

Altria Group, Inc. - Water 2018

W0. Introduction

W0.1

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

Altria Group is headquartered in Richmond, Virginia. Its operating companies include Philip Morris USA, U.S. Smokeless Tobacco Company, John Middleton Company, Nat Sherman, and Nu Mark. Altria also owns Ste. Michelle Wine Estates and Philip Morris Capital Corporation and has a significant equity investment in Anheuser-Busch InBev. Altria Client Services LLC is a subsidiary that provides Altria Group and its companies with high quality services, and Altria Group Distribution Company is a subsidiary that provides sales, distribution and consumer engagement services to Altria's tobacco companies.

Altria's Mission is to own and develop financially disciplined businesses that are leaders in responsibly providing adult tobacco and wine consumers with superior branded products.

This response is a summary of progress on Altria's water questionnaire and is not exhaustive of all information on this topic. Some statements may be forward-looking or aspirational, and these statements may involve a number of risks or uncertainties.

W-FB0.1a

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

- Agriculture
- Processing/Manufacturing
- Distribution

W0.2

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

	Start date	End date
Reporting year	January 1 2017	December 31 2017

W0.3

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

- 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
Green Smoke international facilities are excluded.	Altria's operating company Nu Mark acquired Green Smoke in 2014. Green Smoke maintains offices in Israel and distribution warehouses in the United States. We are in the process of developing the infrastructure to collect environmental data from Green Smoke's international facilities; however we do not expect the water consumption at this location to be material to Altria's overall water consumption.
Nat Sherman facilities are excluded.	Altria acquired Nat Sherman in 2017. Nat Sherman maintains offices in New Jersey, a manufacturing facility in North Carolina, and a flagship store in New York City. We are in the process of developing the infrastructure to collect environmental data from Nat Sherman's facilities.

W1. Current state

W1.1

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Direct use of freshwater is vital because our operating companies use freshwater within manufacturing and processing facilities and for consumption by over 8000 employees. Operating company Ste. Michelle Wine Estates uses freshwater on its owned vineyards for drip irrigation and in its facilities. In the future, direct use of freshwater is expected to remain vital because we don't expect major business changes. Indirect use of freshwater is important because our tobacco operating companies procure tobacco from domestic and international growers, which is irrigated in many parts of the world and Ste. Michelle grows and procures wine grapes which use freshwater for irrigation. Over 95% of Ste. Michelle's contracted growers implement drip irrigation on their vineyards. Sufficient amounts of good quality freshwater availability are important for both of these agricultural supply chains and are expected to remain important in the future because we don't expect major business changes.
Sufficient amounts of recycled, brackish and/or produced water available for use	Neutral	Neutral	Direct use of recycled water is of neutral importance because it is still in early stages of use and/or evaluation at most of Altria's operating companies. Ste. Michelle Wine Estates uses recycled water for drip irrigation at some of its vineyards. The importance of direct use of recycled water may increase in the future when Philip Morris USA commissions a water recycling project in late 2018. Indirect use of recycled water is of neutral importance because Altria's value chain does not significantly rely on recycled water; however, there are opportunities for recycled water use. Ste. Michelle has taken a leading role in engaging with grape growers in Washington to set standards for sustainability, which are part of self-assessment tools for contract growers and include best practices such as recycled water use, which can benefit indirect use. In the future, indirect use of recycled water is expected to remain of neutral importance because we don't expect major business changes.

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
Tobacco	More than 80%	Sourced	Altria's tobacco operating companies, which represent over 95% of Altria's revenues, source tobacco grown in the United States as well as from farmers across the globe.
Other, please specify (Grapes)	Less than 10%	Both	Ste. Michelle Wine Estates, which represents less than 5% of Altria's revenues, owns and operates over 3,900 acres of prime vineyards, and additionally contracts for grapes from long-term grape growers on approximately another 36,400 acres

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water withdrawals – volumes from water stressed areas	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water withdrawals – volumes by source	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Produced water associated with your metals & mining sector activities - total volumes	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.

	% of sites/facilities/operations	Please explain
Water discharges – total volumes	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water discharges – volumes by destination	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water discharges – volumes by treatment method	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water discharge quality – by standard effluent parameters	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water discharge quality – temperature	Not relevant	Not applicable.
Water consumption – total volume	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
Water recycled/reused	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Altria's Safety, Health and Environment department maintains an Environmental Metrics Information System (EMIS) that captures key measures across our operating companies. This system covers 95-100% of Altria's facilities with the exception of Green Smoke's Israel offices and Nat Sherman's facilities. We are developing infrastructure to collect data from these locations. On-going monitoring is achieved by operating companies reporting data through the EMIS based on supplier invoices, meter readings, and lab testing. Data is reported at the business unit and corporate level at least annually. We measure this aspect to help ensure that we are compliant with water regulations and to measure our impacts in support of Altria's long-term environmental goals.

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	8299.25	Lower	Altria's total water withdrawal decreased from 9420.37 megaliters in 2016 to 8299.25 megaliters in 2017 due to decreases in water use at some of our facilities and operations, such as Philip Morris USA's Park 500 facility. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies. We expect total water withdrawals to be about the same or lower in the future based on historical trends. Our withdrawals are balanced with the sum of discharges and consumption because we calculate consumption based on our withdrawals and discharges.
Total discharges	1972.58	Lower	Altria's total water discharge decreased from 2623.67 megaliters in 2016 to 1972.58 megaliters in 2017 due to decreases in water use at some of facilities and operations, such as Philip Morris USA's Park 500 facility. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies. We expect total water discharges to be about the same the future based on historical trends. Our discharges are balanced with the difference between withdrawals and consumption because we calculate consumption based on our withdrawals and discharges.
Total consumption	6326.67	Lower	Altria's total water consumption decreased from 6796.70 megaliters in 2016 to 6326.67 megaliters in 2017 due to decreases in water use at some of facilities and operations, such as Philip Morris USA's Park 500 facility. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies and water consumption is calculated as withdrawals minus discharges. We expect total water consumption to be about the same in the future based on historical trends. Our consumption is balanced with the difference between withdrawals and discharges because we calculate consumption based on our withdrawals and discharges.

W1.2d

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	0.11	This is our first year of measurement	WRI Aqueduct	Altria's proportion of total withdrawals sourced from water stressed areas was 0.11% in 2017. This is our first year of measurement based on identification of water stressed areas in our 2017 water risk assessment. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies. We used the WRI Aqueduct and WWF Water Risk Filter tools to identify the water stressed areas. We entered details for our operations across all facility locations such as Richmond, VA and Woodinville, WA and considered any region where overall water risk (based on quantity, quality and regulatory/reputation risks) was high as a water-stressed area. The result was Napa/Sonoma, CA, where Ste. Michelle Wine Estates' Conn Creek, Stag's Leap and Patz & Hall wineries are located, is the only region where we source water from water-stressed areas.

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 water stressed areas?

Agricultural commodities	The proportion of this commodity produced in water stressed basins is known	The proportion of this commodity sourced from water stressed basins is known	Please explain
Tobacco	Not applicable	Yes	In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to Altria's companies' direct operations and their value chains, using tools such as the WRI Aqueduct Tool and the WWF-DEG Water Risk Filter to determine what areas are water-stressed.
Other commodities from W-FB1.1a, please specify (Grapes)	No, not currently but we intend to obtain this data within the next two years	No, not currently but we intend to collect this data within the next two years	In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to Altria's companies' direct operations and their value chains, using tools such as the WRI Aqueduct Tool and the WWF-DEG Water Risk Filter to determine what areas are water-stressed. Ste. Michelle Wine Estates is planning to obtain the number of grapes produced and sourced in the regions identified as water stressed by 2019.

W-FB1.2g

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

Agricultural commodities	% of total agricultural commodity sourced in water stressed areas	Please explain
Tobacco	0	In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to Altria's companies' direct operations and their value chains, using tools such as the WRI Aqueduct Tool and the WWF-DEG Water Risk Filter to determine what areas are water-stressed. Based on this risk assessment, none of our tobacco growing regions are considered high risk for overall water stress. Based on our 2015 water risk assessment, this was also the case in previous years. In the future, we expect this may change as scenario analysis conducted out to 2030 as part of our water risk assessment indicated a few of our tobacco growing regions may increase in water stress.

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	2157.31	Lower	Altria's surface water withdrawal decreased from 3258.48 megaliters in 2016 to 2157.31 megaliters in 2017. Fresh surface water consumption is relevant because it occurs primarily within Ste. Michelle Wine Estates for irrigation purposes at its owned vineyards. We expect these withdrawals to be about the same or lower in the future based on historical trends.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	Brackish surface water/seawater is not relevant because Altria operates within 27 different locations, including Richmond, VA and Woodinville, WA, where brackish water was not used in 2017 or in the previous year and is not expected to be used in the future.
Groundwater – renewable	Relevant	3584.94	About the same	Altria's renewable groundwater withdrawal decreased slightly from 3607.50 megaliters in 2016 to 3584.94 megaliters in 2017. Altria's Safety, Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies, including renewable groundwater withdrawals at facilities in locations such as Woodinville, WA. We expect these withdrawals to be about the same or higher in the future based on historical trends.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	Non-renewable groundwater is not relevant because Altria operates within 27 different locations, including Richmond, VA and Woodinville, WA, where non-renewable groundwater was not used in 2017 or in the previous year and is not expected to be used in the future.
Produced water	Relevant	2280.33	About the same	Altria's process water withdrawal increased slightly from 2264.05 megaliters in 2016 to 2280.33 megaliters in 2017. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies including process water withdrawals at facilities in locations such as Richmond, VA. We expect these withdrawals to be about the same or lower in the future based on historical trends.
Third party sources	Relevant	276.79	About the same	Altria's municipal water withdrawal decreased slightly from 291.48 megaliters in 2016 to 276.79 megaliters in 2017. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies including municipal withdrawals at facilities in locations such as Richmond, VA. We expect these withdrawals to be about the same or lower in the future based on historical trends.

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	939.54	Lower	Fresh surface water discharge decreased from 1132.60 megaliters in 2016 to 939.54 megaliters in 2017. Freshwater discharges include 8.44 megaliters of water that is used for agricultural beneficial reuse in the form of irrigation at our Crazy Mountain Ranch location in Montana. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies. We expect these withdrawals to be about the same or lower in the future based on historical trends.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	Brackish surface water/seawater is not relevant because Altria operates within 27 different locations, including Richmond, VA and Woodinville, WA, where brackish water was not discharged to in 2017 or in the previous year and is not expected to in the future.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	Groundwater is not relevant because Altria operates within 27 different locations, including Richmond, VA and Woodinville, WA, where groundwater was not discharged to in 2017 or in the previous year and is not expected to in the future.
Third-party destinations	Relevant	1033.19	Lower	Municipal treatment plant discharge decreased from 1491.07 megaliters in 2016 to 1033.19 megaliters in 2017. Altria's Safety Health & Environment department maintains an Environmental Metrics Information System that captures key environmental measures across our operating companies including municipal treatment plant discharges at facilities in locations such as Richmond, VA. We expect these withdrawals to be about the same or lower in the future based on historical trends.

W1.2j

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

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	Less than 1%	About the same	In 2017, we reused 0.10% of water for agricultural beneficial reuse in the form of irrigation at our Crazy Mountain Ranch location in Montana and Ste. Michelle Wine Estates re-used 0.11% of water. In 2016, we reused 0.09% at our Crazy Mountain Ranch location and while we don't have data for Ste. Michelle, total reuse was still estimated to be less than 1% in 2016. The impact of this reuse is less dependence on freshwater. We expect water recycling/reuse to increase in the future due to a water recycling project that will be commissioned by Philip Morris USA in late 2018.

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
Tobacco	Not applicable	No, not currently and we have no plans to collect/calculate this data within the next two years	Domestic tobacco growers report on their water risks/management through the Good Agricultural Practices (GAP) assessment process. The Crop Management section of this assessment asks growers to verify that they have Natural Resource Conservation Service (NRCS) documentation for their farm that covers a conservation plan, including the use of farm practices designed to conserve and protect the land and water supply. Records of rainfall and/or irrigation amounts are currently reviewed as part of the assessment process as well.
Other commodities from W-FB1.1a, please specify (Grapes)	No, not currently but we intend to collect/calculate this data within the next two years	No, not currently but we intend to collect/calculate this data within the next two years	Ste. Michelle Wine Estates is planning to obtain the number of grapes produced in order to calculate water intensity within the next year. For sourced grapes, Ste. Michelle Wine Estates is planning a pilot project in 2019 to collect water intensity data from one grower.

W1.4

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

- Yes, our suppliers
- Yes, our customers or other value chain partners

W1.4a

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

Row 1

% of suppliers by number

26-50%

% of total procurement spend

1-25

Rationale for this coverage

Our domestic tobacco growers and Ste. Michelle Wine Estates' contract vineyards report on water risks/management because the agricultural portion of our supply chain is water-intensive and we have processes in place for these suppliers to report. For example, some domestic tobacco growers report on their water risks/management through the Good Agricultural Practices assessment process and 100% of Ste. Michelle's contract vineyards are required to use the Vinewise self-assessment tool, which includes water management. These suppliers are incentivized to report because these assessments are a required part of contracts. Ste. Michelle is planning a pilot study of requesting environmental data, including water, from one contract grower in 2019.

Impact of the engagement and measures of success

The Soil and Water Management section of the Good Agricultural Practices assessment asks domestic tobacco growers to verify that they have Natural Resource Conservation Service documentation that covers a conservation plan, including farm practices designed to conserve and protect the land and water supply. Records of rainfall and/or irrigation amounts are currently reviewed as well. This information is used to remediate any findings and Altria uses it to monitor supplier compliance with GAP. The measure of success is the % of growers meeting all the requirements for environmental stewardship. In 2017, 94% of growers met them per third-party assessment. For Ste. Michelle, information on water management is requested through the Vinewise self-assessment tool and this information is used by the Viticulture department to actively work with suppliers to understand risks and opportunities related to water. The measure of success is 100% of contract vineyards use the Vinewise tool.

Comment

W1.4b

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

Type of engagement

Innovation & collaboration

Details of engagement

Provide training and support on sustainable agriculture practices to improve water stewardship

% of suppliers by number

26-50

% of total procurement spend

1-25

Rationale for the coverage of your engagement

Our domestic tobacco growers and Ste. Michelle's contract vineyards report on water risks/management because the agricultural portion of our supply chain is water-intensive and we have processes in place for these suppliers to report. For example, some domestic tobacco growers report on their water management through the Good Agricultural Practices assessment process. The Soil and Water Management section asks growers to verify they have Natural Resource Conservation Service documentation that covers a conservation plan, including farm practices designed to conserve and protect the land and water supply. Ste. Michelle's Viticulture department actively works with suppliers to understand risks and opportunities related to water and Ste. Michelle spearheaded the creation of VineWise, which provides wineries with information and tools on sustainable management, including water management. Long-term grower contracts include VineWise self-assessments and on-site visits.

Impact of the engagement and measures of success

Domestic tobacco growers are assessed on GAP through third-party assessments. The measure of success is the percent of growers meeting all the requirements for environmental stewardship. In 2017, 94% of growers met all the requirements for environmental stewardship. For Ste. Michelle, 95% of the company's contract growers employ drip irrigation and enhance their effectiveness through the use of weather stations and soil moisture-measuring probes that monitor water use and eliminate wasted water in the vineyards. The measure of success is 100% of contract vineyards use the Vinewise tool.

Comment

W1.4c

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

Altria engages with both customers and non-profit partners on water-related issues. For customers, Ste. Michelle Wine Estates engages with adult wine consumers on environmental stewardship through labelling on wine bottles produced from vineyards that are certified by Salmon-Safe, an organization that works to protect watersheds in the western United States through promoting sustainable viticulture practices. Success is measured by the number of vineyards certified to use the Salmon-Safe label. We work with non-profit partners to address water-quality and water quantity issues in communities where our companies operate. In 2017, we continued to support the National Fish and Wildlife Foundation (NFWF) through several of its national and regional-scale programs, including: the Western Water Program in the states of Washington and California; the Chesapeake Bay Stewardship Fund in the Mid-Atlantic region; and the Cumberland Plateau Stewardship Fund in the states of Kentucky and Tennessee. These efforts restored approximately 1.1 billion gallons of clean water to rivers in the U.S. through the implementation of agricultural best management practices, irrigation efficiency and agricultural water use improvements, riparian buffers, and green infrastructure improvements for enhanced stormwater management. We prioritize engagements among non-profit organizations to support programs that focus on water quality and conservation in our operating communities; sustainable agriculture in tobacco-growing regions; and nationwide litter prevention and cleanup. Our measures of success for non-profit organization engagement vary by the specific programs supported, but can include the expansion of initiatives such as Keep America Beautiful's Cigarette Litter Prevention Program and the amount of water restored to U.S. waterways through the National Fish and Wildlife Foundation programs through actions referenced above.

W2. Business impacts

W2.1

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

No

W2.2

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

No

W3. Procedures

W-FB3.1

(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?

We manage wastewater and stormwater for water pollutants and identify and classify potential water pollutants based on the U.S. Environmental Protection Agency (EPA) permits through the National Pollutant Discharge Elimination System (NPDES). The NPDES classifies pollutants as conventional, toxic, priority toxic, and nonconventional based on water quality and toxicity. Permits are based on type of pollutant and level of control and analytical methods must exist to test for these pollutants. Government agencies such as the EPA and state regulatory agencies develop water quality criteria for these permits based on potential impacts to ecosystems and human health. The impacts to human health can be from consumption of water or seafood that has been contaminated with pollutants and includes carcinogens, reproductive/developmental risks, immunotoxicity, neurotoxicity, and bioaccumulation. The impacts to ecosystems include toxicity and bioaccumulation risks to aquatic life including short-term effects such as survival and growth, and long-term effects such as reproduction.

In our agricultural supply chain, we engage with our suppliers to follow good agricultural practices around environmental stewardship, including following all laws and regulations, including those related to fertilizers and pesticides. Our U.S.-based suppliers are subject to the same regulatory requirements as our own operations, so the water-related impacts are the same.

W-FB3.1a

(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

Fertilizers

Activity/value chain stage

Agriculture – direct operations

Agriculture – supply chain

Manufacturing – direct operations

Description of water pollutant and potential impacts

Fertilizers are used for lawn care at our facilities in minimal amounts and in our agricultural supply chain for tobacco and grapes, as well as our direct operations for grape vineyards. Fertilizers may be considered a pollutant under the Clean Water Act if the potential runoff impacts water bodies. We manage these materials to minimize their impacts.

Management procedures

Soil conservation practices

Crop management practices

Sustainable irrigation and drainage management

Fertilizer management
Follow regulation standards

Please explain

We have stormwater and wastewater permits and use Standard Operating Procedures to manage fertilizer application and minimize runoff. Success is measured based on performance standards outlined in our Environmental Management Framework which integrates environmental programs (including compliance and sustainability) into business operations. Additionally, in our agricultural operations, we follow soil conservation and crop management practices to minimize fertilizer use. We follow sustainable irrigation and drainage management to minimize fertilizer runoff. For our agricultural supply chain, our growers are assessed on these practices. Success is measured based on the results of third-party assessments.

Potential water pollutant

Pesticides and other agrochemical products

Activity/value chain stage

Agriculture – direct operations
Agriculture – supply chain

Description of water pollutant and potential impacts

Pesticides are used in our agricultural supply chain for tobacco and grapes, as well as our direct operations for grape vineyards. Pesticides may be considered a pollutant under the Clean Water Act if the potential runoff impacts water bodies. We manage these materials to minimize their impacts.

Management procedures

Sustainable irrigation and drainage management
Pesticide management
Substitution of pesticides for less toxic or environmentally hazardous alternatives
Follow regulation standards

Please explain

In our agricultural operations we use pesticide management to minimize use. We follow sustainable irrigation and drainage management to minimize pesticide runoff. For Ste. Michelle Wine Estates, cover crops are used that specifically attract beneficial bugs, disease-resistant grape vines are grown, and environmental friendly pest control agents are used, such as biodegradable soaps, oils and plant extracts. For our agricultural supply chain, our growers are assessed on these practices. We use trained and certified pesticide applicators. Success is measured based on the results of third-party assessments

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

Various chemicals are formed during our manufacturing direct operations. These chemicals are considered pollutants under the Clean Water Act if they discharge to water sources. We manage water discharges in accordance with our permits.

Management procedures

Waste water management
Follow regulation standards

Please explain

We have stormwater and wastewater permits and use Standard Operating Procedures to manage these pollutants. We maintain an effective environmental management system (EMS) which is designed and implemented to integrate environmental programs (including compliance and sustainability) into business operations. Success is measured based on performance standards outlined in our Environmental Management Framework which integrates environmental programs (including compliance and sustainability) into business operations.

W3.3

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

Yes, water-related risks are assessed

(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 a standalone issue

Frequency of assessment

Every two years

How far into the future are risks considered?

>10 years

Type of tools and methods used

- Tools on the market
- Enterprise Risk Management
- Databases
- Other

Tools and methods used

- WBCSD Global Water Tool
- WRI Aqueduct
- WWF-DEG Water Risk Filter
- FAO/AQUASTAT
- Internal company methods
- External consultants
- National-specific tools or standards

Comment

In 2017, Altria updated the comprehensive water risk assessment conducted in 2015 to examine physical, regulatory, and reputational water risks to Altria's companies' direct operations and their value chains. This risk assessment uses several tools on the market and considers scenario analysis. Additionally, we assess risks and opportunities through the use of an annual Enterprise Risk Management process and our Safety, Health and Environment team assesses in 3 to 5 and 7 to 10 year timeframes.

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Every two years

How far into the future are risks considered?

>10 years

Type of tools and methods used

Tools on the market
Enterprise Risk Management
Databases
Other

Tools and methods used

WBCSD Global Water Tool
WRI Aqueduct
WWF-DEG Water Risk Filter
FAO/AQUASTAT
Internal company methods
External consultants
National-specific tools or standards

Comment

In 2017, Altria updated the comprehensive water risk assessment conducted in 2015 to examine physical, regulatory, and reputational water risks to Altria's companies' direct operations and their value chains. This risk assessment uses several tools on the market and considers scenario analysis. Additionally, we assess risks and opportunities through the use of an annual Enterprise Risk Management process and our Safety, Health and Environment team assesses in 3 to 5 and 7 to 10 year timeframes

Other stages of the value chain

Coverage

None

Risk assessment procedure

<Not Applicable>

Frequency of assessment

<Not Applicable>

How far into the future are risks considered?

<Not Applicable>

Type of tools and methods used

<Not Applicable>

Tools and methods used

<Not Applicable>

Comment

W3.3b

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

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Altria's Corporate Responsibility team in conjunction with Altria's Safety, Health & Environment team have evaluated the current and long term availability of water in our facilities across 27 locations such as Richmond, VA and Woodinville, WA. The water risk assessment conducted in 2017 addressed current and future water availability at a basin/catchment level using the WBCSD Global Water Tool, the WRI Aqueduct, and the WWF-DEG Water Risk Filter.
Water quality at a basin/catchment level	Relevant, always included	Altria Client Services' centralized Safety, Health & Environment (SH&E) team monitors water quality at all operating company facilities to help ensure water withdrawals and discharges meet quality requirements. Altria's Corporate Responsibility team in conjunction with Altria's Safety, Health & Environment team evaluated quality considerations regarding the use of water in our facilities across 27 locations such as Richmond, VA and Woodinville, WA. The water risk assessment conducted in 2017 addressed current and future water quality parameters at a basin/catchment level using the WBCSD Global Water Tool, the WRI Aqueduct, and the WWF-DEG Water Risk Filter.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to our operating companies' facilities and their value chains. Part of the WWF-DEG Water Risk Filter looks at reputational water risks, including potential stakeholder conflicts. This risk assessment will help inform future facility-level water planning and guide the focus of Altria's environmental contributions in the coming years. For example, our water risk assessment has highlighted water quality impacts associated with tobacco production within water-stressed regions in the Cumberland River watershed in Kentucky and Tennessee and the Chesapeake Bay watershed in south-central Pennsylvania. In partnership with the National Fish and Wildlife Foundation and its local conservation partners in these regions, we identified opportunities to mitigate water quality impacts of its growers through increased implementation of low and no-till tobacco production practices that significantly reduce soil erosion and associated nutrient runoff. This reduces the potential for conflicts between our tobacco growers and other stakeholders in the community that are concerned about the water quality.
Implications of water on your key commodities/raw materials	Relevant, always included	Altria assesses risks and opportunities to the company through the use of an Enterprise Risk Management process. This is a coordinated process to identify risks relevant to an organization's objectives. It typically includes evaluation of risks related to strategy, operations, finance, and compliance in both short-term (likely to affect the company within the next two years) and long-term (likely to affect the company beyond two years) timeframes. Potential impacts of environmental hazards on key commodities and raw materials critical to business continuity are considered in Altria's annual Enterprise Risk Management process. Risk mitigation plans are developed when issues are identified. Altria's Annual Report shares the business impacts that water risks may have on our ability to procure high quality tobacco and wine grapes to support our operations. These risks are primarily identified as relating to the impact that climatic weather events and flooding may have on our ability to procure the materials needed for our operations. For example, drought conditions could impact Ste. Michelle's ability to procure wine grapes from Woodinville, WA. Additionally, risks to Altria's operating companies' tobacco and wine grape supply chains were evaluated in Altria's 2017 water risk assessment using the WWF-DEG Water Risk Filter's physical quantity risk assessment to determine if there is a risk of not having sufficient amounts of water for operations in our tobacco and wine growing regions.
Water-related regulatory frameworks	Relevant, always included	Altria Client Services' centralized Safety, Health & Environment team monitors current and future regulatory requirements at our companies' facilities and assists our operating companies with maintaining compliance with environmental regulations and company policies. In addition, the SH&E department works with federal regulators as well as state and local regulators across 27 locations where we have facilities, such as Richmond, VA and Woodinville, WA, to ensure that our facilities are compliant with regulations and have an understanding of contemplated regulatory changes over the next 3 to 5 and 7 to 10 years, which is one internal company method for our water risk assessment. In addition, the water risk assessment conducted in 2017 addressed water regulatory frameworks using the WRI Aqueduct and the WWF-DEG Water Risk Filter.
Status of ecosystems and habitats	Relevant, always included	In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to our operating companies' facilities and their value chains and used the WRI Aqueduct and the WWF-DEG Water Risk Filter to determine status of ecosystems and risks for Altria locally. Additionally, we consult with NGOs such as the National Fish and Wildlife Foundation and academic institutions like Virginia Commonwealth University and Washington State University on environmental issues affecting local ecosystems, especially impacts to biodiversity in the communities in which we operate. These issues are considered in the development of business practices within our facilities and in the guidance and requirements provided to business partners within our companies' agricultural supply chains. One internal company method is knowledge gained through these partnerships to estimate future potential changes in ecosystem status. Altria's environmental contributions support the watersheds and ecosystems in the communities in which we live and work. Non-profit and community partners in these regions such as the National Fish and Wildlife Foundation and the Alliance for the Chesapeake Bay continually monitor ecosystem and habitat health and seek to mitigate current and future risks.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Altria employs over 8,000 individuals almost exclusively in the United States and is committed to providing healthy working conditions for our employees, including access to quality water supplies within our facilities and offices. Being U.S. based, guidelines set forth by the Occupational Safety and Health Administration (OSHA) govern our workplace facilities management. The Occupational Health and Safety Act, the law that founded OSHA in 1970, guarantees Americans their right to working environments free of hazards that may affect their well-being. OSHA creates the standards that safeguard these rights and these standards help govern Altria's Safety, Health and Environmental guidelines across the enterprise.
Other contextual issues, please specify	Not considered	We have not evaluated other contextual issues outside of the scope of the above parameters.

W3.3c

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

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Most of Altria's operating companies' products are agricultural products. We understand the effect that nature, including changes to our climate, may have on our companies and their products. We recognize other global concerns, such as water availability and quality, and stakeholders' interest in knowing how we are managing our impact. As part of Altria's 2017 water risk assessment, physical, regulatory and reputational risks were considered in the communities in which we live and work. Our adult tobacco and wine consumers are important stakeholders to Altria's operating companies' brands and reputational risks identified through the water risk assessment could impact these relationships. For example, negative media coverage of our water use could impact our relationship with our Copenhagen smokeless tobacco consumers. Ste. Michelle Wine Estates engages with adult wine consumers on environmental stewardship through labelling on wine bottles produced from vineyards that are certified by Salmon-Safe, an organization that works to protect watersheds in the western United States through promoting sustainable viticulture practices.
Employees	Relevant, always included	Altria employs over 8,000 individuals and is committed to providing healthy working conditions for our employees, including access to quality water supplies within our facilities and offices. If our risk assessment identified water quality issues in areas where we operate, it could negatively impact our ability to provide adequate water for our employees in locations such as Richmond, VA and Woodinville, WA.. Through internal communications initiatives, regular updates on environmental sustainability progress, environmental themed events such as Earth Day and America Recycles Day hosted by the Corporate Responsibility and Safety, Health and Environment teams, experience based employee volunteerism opportunities, and internal company environmental directives, Altria continuously engages its employees on environmental stewardship. In addition, certain employees regularly receive job specific training regarding environmental stewardship. An example of this training includes Ste. Michelle Wine Estates' recent water saving initiatives at one of its wineries. Wine grapes consume water not just in the form of irrigation, but through the grape cleaning process during harvesting. To reduce water consumption, newer, more efficient cleaning nozzles coupled with increased employee awareness of water consumption during this process has helped this winery achieve a reduction in water use. Philip Morris USA's Park 500 facility also has an employee Water Team to reduce the amount of water used in processing activities, including water conservation checklists.
Investors	Relevant, always included	Most of Altria's operating companies' products are agricultural products. We understand the effect that nature, including changes to our climate, may have on our companies and their products. We recognize other global concerns, such as water availability and quality, and stakeholders' interest in knowing how we are managing our impact. Altria's investors have, and will continue to be considered important stakeholders as we continue to manage water risks associated with our operating companies' facilities and value chains since investors are concerned with reputational risks and physical risks such as water scarcity that could impact operations. For example, water quantity risks in areas where we source wine grapes, such as Napa Valley for our Ste. Michelle wines, could impact our ability to operate as investors expect. Besides influencing internal strategy, particularly around our environmental contributions, we share the methodology and outcomes of this work through CDP to update investors on our progress in this area. To help gain a better understanding of water risks, in 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to our operating companies' facilities and their value chains. This assessment examined both short and long-term physical, regulatory and reputational water risks using the WRI Aqueduct, WWF Water Risk filer, and WBCSD Global Water Tools coupled with internal company knowledge and external scans of media coverage.
Local communities	Relevant, always included	While water is necessary for production, our operating companies work to reduce their water use and develop ways to treat or reuse water. Altria operating company Philip Morris USA's Park 500 facility, located along the James River in Chesterfield County, Va., treats water in a natural treatment system before returning it back to the river. Altria and its operating companies also partner with others to conserve water in our communities while protecting biodiversity. For example, a risk to ecosystems that impacts biodiversity in areas where we live and work, such as Richmond, VA and Woodinville, WA could lead to reputational risks. Our local communities are factored into our water risk assessment through internal company knowledge gained from partnerships with local NGOs. For example, we partnered with National Fish and Wildlife Foundation to undertake a water footprint study in the communities where we grow tobacco. For engagement, we also partner with the James River Association for various projects in local communities along the James River near the Park 500 facility.
NGOs	Relevant, always included	Altria Client Services consults with leading NGOs on behalf of Altria's operating companies to understand the water risks in the communities where we operate. For example, a risk to ecosystems in areas where we live and work, such as Richmond, VA and Woodinville, WA could lead to reputational risks. Our operating companies incorporate this knowledge to improve business practices and inform environmental philanthropic support. This internal company knowledge gained from partnerships with NGOs helps inform our water risk assessment. For example, we partnered with National Fish and Wildlife Foundation to undertake a water footprint study in the communities where we grow tobacco such as Virginia and Kentucky. For engagement, we also partner with the James River Association for various projects along the James River near the Park 500 facility.
Other water users at a basin/catchment level	Relevant, always included	In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational water risks to our operating companies' facilities and their value chains. Altria's tobacco operating companies source tobacco grown in the United States in states such as Virginia and Kentucky as well as from farmers across the globe. For example, if our risk assessment identified water quality risks in the areas where we operate or source tobacco, such as Lancaster County, Pennsylvania, then it would negatively impact other local water users. Through Altria's support of the National Fish and Wildlife Foundation, tobacco growers in Kentucky and Lancaster County, Pennsylvania have been given the resources to improve on-farm agricultural practices including implementing no-till and strip till field management methods, and expanding use of more environmentally conscious pesticide management and weed management methods. Expanding these agricultural practices has a positive influence on the water quality of the Cumberland plateau and Chesapeake Bay watersheds, two of the largest watersheds in which we live and work.
Regulators	Relevant, always included	Altria's operating companies have ongoing relationships with local regulators to help ensure that our facilities maintain compliance with environmental regulations. For example, if our water permits are not approved then it could impact our ability to operate in locations such as Richmond, VA and Woodinville, WA. Engagements with regulators around water risks, especially water quality, can be factored into our company water risk assessment. We engage with regulators through meetings, site visits and conferences. For example, after a DEQ site visit to Philip Morris USA's Park 500 facility, Altria's collaborative relationship with the DEQ resulted in a suggestion to pursue a no-exposure storm water permit, which impacts our water risk assessment.

	Relevance & inclusion	Please explain
River basin management authorities	Relevant, always included	While water is necessary for production, our operating companies work to reduce their water use and develop ways to treat or reuse water. Philip Morris USA's Park 500 facility, located along the James River in Chesterfield County, Va., treats water in a natural treatment system before returning it back to the river. This process helps ensure that Philip Morris USA is doing its part as a responsible steward of the James River's water resources. Beyond this location, Altria's operating companies have facilities in the Columbia River, Cumberland Plateau, and Chesapeake Bay watersheds. Additionally, Altria's tobacco operating companies source tobacco leaf from farmers in the Cumberland Plateau and Chesapeake Bay watersheds, and Ste. Michelle Wine Estates grows and sources grapes in the Columbia River watershed. Because these watersheds are part of Altria's value chain, risks facing these watersheds are important to Altria and are included in the water risk assessment processes. For example, a risk to ecosystems that impacts biodiversity in areas where we live and work, such as Richmond, VA and Woodinville, WA could lead to reputational risks. This risk assessment process includes internal company knowledge informed by emerging issues identified by non-profit/community partners like the National Fish and Wildlife Foundation, Alliance for the Chesapeake Bay and James River Association. These partners serve a role similar to river basin management authorities in these watersheds. The identified risks help inform Altria's understanding of how to continue to direct environmental contributions work in the communities in which we live and work.
Statutory special interest groups at a local level	Relevant, always included	Altria Client Services consults with leading NGOs on behalf of Altria's operating companies to understand the water risks in the communities where we operate. For example, a risk to ecosystems in areas where we live and work, such as Richmond, VA and Woodinville, WA could lead to reputational risks. Our local communities, including statutory special interest groups, are factored into our water risk assessment through internal company knowledge gained from partnerships with local NGOs. For example, we partnered with National Fish and Wildlife Foundation to undertake a water footprint study in the communities where we grow tobacco. For engagement, we also partner with the James River Association for various projects along the James River near the Park 500 facility.
Suppliers	Relevant, always included	Altria's operating companies are committed to working with business partners who lead. We have established a Supplier Code of Conduct that, in part, provides direction to our suppliers on maintaining environmental compliance and promotes pursuing activities to reduce the environmental impact of their businesses and promote the sustainability of the natural resources on which we all depend. Altria Client Services' Procurement department and Ste. Michelle Wine Estates' Viticulture department actively work with suppliers to understand risks and opportunities related to water within our operating companies' supply chains. For example, water quantity issues in locations where we source wine grapes, such as Napa Valley for our Ste. Michelle wines, could impact our suppliers' ability to provide us with sufficient amount of grapes. In addition to this work, in 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, and reputational waste risks to our operating companies' facilities and their value chains. This process will help inform future environmental contributions and engagement strategies for our Procurement and Viticulture functions.
Water utilities at a local level	Relevant, always included	Altria's operating companies operate facilities that are major consumers of water in the communities where we operate. Our operating companies maintain relationships with water utilities to better understand the risks and opportunities that exist within our communities. For example, water quantity or quality risks in the areas where we operate, such as Richmond, VA and Woodinville, WA could increase the cost of water provided from water utilities. Facility-level engineering management teams as well as Altria's Safety, Health and Environment team help facilitate these relationships. These engagements have identified opportunities for some of Altria's operating companies' facilities to pursue innovative wastewater treatment and reuse projects. Altria operating company Philip Morris USA's Park 500 facility, located along the James River in Chesterfield County, Va., treats water in a natural treatment system before returning it back to the river. Beyond the environmental benefits of this system, this facility has reduced demand on local water utilities' wastewater systems, mitigating infrastructural risks of over demand on these systems.
Other stakeholder, please specify	Not considered	We have not evaluated other stakeholders outside of the scope of the above parameters.

W3.3d

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

Risks and opportunities are managed in line with the enterprise risk management process, with immediate and emerging risks and opportunities within 1 year, 1-2 year and greater than 2 year timeframes being given priority for mitigation and control. Depending on scale, management decisions to address the risk or opportunity can be made at an enterprise-level or business unit level. Our Corporate Responsibility dept. along with our Safety Health & Environment (SH&E) dept. evaluate the long term availability and quality of water used in our facilities. SH&E also evaluates current and potential regulatory implications. In 2017, we conducted a water risk assessment to examine physical, regulatory, and reputational water risks to our operating companies' facilities and value chains, including risks from 2017 to 2030 and covering our companies' offices and facilities, domestic and international tobacco leaf growing locations, and wine grape growing regions. This risk assessment used company-wide tools such as the WRI Aqueduct, the WWF Water Risk Filter, the WBCSD Global Water Tool, the FAO AQUASTAT database and the EPA Healthy Watersheds to determine water stress and risks. Review of media coverage of water issues was also used to evaluate current or emerging reputational risks. Internal knowledge feeds into our risk assessment and we consider issues identified and monitored by our non-profit partners.

These risk assessments help cross-functional teams inform future facility-level water planning as well as guide the focus of our environmental contributions. For example, Ste. Michelle Wine Estate's vineyards assess their water usage versus well supply to determine acres in production, and some vineyards have reservoirs to mitigate water risk as growth continues. The risks identified also help our Corporate Citizenship dept. determine which non-profits to support by ensuring alignment between the risks and the regions where they have projects and/or influence.

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?

No

W4.1a

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

Altria and its operating companies discuss Risk Factors posed to its operations and supply chain as federally required in financial reporting instruments such as our Form 10-K. Risks to Altria and its operating companies and supply chains regarding water and/or the environment include:

- Natural or man-made disasters impacting one or more facilities or significant suppliers,
- Significant changes in tobacco leaf prices, quality or availability driven by economic conditions and adverse weather patterns, and
- Variations in Ste. Michelle's grape supply influenced by consumer demand for wine, industry-wide production levels as well as weather and crop conditions, influencing costs of production and pricing.

These risks have the potential to influence operating costs for Altria Group's operating companies, and in the case of natural or man-made disasters; prolonged disruption in operations experienced by one or more of Altria Group, Inc.'s subsidiaries or significant suppliers could have a material adverse effect on the business, the consolidated results of operations, cash flows or financial position of Altria Group, Inc. and its tobacco subsidiaries. A change of this magnitude would be considered substantive – the metric is increased operating costs and the threshold for discussion in financial reporting instruments such as our Form 10-K is based on both quantitative and qualitative factors.

W4.2b

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Altria's Enterprise Risk Management process uses scenario planning & business continuity/crisis management to guide our operating companies & subsidiaries in mitigating such risks. In order to gain a better understanding of water risk exposure, in 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, & reputational water risks to our operating companies' facilities & their value chains in locations such as Richmond, VA and Woodinville, WA. Tools such as the WRI Aqueduct, WWF Water Risk Filter & the WBCSD Global Water Tool, along with media coverage and internal company knowledge informed by non-profit & community partners helped shape methodology. This risk assessment will help inform future facility-level water planning & guide the focus of Altria's environmental contributions in the coming years. The results of this assessment have not identified exposure to water risks in our direct operations that could generate a substantive change in our business, operations, revenues or expenditures at this time because most of the areas we operate in that we derive the majority of our revenue from including Richmond, VA and Woodinville, WA are not exposed to water-related risks. The assessment indicated only one area, Napa Valley, at high overall water risk due to physical quantity and quality risks from extreme drought in the area, but the business impacts are minimal due to the minimal financial contribution from this location, as well as our agricultural practices such as drip irrigation and water conservation efforts.

W4.2c

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Altria's tobacco operating companies source tobacco grown in the United States & across the globe. Ste. Michelle Wine Estates contracts with grape growers on about 36,400 acres. Altria's tobacco and wine operating companies face risks from shifts in crops driven by economic conditions & adverse weather patterns as well as government mandated prices and production control programs. In 2017, Altria conducted a comprehensive water risk assessment to examine physical, regulatory, & reputational water risks to our operating companies' facilities & their value chains. Tools such as the WRI Aqueduct, WWF Water Risk Filter & the WBCSD Global Water Tool, along with media coverage and internal company knowledge informed by non-profit & community partners helped shaped methodology. This risk assessment identified regions of potential water risk within our supply chains and has helped inform the focus of our environmental contributions to the regions and communities within our tobacco and wine value chains. It has not identified exposure to water risks that could generate a substantive change in our business, operations, revenues or expenditures at this time. For example, our tobacco sourcing areas, including Virginia and Kentucky, are not exposed to water-related risks, and tobacco products account for the majority of our revenue. This assessment indicated only one area Napa Valley, at high overall water risk due to physical quantity and quality risks from extreme drought in the area, but the business impacts are minimal due to the minimal financial contribution from this location, as well as agricultural practices such as drip irrigation and water conservation efforts.

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

Altria's operating companies assess opportunities to improve the efficiency of water usage throughout their operations at facilities in locations such as Richmond, VA and Woodinville, WA. Water consumption is measured at each company facility and water reduction activities provide operational cost savings. An example of these activities at an operating company level includes Philip Morris USA's Park 500 facility's conservation activities in Chesterfield County, VA. While water is necessary for production, Park 500 works to reduce water usage and develop ways to treat or reuse water consumed. Park 500 has a long history of innovation that allows it to be more efficient with the water resources required for operation. These implemented efforts include: -Formation of an employee Water Team to identify and mitigate unnecessary water usage -Conservation checklists for operators to fill out to identify and repair water leaks and water usage issues -Implementation of trial equipment to clean cooling tower water, reducing the amount of water and chemicals needed -The Natural Treatment System at Park 500 is on-site water treatment that helps support the Altria water neutrality goal

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Low-medium

Potential financial impact

113000

Explanation of financial impact

The trial equipment at Philip Morris USA's Park 500 facility showed projected conservation of 58,000 gallons per day of water and an estimated annual savings of \$113,000 and is currently in the progress of being installed permanently.

W6. Governance

W6.1

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

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

W6.1a

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

Row	Scope	Content	Please explain
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 Company water targets and goals Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Recognition of environmental linkages, for example, due to climate change	Our Environmental Management Framework states how our business both depends on and impacts water. Our company-wide Framework has long-term environmental goals, including 50% water neutrality and is publicly available on altria.com . We engage with suppliers on environmental & water best practices including assessment programs. Our domestic tobacco growers follow GAP guidelines, including Soil & Water Management. These efforts are beyond regulatory compliance. Our Framework includes stakeholder education - Ste. Michelle educates adult wine consumers with bottle labels certified by Salmon-Safe, an organization that protects watersheds through sustainable viticulture practices, which demonstrates a biodiversity linkage. Our water policy doesn't state the human right to water and sanitation since our approach is to focus on water availability and quality. We don't include international standards or public policy initiatives, although we align our efforts with such best practices.

W6.2

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

Yes

W6.2a

(W6.2a) Identify the position(s) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Other, please specify (Board committee)	The Nominating, Corporate Governance and Social Responsibility Committee oversees our corporate responsibility strategies. With the support of our full Board, the Committee is charged with oversight of management efforts to identify, evaluate and understand the environmental, social and governance issues that present risks and opportunities for our businesses. This committee has responsibility for water-related issues because they have responsibility for all social responsibility issues, including the environment and water.

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 - all meetings	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy	The board is briefed on our corporate responsibility topics, including environmental and water-related issues, by the Senior Vice President of Corporate Communications and Citizenship. This includes implementation and performance of our long-term environmental goals, including our water neutrality goal. As part of implementation of our long-term goals, the board would be briefed on any significant business plans, major plans of action and strategy, including any major capital expenditures, at the corporate and operating company level as related to water risks and opportunities if they were considered substantive. If a water-related risk was considered to be substantive under our Enterprise Risk Management process, the board would be briefed. The board also reviews and approves Altria’s board-allocated contribution portfolio and budget, which includes environmental grants for water-related issues.

W6.3

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

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

Environment/Sustainability manager

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Less frequently than annually

Please explain

Our Senior Vice President of Communications and Corporate Citizenship reports directly to the CEO and briefs the Leadership Team and board on our corporate responsibility strategy, including environmental and water-related issues as part of our long-term environmental goals. Reporting to this position is our Director of Corporate Responsibility, who is responsible for both assessing and managing water-related risks and opportunities at the corporate level, such as conducting our water risk assessment and setting new long-term environmental goals. Our operating companies have various positions that manage risks and opportunities at a company level, some of which roll up to the corporate level.

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

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

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

W6.5

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

Yes, trade associations

Yes, funding research organizations

W6.5a

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

Our approach to advocacy and engagement is grounded in maintaining compliance with the law and acting responsibly. Altria and its companies, like most major corporations, are members of various trade associations and public policy organizations focused on issues that affect our businesses. In developing and maintaining partnerships with these organizations, we expect that they will engage in effective and responsible advocacy within the political and public policy processes. We consider these organizations in the context of our Mission strategies and our responsibility expectations. On altria.com, we disclose an extensive list of organizations to which Altria and its companies contribute, including many that are involved in public policy issues.

While we may not necessarily agree with every position taken by each organization we support, we do assess whether the intended use of a contribution is consistent with Altria's Mission & Values. If an organization we support adopts a public policy position that we do not agree with, we may voice our objection to it and choose to not participate in advocacy related to that subject. In some cases, we may actively lobby against the position of an organization of which we are a member.

While Altria's companies focus on a variety of public policy issues, our companies have not advocated for or against water policy. Moreover, our companies have not asked any third party organizations to take any position on such standards.

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	16-20	Altria's Mission includes the strategy to "Drive Positive Change" which means our companies will help solve societal issues important to our business, stakeholders and communities. This includes reducing the environmental impact of our businesses and promoting the sustainability of the natural resources on which we depend, of which water-related issues such as quality and quantity are integrated. For example, water-related issues in areas where we live and operate led to the water neutrality goal as part of our long-term environmental goals, which directly support this part of our Mission. The time horizon is 16-20 years because our Mission is the foundation for all our long-term strategic business plans and was refreshed after 20 years.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	We have several strategies for achieving our long-term objective to "Drive Positive Change" related to water issues such as quality and quantity. One strategy is the establishment of environmental goals, including a water goal to achieve 50 percent water neutrality through reduction activities within our operations by offsetting our water use through on-site treatment programs and conservation, and by enacting conservation efforts in the communities in which we operate. We had this goal for a five-year timeframe that concluded in 2016, and then renewed the goal out to 2025 for a total of 15 years. Our operating company Ste. Michelle Wine Estates plans for water risks in its growth strategy by purchasing water rights for new vineyards before they are needed. When Ste. Michelle is determining its growth strategy or which new vineyards or wineries to acquire, they also consider longer-term climate change and water risks.
Financial planning	Yes, water-related issues are integrated	11-15	Water-related issues are integrated into financial planning when related to our strategy for achieving long-term objectives. For example, as part of supporting our water neutrality goal (which has been ongoing for 15 years and was renewed out to 2025), we direct environmental grants to partners such as the National Fish and Wildlife Foundation, which supports water stewardship, habitat protection and restoration, and sustainable agricultural practices in the Columbia River, Cumberland Plateau, and Chesapeake Bay watersheds. These watersheds are the same watersheds where Altria's employees live and work, and the stewardship of these watersheds is not only important to Altria's businesses, but to the health and sustainability of the communities we call home. These grants are part of a board-allocated portfolio and a significant financial spend. We also integrate water issues into capital projects, for example, for water efficiency projects and/or water recycling projects.

W7.2

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

	Water-related CAPEX (+/- % change)	Anticipated forward trend for CAPEX (+/- % change)	Water-related OPEX (+/- % change)	Anticipated forward trend for OPEX (+/- % change)	Please explain
Row 1					We do not currently track water-related CAPEX and OPEX at an enterprise-level.

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	In 2017, a cross-functional team of Altria employees and external industry experts conducted a scenario planning process to explore how supply chain will evolve over the next decade to develop a long-term supply chain strategy for Altria's companies. The team explored the macro environment to identify trends and key uncertainties then considered how those trends could impact Altria. The team developed four possible scenarios, including assumptions about resource availability and environmental sustainability. Our 2017 water risk assessment included climate-related scenario analysis to determine changes in water stress by 2030. It used the WRI Aqueduct tool to provide site level assessments and mapping capabilities, including water stress predictions under different climate scenarios and the WWF Water Risk Filter to provide additional site level assessments of water risks across a large number of water risk indicators, including forecasted impact of climate change.

W7.3a

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

Yes

W7.3b

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

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	Other, please specify (Various scenarios used by the tools)	Our 2017 water risk assessment included climate-related scenario analysis to determine changes in water stress by 2030. Some of our tobacco growing regions were identified as having high change in overall water stress risk by 2030 based on this assessment.	Our water risk assessment will help inform future facility-level water planning as well as guide the focus of Altria's environmental contributions in the coming years.

W7.4

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

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

Our facilities that use municipal water incorporate that price into evaluations for projects that will utilize water.

W8. Targets

W8.1

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals Basin specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Our long-term environmental targets, including our water target, are set by first working with our operating companies that have the biggest impact to set individual business level targets and then rolling those up into a corporate-level target. We monitor the corporate-level target through regular check-ins with the operating companies on progress and projects, as well as annual updates of the underlying data. Some operating companies and/or facilities set additional targets and/or goals. For basin specific targets and/or goals, we support the National Fish and Wildlife Foundation's work in the Columbia River, Cumberland Plateau, and Chesapeake Bay watersheds to help protect and restore some of the most important ecosystems in the nation. This work helps support our corporate-level target of water neutrality through conservation, as well as restoring watersheds in the areas where we live and work.

W8.1a

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

Target reference number

Target 1

Category of target

Other, please specify (Water neutrality)

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Our company-wide target is to achieve 50 percent water neutrality through programs within our operations, offsetting our direct water use through on-site treatment programs and conservation, and enacting conservation efforts in the communities in which we operate. An example of these conservation efforts include support of the National Fish and Wildlife Foundation's programs in the Columbia River watershed of Washington state which helps mitigate water quantity risks posed to this region by drought and growing land use demands. The majority of Ste. Michelle's wineries in the state reside in this watershed, making this conservation focus of importance to Altria. An example of leading on-site treatment programs includes Philip Morris USA's Park 500 facility, located along the James River in Chesterfield County, Va. This facility treats water in a natural treatment system before returning it back to the river.

Quantitative metric

Other, please specify (Percent of direct water use offset)

Baseline year

2015

Start year

2016

Target year

2025

% achieved

100

Please explain

Through ongoing water stewardship efforts including on-site water treatment and the company's support of non-profit conservation efforts, Altria conserved 1,103 million gallons of water while treating 202 million gallons of water in 2017. Based on our 2017 water use these conservation and treatment efforts resulted in a water neutrality percent of 54.9%, above our target of 50%.

W8.1b

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

Goal

Watershed remediation and habitat restoration, ecosystem preservation

Level

Site/facility

Motivation

Water stewardship

Description of goal

Improve water quality in our local watersheds through on-site treatment. This goal is important because it helps support our corporate-level target of water neutrality, as well as restoring watersheds in the areas where we live and work. The stewardship of these watersheds is not only important to Altria's businesses, but to the health and sustainability of the communities we call home. This is an annual, ongoing goal for Philip Morris USA's Park 500 facility located along the James River in Chesterfield County, VA, in the Chesapeake Bay watershed. The goal level is site/facility because watershed remediation is a local issue and varies by each operating location in different locations. For example, the Park 500 facility has the natural treatment system that contributes to the on-site treatment portion of our water neutrality target. Additionally, the facility participates in the Virginia Nutrient Credit Exchange, which is designed to coordinate and facilitate nutrient credit trading among its members with the goal of improving water quality in the Chesapeake Bay watershed.

Baseline year

2017

Start year

2017

End year

2017

Progress

Measures of success include achieving our water neutrality goal of 50% - in 2017, we exceeded it with 54.9% water neutrality. We also track the amount of water treated through the system and ongoing return of native flora and fauna to the facility grounds, as well as participation in the Virginia Nutrient Credit Exchange. In 2017, over 201 million gallons of wastewater were treated through our Natural Treatment System at Philip Morris USA's Park 500 facility, located along the James River in Chesterfield County, VA, helping achieve our 50% water neutrality goal. Since inception, more than 230 plant and animal species re-populated the area including native deer, frogs and birds.

W9. Linkages and trade-offs

W9.1

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

Yes

W9.1a

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

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Increased biodiversity

Description of linkage/tradeoff

Our 50% water neutrality target includes support for the National Fish and Wildlife Foundation's work in the Columbia River, Cumberland Plateau, and Chesapeake Bay watersheds to help protect and restore ecosystems. These ecosystems face water quality and quantity issues, which impact biodiversity and native habitats. Philip Morris USA's Park 500 facility, located along the James River, treats water in a natural treatment system. Besides reducing the impact of water use and discharges, this system has created natural habitats for local flora and fauna to repopulate and improve biodiversity. We measure the impact through our water neutrality target and species repopulated. We increase the positive impact of increased biodiversity by meeting or exceeding our water neutrality target. In 2017, we exceeded our 50% water neutrality target, hitting 54.9%, including conserving 1,103 million gallons of water and treating 202 million gallons of water. More than 230 species re-populated the area.

Policy or action

Our environmental policy includes company initiatives and long-term environmental targets, including our water neutrality target that guides these conservation efforts, and on-site treatment that leads to greater biodiversity. This policy is integrated into our business strategy to "Drive Positive Change", since our water neutrality target is one of the ways we achieve that long-term objective. An example of a strategic choice made as a result of management action taken from this policy is how we direct our board-allocated environmental grants to meet our target.

W10. Verification

W10.1

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

Yes

W10.1a

(W10.1a) 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	Our water withdrawals have been verified – for question W1.2b, our total withdrawals; for question W1.2d, our total withdrawals; for question W1.2h, our withdrawals by source.	Other, please specify (ERM CVS Assurance Methodology ISO14064:3)	Our environmental data, including our water withdrawals, is verified by third-party as part of our corporate responsibility and sustainability reporting. The standard is determined by the third-party using their internal methodology. We verify data annually, and it covers corporate-level data.

W11. Sign off

W-FI

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

W11.1

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

	Job title	Corresponding job category
Row 1	Director, Corporate Responsibility	Environment/Sustainability manager

W11.2

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

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms