Row 1**

**Water-related CAPEX (+/- % change)**

-19.3

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

-5

**Water-related OPEX (+/- % change)**

29.9

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

-3

**Please explain**

We reduced the reporting burden on our sites and did not aggregate this data in for 2019. The figures shown are for 2018, which is the latest information available. Our CAPEX only includes capital investments made to improve water efficiency and excludes water-related investment at new sites and in some wastewater treatment, as this information is not collected centrally. As we now focus on sites in water-stressed areas (40% of sites), we are seeing some reduction in water spending during the transition as it takes time for CAPEX projects to impact sites. We expect this value to fall a little more and then begin to increase as water risks in stressed areas drive business responses. The OPEX includes the total spent on incoming water, water treatment and improving operational water efficiency. In the medium term, we expect these costs to fall aided by our water stewardship reviews, which tend to identify opportunities to both address water tariffs and make efficiency savings.

**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	Mars uses the WRI Aqueduct tool to assess projected change in baseline water stress in geographies where we operate and source from. The projected change in baseline water stress is based on three different scenarios of climate change and socio-economic development created by the IPCC: the A2, A1B, and B1 scenarios. The Aqueduct assessments are used to prioritize watersheds under particular stress where we need to take action either by reducing water use in our facilities or through our sourcing strategies for our raw materials. In addition, we have worked with government agencies in Spain to assess the climate resilience and adaptive capacity of rice farming communities and used the results to inform our rice sourcing strategy.

**W7.3a**

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

Yes

**(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 scenarios and models applied	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify (IPCC: A2, A1B, and B1 scenarios)	Mars uses the WRI Aqueduct tool to assess projected change in baseline water stress in geographies where we operate and source from. The projected change in baseline water stress is based on three different scenarios of climate change and socio-economic development created by the IPCC: the A2, A1B, and B1 scenario. Using this tool, we've identified watersheds in our supply chain that are experiencing stress or may experience stress in the future. Some locations are included purely on the basis that Aqueduct shows they are likely to become water scarce in future due to climate change. Reduced water availability in these watersheds may affect farmers' ability to grow crops for the raw materials we use in brands as diverse as Uncle Ben's, Maltesers, and Pedigree pet food, leading to price increases or shortages.	We use Aqueduct assessments to prioritize watersheds under the most stress and where water use is greatest. These watersheds are located in Australia, India, Pakistan, Spain and the United States. Our ultimate goal is to eliminate water use in excess of sustainable levels. As we work toward our ultimate goal, our interim target is to cut unsustainable water use by half by 2025, in close collaboration with our suppliers and others across our extended value chain. Our Water Action Strategy describes how we understand, eliminate, reduce, reuse, treat and recycle water to reduce our water impacts. We're assisting with farmer training and technology that helps advance more sustainable water use. Where we can't reduce water use to sustainable levels, we may engage in water recharge activities, such as landscape restoration, to recharge water levels to the point necessary to meet our targets. These recharge activities will be in the same watersheds as those within which we operate/source and they will be independently verified. If interventions can't help relieve stress on a local watershed where we source, we're prepared to change where we source to protect that watershed. Water stewardship has been integrated into the Mars Strategic Sourcing methodology, our company-wide process for assessing, selecting, contracting and monitoring suppliers. Our updated Water Stewardship position statement provides more details of our ambition, theory of change and strategy.

W7.4

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

Row 1

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

Yes

**Please explain**

We monitor centrally the cost of each site's water use and wastewater treatment. The results show that water forms a very small part of our operating costs and we expect that to remain the case. We have piloted the use of the Ecolab/Trucost Water Risk Monetiser tool at two locations. However, we did not find an artificial water price useful for assessing value and risk, compared with other tools such as WRI Aqueduct and the WWF Water Risk Filter. Instead, to drive water-efficiency, we have developed an internal Mars True Cost of Water Tool that highlights the "hidden" costs of energy, chemical, maintenance and other treatments associated with manufacturing site water use. The Mars True Cost of Water Tool is a recommended practice for all our Mars Wrigley manufacturing sites in water-stressed locations. We will monitor the success of the tool at chocolate sites and may decide to roll it out to other segments in future.

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Activity level specific targets and/or goals Site/facility specific targets and/or goals Basin specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	The impacts of water use vary depending on geography and the water source – water is more precious in the desert than in the rainforest, and treated tap water is more valuable than collected rainwater or reused process water. Our approach to water reflects this, by seeking to understand the impacts that our operations and our raw material suppliers have on the availability and quality of water, at watershed level. As a result, we are introducing context-based water targets (CBWT) to reduce water impacts from specific activities in Mars' extended value chain. CBWT are based on science and informed by stakeholder consultation to reflect the varying societal demands and issues affecting the different watersheds our business touches. As methodologies for defining science-based corporate water targets are not yet widely accepted and remain under development, Mars is contributing to closing this gap. In the meantime, we have defined a water-saving allocation approach using water-scarcity data from WRI's Aqueduct platform. This data has been used to quantify Mars' fair share of the water withdrawal reductions needed to address water scarcity in highly-stressed watersheds where we have activities. Mars regards its water usage in a watershed to be sustainable if: - It is operating in a watershed with a BWS under 40%. - Or watershed BWS over 40% and Mars has reduced its total (supply chain) blue water withdrawals since its 2015 base year, in excess of the ratio that the current watershed BWS exceeds 40%. - Or the gap to sustainable water use has been closed in the watershed by a combination of reduced supply chain water use and recharge/ replenishment activities. Our updated Water Stewardship Position Statement provides full details of our approach, including a methodology and glossary section. Our overarching SIG Plan target (see target 1 in W8.1a, below) is cascaded to our business segments and functions. Site-specific targets are calculated at basin level.

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

Target 1

**Category of target**

Water withdrawals

**Level**

Other, please specify (Value chain wide)

**Primary motivation**

Risk mitigation

**Description of target**

Mars' water stewardship goal is to ensure water use in our value chain is within annually renewable levels by watershed. The gap to sustainable water use levels in a watershed (000 m3) = annual total water withdrawals in watershed (000 m3) x (BWS - 40%\*) / BWS where BWS = baseline water stress for location (either from local study or where not available from WRI Aqueduct) \* If a desired watershed end state has been agreed we will use this. Otherwise, we assume that 40% BWS represents a practical sustainable usage threshold. We chose this goal because it is context-based, and so focuses on playing our part in solving water availability in the watersheds we operate in or source from. In support of this global goal, we will work towards improvement targets for raw materials such as rice, maize, mint, and sugar that involve high water usage and are sourced from water-scarce areas. These targets will consider areas such as irrigation efficiency and evapotranspiration benchmarks.

**Quantitative metric**

Other, please specify (Gap to sustainable water use level in a watershed, as explained in Description of target, above)

**Baseline year**

2015

**Start year**

2017

**Target year**

2025

**% of target achieved**

55.4

**Please explain**

The total gap to sustainable water use levels in our value chain has reduced by 27.7% since 2015, meaning that we have achieved 55.4% of our target to halve the gap by 2025. These reductions are the result of deploying strategies aimed at reducing unsustainable water use, including our manufacturing site water efficiency programs and our purchasing decisions for raw materials such as rice, maize, mint and sugar, which involve high water usage and are sourced from water-stressed areas. We are developing water-use improvement targets for these raw materials in areas such as irrigation efficiency and evapotranspiration benchmarks. More information is available in our Water Stewardship Position Statement: <https://www.mars.com/about/policies-and-practices/water-stewardship>

**Target reference number**

Target 2

**Category of target**

Water use efficiency

**Level**

Site/facility

**Primary motivation**

Risk mitigation

**Description of target**

We will improve water intensity (m3/tonne) by 15% at factories in water-stressed locations.

**Quantitative metric**

% reduction in total water withdrawals

**Baseline year**

2015

**Start year**

2015

**Target year**

2020

**% of target achieved**

49.4

**Please explain**

Our manufacturing site water use efficiency has improved by 7.4% at water-stressed locations since 2015, meaning that we have achieved 49.4% of our 15% improvement target. This reduction is a result of focusing our water efficiency resources on improvement programs at sites in water-stressed areas. Additionally, a major CAPEX project at the site making the second-highest water withdrawals in our global network considerably reduced water use. This site uses river water and has rationalized its water treatment facilities to greatly improve its efficiency. Please note that in our previous submission, we reported the % change from 2015 to 2018 as the % of target achieved, which accounts for the large year-on-year change in our reporting. For 2019, we are reporting that Mars has made 49.4% of the required progress toward our 15% reduction target.

## W8.1b

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

#### Goal

Other, please specify (Twenty Mars factories facing the greatest water-related risks will complete water stewardship reviews based on the AWS International Standard by 2020)

#### Level

Site/facility

#### Motivation

Risk mitigation

#### Description of goal

Mars has adopted the Alliance for Water Stewardship (AWS) definition of water stewardship, which states that "Good water stewards understand their own water use, catchment context and shared concerns in terms of water governance; water balance; water quality; important water-related areas; water, sanitation and hygiene, and then engage in meaningful individual and collective actions that benefit people, the economy and nature". We believe that water efficiency improvement is an important but insufficient response to shared water challenges. Our goal is to undertake water stewardship reviews at sites where water is a significant business risk. Our reviews follow steps 1-2 of the AWS standard and seek to identify water opportunities and challenges within and outside the site boundary. Typically, on-site opportunities involve operational improvements and capital investments to reduce usage or recycle water, which can be implemented immediately or included in the site's strategic action plans. Outside the fence, the reviews help to develop a realistic picture of the catchment in the short, medium and long term, and to identify stakeholders and opportunities to engage on water stewardship. Where possible, we share findings with other interested organizations in the catchment, such as in Queretaro, Mexico, where our site is in discussions with local government, NGOs and the Livelihoods Fund for Family Farming to investigate to engage in water stewardship beyond the factory fence.

#### Baseline year

2015

#### Start year

2017

#### End year

2020

#### Progress

At the end of 2019, we had completed 14 reviews at sites where water is a significant business risk in Australia, China, Russia, Poland, the UK and the USA. The remaining reviews will be completed in 2020, assuming the COVID-19-related restrictions we currently face are lifted in time. If not, these reviews will be carried forward into 2021. The reviews have been useful for verifying (or not) the results of risk assessments completed using global tools. For example, at one UK site identified as a water-stress risk using WRI Aqueduct and internal water risk assessment processes, the AWS review revealed that flooding and the local site of special scientific interest presented greater risks. The reviews set a context-based water usage reduction target for the site, based on catchment context. This target sets the level of ambition for projects to reduce, reuse, or recycle water. Findings can include "quick wins", such as one UK site that optimized incoming water treatment equipment, resulting in immediate savings. External fresh eyes can also identify opportunities in tariff and bill structures, sometimes leading to immediate financial savings. Catchment-level studies are useful in identifying water risks, such as in Queretaro, Mexico, where rapidly-falling ground-water levels and summer flooding are challenges for the catchment. Insights such as these are helping Mars develop ambitious targets for 2025 that focus on the sites with the greatest shared water challenges.

## W9. Verification

### W9.1

#### (W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

Yes

Mars CY2019 GHG and Environmental Data AS April 27 2020 S1and2-ASRauthorized final July 13 update S1 and S2 and S3 final.pdf

### W9.1a

#### (W9.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	In W1.2, the water withdrawals - total volumes and water discharges - total volumes reported were verified at a sample of facilities as part of our wider sustainability data assurance process for 2019.	ISAE 3000	Annual internal and third-party verifications help Mars continually assess, improve, and strengthen confidence in the accuracy and reliability of its environmental metrics, including: - Water withdrawn, - Wastewater discharged The independent, third-party verification procedure used by auditor LRQA is based on current best practice and is in accordance with ISAE 3000, the standard for assurance of non-financial information. ISAE 3000 is applicable for audits of internal controls and sustainability. Verification takes place at a sample of sites each year.

## W10. 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.

### W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Vice President, Supply, Research and Development and Procurement	Chief Operating Officer (COO)

### W10.2

(W10.2) 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)].

Yes

### SW. Supply chain module

#### SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	40000000

#### SW0.2

(SW0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

No

#### SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

This is confidential

#### SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	No, this is confidential data	

#### SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

**Requesting member**

Wal Mart de Mexico

**Category of project**

Promote river basin collective action

**Type of project**

Invite customer to collaborate with other users in their river basins to reduce impact

**Motivation**

We are interested in potential collaborations with other river basin users to mitigate shared water risks in the areas surrounding our sites in Mexico.

**Estimated timeframe for achieving project**

Up to 1 year

**Details of project**

We are interested in collaborating with other river basin users in Mexico on projects related to agricultural water use, land restoration, and reforestation. For example, our site in Queretaro, Mexico, is in discussions with local government, NGOs and the Livelihoods Fund for Family Farming to investigate ways to engage in water stewardship beyond the factory fence. Rapidly-falling ground-water levels and summer flooding are challenges for the river basin, and catchment-level studies and collaborations are useful in understanding and mitigating these shared water risks.

**Projected outcome**

Improved catchment water balance for all water users through more sustainable agricultural practices, for example.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms