Seagate Technology PLC - Water Security 2022

W0. Introduction

W0.1

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

Founded in 1979, Seagate is a leading provider of hard drives and data storage solutions. From the videos, music and documents we share with friends and family on social networks, to servers that form the backbone of enterprise data centers and cloud-based computing, to desktop and notebook computers that fuel our personal productivity, Seagate products allow people to store, share and protect their valuable digital content. Seagate offers the industry's broadest portfolio of hard disk drives, solid-state drives, solid-state hybrid drives and storage systems. In addition, the company offers an extensive line of retail storage products for consumers and small businesses, along with data-recovery services for any brand of hard drive and digital media type. Seagate employs approximately 40,000 people around the world.

Seagate's responses in this questionnaire refer to CY 2021 unless otherwise specified.

Cautionary Note Regarding Forward-Looking Statements: This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to historical fact. Forward-looking statements include, among other things, statements about our goals, targets, expectations and strategy, statements and expectations about our environmental, social and governance priorities and goals, and statements about our customers, suppliers and industry. Forward-looking statements are subject to various uncertainties and risks that could cause our actual results to differ materially. These risks and uncertainties include, but are not limited to, those described under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Company's Annual Report on Form 10-K for the year ended July 2, 2021, and in the Company's other filings with the United States Securities and Exchange Commission (SEC). Forward-looking statements speak only as of the date they were made, and the Company undertakes no obligation to update or revise any forward-looking statements.

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 2021	December 31 2021

W0.3

(W0.3) Select the countries/areas in which you operate.

China
India
Malaysia
Singapore
Thailand
United Kingdom of Great Britain and Northern Ireland
United States of America

W0.4

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

USD

W0.5

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

Other, please specify (All facilities that Seagate has operational control are considered for inclusion in water inventory. We prioritize manufacturing facilities, largest R&D and admin facilities for monitoring as this are the largest contributors to water withdrawals.)

W0.6

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

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	IE00B58JVZ52

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	Important	Important	The primary use of freshwater in our direct operations and our value chain is as coolants and cleaning agents at production facilities. Additionally, freshwater is important for employee consumption and sanitation. The rating of “important” was chosen for direct and indirect use because without water, we could not clean products during manufacturing or provide adequate cooling to facilities and critical equipment. We do not anticipate any significant changes to our direct operations or our indirect supply chain that would impact our dependency on freshwater. It will continue to remain important as cleaning and cooling are critical to our direct operations and our indirect supply chain.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	The primary use of recycled and produced water in direct operations and our value chain is as coolants at production facilities. The rating of “important” was chosen for direct and indirect use because using recycled water in cooling systems allows us to reduce our potable water use, which is an environmental and cost saving initiative for us and our suppliers. We do not anticipate any significant changes to our direct operations or our indirect supply chain that would impact our dependency on recycled or produced water. It will continue to remain important as cooling is critical to our direct operations and our indirect supply chain.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Seagate measures water withdrawals monthly at all facilities, and reports to corporate quarterly. For facilities where actual data are not available, we estimate withdrawals based on available data from other facilities until actual data are available. Manufacturing sites and Seagate's largest R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water withdrawals. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water withdrawals – volumes by source	100%	Seagate measures water withdrawals monthly at all facilities, and reports to corporate quarterly. For facilities where actual data is not available, we estimate withdrawals based on available data from other facilities until actual data is available. Manufacturing sites and Seagate's largest R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water withdrawals. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Seagate measures water withdrawals quality monthly at all facilities, and reports to corporate quarterly. For facilities where actual data is not available, we estimate withdrawals based on available data from other facilities until actual data is available. Manufacturing sites and Seagate's largest R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water withdrawals. Water withdrawals quality is measured at all sites that use ultra pure water (UPW) for production and R&D, which is all manufacturing, R&D, and associated administrative sites. Water withdrawals quality is measured continually via in-line sensors in the UPW plants. Monitoring the quality of water withdrawals is needed to understand how to treat the incoming water to meet Seagate's UPW specifications and manage the UPW plant.
Water discharges – total volumes	100%	Seagate monitors water discharges at all facilities annually. For facilities where actual data is not available, discharges are estimated based on available data for withdrawals and/or consumptive use at each facility. Manufacturing sites and Seagate's largest R&D sites are prioritized for monitoring because they are the largest contributors to our water discharges. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water discharges – volumes by destination	100%	Seagate monitors water discharges by destination at all facilities annually. For facilities where actual data is not available, we estimate discharges based on available data for withdrawals and/or consumptive use at each facility. Manufacturing sites and Seagate's largest R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water discharges. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water discharges – volumes by treatment method	100%	Seagate monitors discharges by treatment method at all facilities annually. Seagate's largest manufacturing, R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water discharges. We feel this prioritization of monitoring is appropriate because discharges are monitored by treatment method at all facilities where wastewater treatment takes place on site. Our remaining sites discharge to municipal sewers as per local requirements and do not negatively impact surrounding ecosystems. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water discharge quality – by standard effluent parameters	100%	Seagate monitors water discharge quality at all facilities annually. Manufacturing sites and Seagate's largest R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water discharges. We feel this prioritization of monitoring is appropriate because water discharge quality is monitored by standard effluent parameters at all facilities where wastewater treatment takes place on site. Our remaining sites discharge to municipal sewers as per local requirements and do not negatively impact surrounding ecosystems. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water discharge quality – temperature	51-75	Seagate monitors temperature of water discharged at manufacturing facilities annually, in compliance with local legal requirements. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water consumption – total volume	100%	Seagate's primary consumptive uses of water are for cooling and irrigation, both of which we monitor at our facilities annually. For facilities where actual data is not available, we estimate consumptive use based on available data from other facilities. Manufacturing sites and Seagate's largest R&D and administrative sites are prioritized for monitoring because they are the largest contributors to our water use. For smaller office-based sites, consumption is negligible. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
Water recycled/reused	100%	Seagate annually measures recycled water at all facilities (100%). The primary use of recycled water is for manufacturing processes. Additionally, some facilities use recycled water for irrigation and/or cooling towers. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Seagate provides fully functioning WASH services for all employees at 100% of facilities. Seagate measures this water aspect through various methods at sites, including real time metering and flow meters.

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	7968	About the same	There were no major changes to Seagate's water withdrawals from 2020 to 2021. Seagate's water withdrawals remained about the same 2020 to 2021 because there were no major changes to operations 2020 to 2021. We consider changes less than 10% to be about the same. Future withdrawals are not expected to vary significantly. Estimates are made when data are not available, which allows Seagate to balance its water (i.e. W = D + C+ ΔS). Water withdrawals are less than the sum of discharges and consumption by about 0.98%. This difference is driven by differences in meter timing and reporting time frames at Seagate facilities. There was no on-site water storage at any sites in 2021 (Seagate does not consider wastewater treatment plant tanks, deionization (DI) water treatment tanks, cooling tower or other operations water tanks, or fire water tanks as water storage). We allow for a 5% difference in the water balance equation by site.
Total discharges	5501	About the same	There were no major changes to Seagate's water discharges from 2020 to 2021. Seagate's water discharges remained about the same 2020 to 2021 because there were no major changes to operations 2020 to 2021. We consider changes less than 10% to be about the same. Future discharges are not expected to vary significantly. Estimates are made when data are not available, which allows Seagate to balance its water (i.e. W = D + C + ΔS). Water withdrawals are less than the sum of discharges and consumption by about 0.98%. This difference is driven by differences in meter timing and reporting time frames at Seagate facilities. There was no on-site water storage at any sites in 2021 (Seagate does not consider wastewater treatment plant tanks, deionization (DI) water treatment tanks, cooling tower or other operations water tanks, or fire water tanks as water storage). We allow for a 5% difference in the water balance equation by site.
Total consumption	2389	About the same	There were no major changes to Seagate's water consumption from 2020 to 2021. Seagate's water consumption remained about the same 2020 to 2021 because there were no major changes to operations 2020 to 2021. We consider changes less than 10% to be about the same. Future consumption is not expected to vary significantly. Estimates are made when data are not available, which allows Seagate to balance its water (i.e., W = D + C + ΔS). Water withdrawals are less than the sum of discharges and consumption by about 0.98%. This difference is driven by differences in meter timing and reporting time frames at Seagate facilities. There was no on-site water storage at any sites in 2021 (Seagate does not consider wastewater treatment plant tanks, deionization (DI) water treatment tanks, cooling tower or other operations water tanks, or fire water tanks as water storage). We allow for a 5% difference in the water balance equation by site.

W1.2d

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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	11-25	Higher	WRI Aqueduct	Seagate uses the WRI Aqueduct Water Risk Atlas to determine which operations are in water stressed areas, which are defined as any basins where Baseline Water Stress is equal to or greater than “High” (40-80%). These 3 facilities (Pune, Longmont, and Wuxi) make up 10.5% of our total water withdrawals in 2021. This is a larger percentage of withdrawals than in 2020, particularly because Wuxi is newly designated as having high baseline water stress per the WRI Aqueduct Water Risk Atlas as of 2021. In 2020, Longmont and Pune were the only sites in water stressed areas and represented 1% of our withdrawals in 2020. Therefore, this increase in withdrawals from water stressed areas is not a result of an increase in Seagate's total withdrawals, but rather a change in the water stressed status of the Wuxi facility. There were no major changes in operations at Seagate facilities from 2020 to 2021.

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	Not relevant	<Not Applicable>	<Not Applicable>	This source is not relevant because Seagate sources 0% of total water withdrawals from fresh surface water. We do not anticipate any future changes to this source
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	This source is not relevant because Seagate sources 0% of total water withdrawals from brackish surface water and seawater sources. We do not anticipate any future changes to this source.
Groundwater – renewable	Not relevant	<Not Applicable>	<Not Applicable>	This source is not relevant because Seagate sources 0% of total water withdrawals from renewable groundwater sources. We do not anticipate any future changes to this source.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	This source is not relevant because Seagate sources 0% of total water withdrawals from non-renewable groundwater sources. We do not anticipate any future changes to this source.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	This source is not relevant because Seagate sources 0% of total water withdrawals from produced/process water sources. We do not anticipate any future changes to this source.
Third party sources	Relevant	7968	About the same	This source is relevant because Seagate sources 100% of total water withdrawals from third party sources. These third-party sources are mostly municipalities. Compared to the previous reporting year, withdrawals from this source were 6% higher, primarily driven by increased withdrawals at Woodlands due to an increase in production volume in 2021. We consider changes less than 10% to be about the same.

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	452	About the same	This destination is relevant because Seagate discharges 8% of total water discharges to fresh surface water. Compared to the previous reporting year, discharges to this destination were about the same. There were no major changes to Seagate operations from 2020 to 2021 to drive significant changes in discharge at these sites. We do not anticipate any future changes to this source.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	This destination is not relevant because Seagate discharges 0% of total water discharges to brackish surface water and seawater. We do not anticipate any future changes to this source.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	This destination is not relevant because Seagate discharges 0% of total water discharges to groundwater. We do not anticipate any future changes to this source.
Third-party destinations	Relevant	5049	About the same	This destination is relevant because Seagate discharges 92% of total water discharges to fresh surface water. Compared to the previous reporting year, discharges to this destination were about the same. There were no major changes to Seagate operations from 2020 to 2021 to drive significant changes in discharge at these sites. We do not anticipate any future changes to this source.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Relevant	1592	About the same	11-20	In 2021, 3 Seagate facilities used tertiary treatment on site prior to discharge of water to a municipal treatment plant, representing 20% of Seagate's total facilities. Future discharges are not expected to vary significantly. Tertiary treatment is required by either permit requirements or regulatory standards at Seagate sites. Seagate does not comply with any voluntary standards.
Secondary treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Secondary treatment is not relevant because Seagate does not currently treat any discharge using secondary treatment. Seagate is not currently subjected to any permit requirements or regulatory standards that require secondary treatment of discharge.
Primary treatment only	Relevant	2368	Much higher	11-20	In 2021, 2 Seagate facilities used primary treatment (removing solids, pH adjustment) on site prior to discharge of water to a municipal treatment plant, representing 13% of Seagate's total facilities. Future discharges are not expected to vary significantly. Primary treatment is required by either permit requirements or regulatory standards at Seagate sites. Seagate does not comply with any voluntary standards.
Discharge to the natural environment without treatment	Relevant	452	About the same	11-20	In 2021, 2 Seagate facilities discharged water to the natural environment without treatment, representing 13% of Seagate's total facilities. Future discharges are not expected to vary significantly. Discharges are discharged to the natural environment without treatment at some Seagate facilities because no treatment is required by either permit requirements or regulatory standards at these sites. Seagate does not comply with any voluntary standards.
Discharge to a third party without treatment	Relevant	986	About the same	71-80	In 2021, 12 Seagate facilities discharged water to a third party without treatment, representing 80% of Seagate's total facilities. Future discharges are not expected to vary significantly. The highest level of treatment the third party applies is unknown. Discharges are discharged to a third party without treatment at some Seagate facilities because no treatment is required by either permit requirements or regulatory standards at these sites. Seagate does not comply with any voluntary standards.
Other	Relevant	103	About the same	1-10	In 2021, 1 Seagate facility used other treatment on site prior to discharge of water to a municipal treatment plant, representing 7% of Seagate's total facilities. Future discharges are not expected to vary significantly. This other treatment was required by either permit requirements or regulatory standards at the site. Seagate does not comply with any voluntary standards.

W1.3

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

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	10681000000	7968	1340486.94779116	Seagate does not anticipate any large future changes to this value.

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
76-100

% of total procurement spend
76-100

Rationale for this coverage
These suppliers were selected because they are direct material suppliers who represent the majority of Seagate's supplier spend (more than 80%). As we continue to review supplier responses via the RBA tool, we will plan to prioritize engagement with our suppliers based on those suppliers showing the greatest opportunity for improvement or representing the greatest risk to Seagate. We believe suppliers are motivated to report given the importance Seagate places on the Responsible Business Alliance (RBA) environmental reporting initiative. Seagate has a metric to drive supplier reporting, and the Materials team follows up with suppliers to ensure responses are received. Additionally, we believe most of our suppliers receive requests from other customers, which adds leverage to our request.

Impact of the engagement and measures of success
The RBA Environmental tool is used by suppliers to respond to a standardized questionnaire that provides quantitative energy, GHG, water, and waste data, as well as qualitative information on environmental management practices. The RBA tool now allows the suppliers to upload their CDP Water Security response to meet the reporting requirements for water. Therefore, Seagate has started receiving CDP Water Security responses for those who respond to CDP and in the traditional format for those who do not. Once received, this information is evaluated internally at Seagate to better understand the maturity of our suppliers with regard to environmental management practices, and identity areas to improve performance over time. Success is measured based on the number of suppliers that respond.

Comment
Seagate requests information on supplier energy/GHG, water, and waste indicators via the RBA environmental reporting initiative.

W1.4b

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

Type of engagement
Onboarding & compliance

Details of engagement
Requirement to adhere to our code of conduct regarding water stewardship and management
Other, please specify (Educate suppliers about water stewardship and collaboration)

% of suppliers by number
76-100

% of total procurement spend
76-100

Rationale for the coverage of your engagement
Coverage is 100% of Seagate's direct suppliers, which provide components and parts for products. These suppliers, which make up more than 80% of our total direct and indirect procurement spend, were selected because they represent the majority of Seagate's supplier spend (>50%). As we continue to review supplier compliance with our Supplier Code of Conduct, we plan to prioritize engagement with our suppliers based on those suppliers showing the greatest opportunity for improvement or representing the greatest risk to Seagate.

Impact of the engagement and measures of success
We adopted the RBA Code of Conduct as our Supplier Code of Conduct and require suppliers to sign it. Aligning with this industry standard eliminates confusion among suppliers about expectations around compliance. Seagate requires key suppliers to train their employees on the RBA code. All suppliers have direct and free access to a third–party online manager, which includes software that details RBA expectations and supplier reports that track progress. Seagate compliance managers also are positioned across locations. As of 31 Dec, 2021, Seagate requires selected direct suppliers to report their water withdrawals, discharges, and water reuse/recycling in the RBA survey. Suppliers are also required to provide information about any applicable water policies or targets they have in place, any water risk assessments they conduct, and whether this information is publicly available. Through in–person meetings, quarterly business reviews with key suppliers, and our Supplier Day held throughout Asia, we educate suppliers on the importance of global citizenship, sustainability and compliance with the RBA and our standards. During our required supplier training in March 2022 (Supply Chain Webinar: Environmental Reporting) we discussed energy, water stewardship, and science-based targets. Success is measured based on the level of compliance with this requirement.

Comment
none

W1.4c

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

Partners Engaged: Seagate engages customers, investors, and utility providers around water-related issues

Method or Strategy of Engagement: Seagate engages customers through education and information sharing about our water management strategy on our website. Additionally, we engage customers who request that we respond to CDP Supply Chain. We engage investors through education and information sharing by responding to CDP Water Security. We engage utility providers through conversations about supply continuity, water quality, and recycling opportunities.

Rationale for Engagement: Seagate prioritizes customers for engagement because their satisfaction with our products is key to our success. We want customers to know that we value water as a key resource that warrants proper management to preserve and protect the health of our ecosystem as a whole. Investors are prioritized when they request or view Seagate's CDP Water Security response. Seagate provides data through CDP to any customers or investors requesting information about our water impacts and management. Our response is also made public on the CDP website to allow any additional investors interested in our water impacts and management to view our response. We prioritize engaging with utility partners to ensure supply continuity and quality, because the water supplied by utility partners is vital for our business.

Measurement for Success: Success for our customer engagement is measured by customer feedback received about our published information on water management. Success for our investor engagement is measured by their continued business and information collection requests made via CDP or other avenues, as well as our annual CDP scores. Success for our utility partner engagement is measured by the availability of a continuous water supply and increased water recycling opportunities identified at facilities.

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

W3.3

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

Yes, water-related risks are assessed

W3.3a

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

Value chain stage
Direct operations
Supply chain

Coverage
Full

Risk assessment procedure
Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
Annually

How far into the future are risks considered?
3 to 6 years

Type of tools and methods used
Tools on the market
Other

Tools and methods used
WRI Aqueduct
Internal company methods
External consultants
Other, please specify (Responsible Business Alliance (RBA) On-line tool)

Contextual issues considered
Water availability at a basin/catchment level
Water quality at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees
Other, please specify (current and estimates of future water-related costs)

Stakeholders considered
Customers
Employees
Investors
Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level
Other, please specify (River basin management authorities)

Comment
Seagate conducts multiple risk assessment processes that identify and assess water related risks in our direct operations and value chain. We use our integrated enterprise risk management (ERM) framework to conduct an annual risk assessment at the corporate level, and the outcomes of this are reported to the Board's Audit and Finance Committee twice a year. per the annual agenda of the Audit and Finance Committee. If there are material water risks to a business group, they are likely to be identified through the ERM process. We also use the WRI Aqueduct tool to assess the water stress and coastal and riverine flood risk of our manufacturing sites and largest R&D sites. The RBA Environmental tool is used by suppliers to respond to a standardized questionnaire that provides quantitative energy, GHG, water, and waste data, as well as qualitative information on environmental management practices. The RBA tool allows us to assess our water-related risks associated with our suppliers. We consider multiple contextual issues and stakeholders in our comprehensive water risk assessment procedures.

W3.3b

(W3.3b) 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.

Seagate conducts multiple risk assessment processes to assess water risk. At all production facilities, the Sustainability and Operations staff conduct an environmental impact analysis annually, considering water supply, withdrawal and discharge quality, related legal impacts, and other environmental factors. Water-related factors are included in the company's enterprise risk assessment process at a business group level, if material water risks are identified. Inputs are provided by Operations staff at all facilities based on local conditions (internal company methods). We conduct a river basin-level water risk assessment using WRI Aqueduct tool. This multi-faceted process was selected because it allows Sustainability staff to understand water-related risk factors throughout operations. We also request information on supplier energy/GHG, water & waste indicators via the Responsible Business Alliance (RBA) environmental reporting initiative. Via RBA Online tool, suppliers respond to a questionnaire, providing quantitative environmental data and information on environmental management practices. Information is evaluated to understand the maturity of our supplier's environmental management practices. In 2017, we completed a process to more closely assess water risk at our supplier locations, using data from RBA Online, publicly available CDP water responses and WRI Aqueduct. We evaluate suppliers that represent 80% of direct spend.

We use a severity matrix to assess potential changes in our business. Water concerns have not surfaced as being a top 5 risk to Seagate at this current time. We conduct analyses on an annual basis and consider 3 years into the future when evaluating water risks to company facilities, which aligns the risk assessment process with our enterprise-wide planning process. As our water management program progresses, and water is further integrated into comprehensive company-wide risk assessment processes, we anticipate taking a longer-term view of our company's potential water risks.

Stakeholders included in our risk assessment:

- Customers, because many of our customers request that we respond to CDP Water Security via CDP Supply Chain and we take this request seriously in our business operations
- Employees, because our employees operate machines and run processes where their decisions are impacting water use
- Investors, because we aim to maintain positive socially responsible investment (SRI) ratings and continue to make Seagate more appealing to investors.
- Local communities, because we are a responsible member of the community and water is a joint resource
- NGOs, we value their opinion and require their knowledge to make well-informed business decisions; they can provide insights to issues that we may not be aware of for our supply chain partners.
- Water users at a basin/catchment level because they may discharge wastewater that can impact our water intake and supply.
- Regulators, because regulations may impact our operations and costs
- Suppliers, because many of our component suppliers are geographically concentrated, which makes our supply chain more vulnerable to regional disruptions, particularly water-related disruptions
- Water utilities at a local level and river basin management authorities because they are important to our daily business as we regularly engage with local water utilities (who are primarily river basin management authorities in Asia) to ensure continuity of supply.

Contextual issues included in risk assessment:

- Water availability and quality at a local level, because our operations, particularly at manufacturing and large R&D facilities, are dependent on the availability and quality of water supply for activities such as product treatment, equipment cleaning, heating/cooling, sanitation, use in cooling towers, and irrigation.
- Stakeholder conflicts concerning water resources at a local level, because stakeholder conflicts could disrupt Seagate's water supply
- Implications of water on our key commodities and raw materials, because many of our component and raw material suppliers are geographically concentrated, which makes our supply chain more vulnerable to regional disruptions
- Water-related legal impacts and regulatory frameworks, because water regulations, fines, and tariffs could affect operations at our production facilities
- Status of ecosystems and habitats, because we recognize that water is a joint resource between citizens of local communities and the plants and animals on the land they occupy, and Seagate aims to maintain a positive environmentally and socially responsible position within the local communities we occupy
- WASH access because we aim to ensure the safety and health of our employees.
- Current and estimates of future water-related costs, because water is essential to our operations, and changes in our water-related costs could have an effect on our business continuity, production processes, and overall success.

W4. Risks and opportunities

W4.1

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

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

W4.1a

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

Seagate's internal ERM process defines substantive financial or strategic impact as a change in our business, operations, revenue or expenditure from water-related risk that would impact on our ability to successfully deliver products to 100% of our customers. Seagate's ERM team use a severity matrix to assess potential changes in our business, which rates risks on a scale of 1 to 5, 1 being less than $1 million in potential impact and 5 being more than $250 million in potential impact. This applies to our direct operations with influence from both upstream and downstream business activities.

One example of a substantive impact considered: Our business operations are subject to interruption by natural disasters such as floods and earthquakes, fires, power or water shortages, among other things, and other events beyond our control. Such events may decrease demand for our products, make it difficult or impossible for us to make and deliver products to our customers or to receive components from our direct and indirect suppliers, and create delays and inefficiencies in our supply chain. In the event of a natural disaster, losses and significant recovery time could be required to resume operations and our financial condition and operating results could be materially adversely affected. The severe flooding in Thailand in October 2011 had a material impact on the production and availability of many components that we purchase. In 2012, the industry experienced significant increases in the cost of components due to the 2011 flooding in Thailand. While in this instance, the primary impact was on our suppliers, we also have manufacturing facilities in Southeast Asia that could be similarly impacted by flooding and other natural disasters.

W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	5	26-50	Seagate considers facilities at risk if they have either a coastal or river flood risk rating of high (6 in 1,000 to 1 in 100) or greater, as classified by WRI Aqueduct. In 2021, 5 Seagate facilities were in regions with flood risk, representing 33% of Seagate's total facilities.

W4.1c

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

Country/Area & River basin

Thailand	Chao Phraya

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
11-20

Comment

Country/Area & River basin

United States of America	Other, please specify (Coyote)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment

Country/Area & River basin

Malaysia	Other, please specify (Bayan Lepas)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

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

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment

Country/Area & River basin

India	Krishna

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
1-10

Comment

Country/Area & River basin

China	Other, please specify (China Coast)

Number of facilities exposed to water risk
1

% company-wide facilities this represents
1-25

Production value for the metals & mining activities associated with these facilities
<Not Applicable>

% company's annual electricity generation that could be affected by these facilities
<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities
<Not Applicable>

% company's total global revenue that could be affected
11-20

Comment

W4.2

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

Country/Area & River basin

Thailand	Chao Phraya

Type of risk & Primary risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)

Primary potential impact
Closure of operations

Company-specific description
Our business operations are subject to interruption by natural disasters such as floods and earthquakes, fires, power or water shortages, among others, and other events beyond our control. Such events may decrease demand for our products, make it difficult or impossible for us to make and deliver products to our customers or to receive components from our direct and indirect suppliers, and create delays and inefficiencies in our supply chain. In the event of a natural disaster, losses and significant recovery time could be required to resume operations and our financial condition and results of operations could be materially adversely affected. Severe flooding could have a

material impact on the production and availability of components that we purchase. We also have manufacturing facilities in Southeast Asia that could be similarly impacted by flooding and other natural disasters.

Timeframe
More than 6 years

Magnitude of potential impact
Low

Likelihood
Likely

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
3000000

Potential financial impact figure - maximum (currency)
5000000

Explanation of financial impact
Seagate estimates the potential financial impact based on the average revenue per manufacturing facility per day. With FY2021 revenues of $10,681,000,000 and seven manufacturing facilities, our average daily revenue is $4M ($10.681 B / 7 facilities / 364 = $4M per facility per day + or – 25% = range from $3-5M). This is a rough estimate of the potential financial impact of the stated risk. The true financial impact of any actual incident, if one were to occur, would be calculated at that time based on a range of factors and circumstances relating the actual incident, and each of those factors and circumstances cannot be predicted with accuracy at this time.

Primary response to risk
Amend the Business Continuity Plan

Description of response
Seagate has pursued ISO22301 certification at all three of our primary drive sites, which are located in Thailand and China. This certification provides a framework for business continuity planning and management. This certification helps us protect our facilities against severe weather and natural disasters, including flooding. Additionally, it allows us to actively plan for, prepare for, respond to, and recover from disruptions to our operations. Each site has a unique approach to business continuity planning. For example, our facility in Thailand has instituted a protocol to notify staff and commuter bus drivers if the facility has closed, to prevent employees from attempting to get to work in unsafe conditions.

Cost of response
90000

Explanation of cost of response
Certifications such as ISO14001, ISO50001 or ISO22301 are estimated to cost $25,000-$30,000 per facility to acquire; Seagate then spends more than $15,000 annually to maintain these certifications, spending roughly $90,000 per year.

Country/Area & River basin

Malaysia	Other, please specify (Malaysia Coast)

Type of risk & Primary risk driver

Acute physical	Pollution incident

Primary potential impact
Reduction or disruption in production capacity

Company-specific description
In the past 5 years, our Johor, Malaysia facility has experienced seven unplanned water disruptions from the water company (SAJ). Two of these disruptions were caused by pollution in the nearby river which forced the water intake plant to shut down intermittently until the contaminant was cleaned, shutting down production at times. Three were due to pipe leak incidents and two were due to power supply failure at the water treatment plant. These water incidents caused a reduction in our production capacity. For these previous incidents we were still able to successfully deliver product to 100% of our customers, however there is risk of this continuing to occur and causing a substantive business impact. In 2021, this resulted in losses in production of about $500,000.

Timeframe
1-3 years

Magnitude of potential impact
Low

Likelihood
Very likely

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure - minimum (currency)
1

Potential financial impact figure - maximum (currency)
1000000

Explanation of financial impact

The financial impact estimate was derived based on the value of the product that would have been produced if the facility were running normal operations during the 2019 incident, which is about $500,000. We have bounded the low end below this value at $300,000 and the high at about $1,000,000 which is about double the 2019 impact.

Primary response to risk

Adopt water efficiency, water reuse, recycling and conservation practices

Description of response

As a response strategy, we implemented a water recycling project at this facility in 2019. This project reclaims wastewater from industrial effluent treatment systems (IETS) and turns it into process water, thus minimizing our reliance on water withdrawals that may be contaminated. This system was completed in late 2019 and has recycled 171,249 m3 in 2021.

Cost of response

1000000

Explanation of cost of response

The cost to respond to this risk for the initial set up to improve the facility to allow for the recycling system. This was a one- time cost. This recycling system is primarily a cost savings to Seagate realized through the decreased cost of water.

W4.2a

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

Country/Area & River basin

Thailand	Chao Phraya

Stage of value chain

Other, please specify (Upstream (suppliers) and downstream (customers))

Type of risk & Primary risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)

Primary potential impact

Supply chain disruption

Company-specific description

Our business operations are subject to interruption by natural disasters such as floods and earthquakes, fires, power or water shortages, among other things, and other events beyond our control. Such events may decrease demand for our products, make it difficult or impossible for us to make and deliver products to our customers or to receive components from our direct and indirect suppliers, and create delays and inefficiencies in our supply chain. In the event of a natural disaster, losses and significant recovery time could be required to resume operations and our financial condition and results of operations could be materially adversely affected. Additionally, many of our component suppliers are geographically concentrated in Thailand, which makes our supply chain more vulnerable to regional disruptions. An example is the severe flooding in Thailand in October 2011, which had a material impact on the production and availability of many components. There are a limited number of independent suppliers of components, such as recording heads and media, available to disk drive manufacturers. In 2012, the industry experienced significant increases in the cost of components due to the 2011 flooding in Thailand.

Timeframe

More than 6 years

Magnitude of potential impact

Medium

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

200000000

Potential financial impact figure - maximum (currency)

3000000000

Explanation of financial impact

In 2012, the average selling price of our products increased from $54 per unit to $66 per unit, primarily due to the limited industry supply of hard drives resulting from the 2011 flooding in Thailand. Had we not been able to pass these costs on to our customers, Seagate would have faced potential losses of up to $1-12 per unit, which would have led to $0.2 to $3 billion in lost revenues in 2012.

Primary response to risk

Upstream	Increase supplier diversification

Description of response

While the equipment we use to manufacture our products and components is frequently custom made and comes from a few suppliers and the lead times required to obtain manufacturing equipment can be significant, we aim to diversify our supply base as much as possible, to prevent shortages in supply and increases in production costs. Additionally, we are often able to pass increased component costs on to our customers. For example, in 2012, the average selling price of our products increased from $54 per unit to $66 per unit, primarily due to the limited industry supply of hard drives resulting from the 2011 flooding in Thailand.

Cost of response

0

Explanation of cost of response

These management methods are a routine part of our business and thus have an incremental cost of $0.

W4.3

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

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

W4.3a

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

Type of opportunity
Efficiency

Primary water-related opportunity
Improved water efficiency in operations

Company-specific description & strategy to realize opportunity
We have actively pursued opportunities to improve our efficiency and reduce our water consumption and we plan to do so in the future. For example, in 2019, we implemented a water recycling project at our Johor facility. This project reclaims wastewater from industrial effluent treatment systems (IETS) and turns it into process water. This system was completed in late 2019 and has recycled 171,249 m3 in CY2021. We implemented this project at this facility because it is the most likely to be disrupted by polluted water. We are working with a third party to make continuous improvements to the process. Therefore, we expect to increase savings each year.

Estimated timeframe for realization
Current - up to 1 year

Magnitude of potential financial impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
126000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact
This figure represents the cost savings associated with implementing the Johor industrial effluent treatment system (IETS) to reclaim and recycle wastewater. Which will likely save 1400 m3 of water annually as well as cut down on wastewater costs, this comes out to about 126,000 USD per year of savings.

Type of opportunity
Efficiency

Primary water-related opportunity
Improved water efficiency in operations

Company-specific description & strategy to realize opportunity
Our Recording Media Operations (RMO) in Singapore completed a project at scale to build a recycled water system. Natural water sources are limited in Singapore - 58 percent of fresh water is imported from Malaysia. To reduce the need for imported water, Singapore's Public Utilities Board (PUB) reclaims local wastewater and provides the reclaimed water at a reduced cost, mainly to support commercial industries. The RMO project set out to implement new systems and enhance current operations to reduce our dependency on freshwater and preserve this critical natural resource. The first phase of the project was to maximize reclaimed water usage in tool processes. This was achieved by upgrading and increasing the capacity of the current reclaim water system by installing additional filtration tanks. In the second phase, Seagate implemented a system that would recycle wastewater for use in cooling towers and other operational processes. Since operationalizing this project, Seagate has significantly reduced our dependency on reclaimed water from the PUB, and in FY2021 saved 658,132m3/year - the equivalent of $1.14 million/year. We were also able to successfully claim 50 percent of the project cost from the PUB for meeting the project requirements. With our learnings from this project, we are exploring recycling wastewater in our other Singapore sites. Our Seagate facility in Singapore is committed to saving water continuously and supporting "Go Green" initiatives.

Estimated timeframe for realization
Current - up to 1 year

Magnitude of potential financial impact
Low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
1140000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact
This figure represents the cost savings associated with implementing the RMO reclaimed water project to expand our wastewater recycling systems at our Woodlands, Singapore site. This project reduced our need to purchase reclaimed water from Singapore's Public Utilities Board (PUB) by 658,132m3 in FY2021. This equates to $1.14 million saved in FY2021.

W5. Facility-level water accounting

W5.1

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

Facility reference number
Facility 1

Facility name (optional)

Country/Area & River basin

China	Other, please specify (China Coast)

Latitude
31.490989

Longitude
120.31237

Located in area with water stress
Yes

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
713

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
713

Total water discharges at this facility (megaliters/year)
328

Comparison of total discharges with previous reporting year
Much lower

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
328

Total water consumption at this facility (megaliters/year)
379

Comparison of total consumption with previous reporting year
Much higher

Please explain
The water withdrawals remained about the same, but discharges decreased as a result of increased consumption.

Facility reference number
Facility 2

Facility name (optional)

Country/Area & River basin

United States of America	Other, please specify (Coyote)

Latitude
37.476905

Longitude

-121.9306

Located in area with water stress
Yes

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
97

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
97

Total water discharges at this facility (megaliters/year)
23

Comparison of total discharges with previous reporting year
Much lower

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
23

Total water consumption at this facility (megaliters/year)
73

Comparison of total consumption with previous reporting year
Much higher

Please explain
The water withdrawals remained about the same, but discharges decreased as a result of increased consumption.

Facility reference number
Facility 3

Facility name (optional)

Country/Area & River basin

Malaysia	Other, please specify (Bayan Lepas)

Latitude
5.325826

Longitude
100.286771

Located in area with water stress
Yes

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
0.24

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
0.24

Total water discharges at this facility (megaliters/year)
0.24

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0.24

Total water consumption at this facility (megaliters/year)
0

Comparison of total consumption with previous reporting year
About the same

Please explain
Water withdrawals, discharges, and consumption remained about the same due to no major changes in operations.

Facility reference number
Facility 4

Facility name (optional)

Country/Area & River basin

India	Krishna

Latitude
18.549548

Longitude
73.95097

Located in area with water stress
Yes

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
0.18

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources
0.18

Total water discharges at this facility (megaliters/year)
0.13

Comparison of total discharges with previous reporting year
About the same

Discharges to fresh surface water
0

Discharges to brackish surface water/seawater
0

Discharges to groundwater
0

Discharges to third party destinations
0.13

Total water consumption at this facility (megaliters/year)
0.05

Comparison of total consumption with previous reporting year
About the same

Please explain
Water withdrawals, discharges, and consumption remained about the same due to no major changes in operations.

Facility reference number
Facility 5

Facility name (optional)

Country/Area & River basin

Thailand	Chao Phraya

Latitude
13.599082

Longitude
100.599835

Located in area with water stress
Yes

Primary power generation source for your electricity generation at this facility
<Not Applicable>

Oil & gas sector business division
<Not Applicable>

Total water withdrawals at this facility (megaliters/year)
403

Comparison of total withdrawals with previous reporting year
Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
0

Withdrawals from brackish surface water/seawater
0

Withdrawals from groundwater - renewable
0

Withdrawals from groundwater - non-renewable
0

Withdrawals from produced/entrained water
0

Withdrawals from third party sources
403

Total water discharges at this facility (megaliters/year)
75

Comparison of total discharges with previous reporting year
Higher

Discharges to fresh surface water
75

Discharges to brackish surface water/seawater

0

Discharges to groundwater
0

Discharges to third party destinations
0

Total water consumption at this facility (megaliters/year)
243

Comparison of total consumption with previous reporting year
About the same

Please explain
The water withdrawals increased slightly as a result of a small increase in consumption. A slight increase in water discharges was observed as well.

W5.1a

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

Water withdrawals – total volumes

% verified
76-100

Verification standard used
CDP Water Security Reporting Guidance 2022 (Water Withdrawal) 100%

Please explain
<Not Applicable>

Water withdrawals – volume by source

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water withdrawals – volume by source due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

Water withdrawals – quality by standard water quality parameters

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water withdrawals – quality by standard water quality parameters due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

Water discharges – total volumes

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water discharges – total volumes due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

Water discharges – volume by destination

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water discharges – volume by destination due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

Water discharges – volume by final treatment level

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water discharges – volume by final treatment level due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

Water discharges – quality by standard water quality parameters

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water discharges – quality by standard water quality parameters due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

Water consumption – total volume

% verified
Not verified

Verification standard used
<Not Applicable>

Please explain
Seagate does not verify water consumption – total volume due to data availability and because the company is currently prioritizing verification of water withdrawals – total volumes. This water aspect may be included in the verification process within the next two years.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?
No, but we plan to develop one within the next 2 years

W6.2

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

W6.2a

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

Position of individual	Please explain
Chief Executive Officer (CEO)	Our CEO has overall responsibility for water. Responsibility for water-related issues has been assigned to our CEO because it is an integral part of our business strategy, and the CEO is responsible for our overall business strategy. Our CEO works closely with Sustainability & Transformation and Global Operations & Development to ensure transparency, improvement reporting and verification. Our Senior Vice President of Sustainability and Transformation briefs the Board of Directors on water and sustainability issues periodically. For example, in 2020 our CEO supported the investment in the water recycling project at our Johor facility in order to reclaim wastewater from industrial effluent treatment systems (IETS) and turn it into process 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 - some meetings	Reviewing and guiding strategy	Our Senior Vice President of Sustainability and Transformation briefs the Board of Directors on water and sustainability issues periodically that review and guide Seagate's strategy on these issues.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	The CEO as a Board Member has over 5 years of experience having oversight of environmental related issues at the company. He has broad awareness of water related issues with technical expertise to guide and understand water related impacts. He has access to both internal and external expert resources to advise.	<Not Applicable>	<Not Applicable>

W6.3

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

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

Other C-Suite Officer, please specify (Senior Vice President of Sustainability and Transformation)

Responsibility

Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

The Senior VP of Sustainability and Transformation reports to the CEO and is a Seagate C-suite officer. The SVP of Sustainability and Transformation reviews water performance quarterly to the CEO in alignment with the water metrics tracked for water reduction.

W6.4

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

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

W6.5a

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

One of our key industry collaborations is with the Responsible Business Alliance (RBA). Seagate adopted the RBA Code of Conduct in 2007 and maintain full active RBA membership. The revised RBA code 2015 includes water management requirements. This helps encourage actions to mitigate water use throughout the supply chain. Additionally, we are a signatory to the United Nations Global Compact, a strategic policy initiative for businesses that is committed to aligning operations & strategies with ten universally accepted principles around human rights, labor, environment & anti-corruption. We have participated in activities (e.g., NGO forums) that engage policy makers in the area of water management on specific topics, such as water conservation. These forums take place at least annually; Seagate participates in these activities alongside many other companies.

Our strategy on water is a component of our broader Global Citizenship program that our CEO has direct responsibility. Reporting metrics have been developed & progress against the metrics is reported to Senior Management, which helps us ensure that all of our activities are in alignment & as an organization, we are driving toward a common objective that crosses business divisions & geographies. If any inconsistencies are identified via audits, metrics performance or during operations reviews, Seagate will plan to take corrective actions to address the deviation & track the inconsistency in the future.

W6.6

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

Yes (you may attach the report - this is optional)

W7. Business strategy

W7.1

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	Water withdrawals are integrated into the long-term business plan through water reduction goals. Seagate has an ongoing water intensity goal to reduce water withdrawals by 2% per exabyte annually. This goal was active in 2021. To achieve this goal, Seagate has been increasing its use of grey water through the use of water recycling and water treatment to supply cooling towers. Additionally, we are pursuing process efficiencies, such as optimizing controls of systems that use water. These water projects are intended to continue for the foreseeable future. We expect this to be at least 11 years.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	At all production facilities, operations staff conduct an annual environmental impact analysis, considering water supply, quality, and legal impacts. We have environmental management systems and continually update policies and procedures for our operations worldwide. Seagate has pursued ISO22301 certification at all of our primary drive sites. This certification provides a framework for business continuity planning and helps us protect our facilities against severe weather, including flooding. It allows us to plan for, prepare for, respond to, and recover from operations disruptions. As a result of the process of this certification in 2019, we implemented a water recycling project at our Johor facility. This project reclaims wastewater from industrial effluent treatment systems (IETS) and turns it into process water. This system was completed in late 2019 and has recycled 171,249 m3 in 2021. This system could allow us to achieve our long-term objectives of minimizing water disruptions at this site. These water projects are intended to continue for the foreseeable future. We expect this to be at least 11 years.
Financial planning	Yes, water-related issues are integrated	11-15	Our business operations are subject to interruption by natural disasters such as floods and earthquakes, fires, power or water shortages, among other things, and other events beyond our control. Such events may decrease demand for our products, make it difficult or impossible for us to make and deliver products to our customers or to receive components from our direct and indirect suppliers, and create delays and inefficiencies in our supply chain. In the event of a natural disaster, losses and significant recovery time could be required to resume operations and our financial condition and results of operations could be materially adversely affected. The severe flooding in Thailand in 2011 had a material impact on the production and availability of components. While in this instance, the primary impact was on our suppliers, we have manufacturing facilities in Southeast Asia that could be similarly impacted by flooding and other natural disasters. Seagate has pursued ISO22301 certification at all our drive sites, which provides a framework for business continuity planning and helps us protect our facilities against severe weather, including flooding. It allows us to plan for, prepare for, respond to, and recover from operations disruptions. We plan to maintain this ISO certification indefinitely. We expect to continue operations at these facilities for the foreseeable future.

W7.2

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

Row 1

Water-related CAPEX (+/- % change)

0

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

0

Water-related OPEX (+/- % change)

0

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

0

Please explain

There was no substantive change in water-related capital or operating spend since the previous reporting period because we could fit in water-related investments in our current CAPEX and OPEX budgets. We implemented a multi-year water recycling project in stages at our Johor facility, however that project was reallocation of standard CAPEX budget. We do not anticipate a change in this approach at this time.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related	Seagate manufacturing sites have conducted facility-level scenario analyses related to water impacts, which are reviewed annually. For example, certain manufacturing sites have conducted a scenario analysis to determine how operations could be affected if a water supply disruption occurred for various durations (4 hours, 12 hours, etc.), and how the disruption would affect Seagate's operations depending on the cause of the disruption. The main driver for this analysis was previous water supply disruptions that Seagate has experienced, such as the four unplanned water disruptions at Seagate's Johor, Malaysia facility over the last five years due to water pollution in a nearby river and a power supply failure. These disruptions previously caused a disruption in our production capacity. Seagate used these past experiences, as well as details from local water authorities, to inform the assumptions (duration, frequency of disruption) we used in the scenario analyses.	A probable challenge that Seagate has identified and modeled in our scenario analyses is water supply disruptions at manufacturing sites. Water supply disruptions could occur due to flooding, water pollution, or power supply failures. Through our scenario analyses, we've identified the opportunity to increase water storage and water recycling at sites to make Seagate's manufacturing operations more resilient to water disruptions from our water suppliers. Increasing water storage and recycling at sites could lessen the impact of a disruption on Seagate's production capacity because the facility would be less reliant on supply from the local water authority.	Using facility-level scenario analysis to model potential outcomes of a water disruption has been incredibly useful in guiding Seagate's business continuity planning and operational decision-making. The results of these facility-level scenario analyses have informed business and operational decisions at Seagate, such as increasing water storage and water recycling at sites. Water recycling has already been implemented at 9 of Seagate's facilities. Seagate aims to increase the water recycling at sites as a result of this scenario analysis.

W7.4

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

Row 1

Does your company use an internal price on water?

No, but we are currently exploring water valuation practices

Please explain

We are currently developing a water policy based on our successful energy policy. We intend to include water into the capital valuation model as part of this water policy implementation.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	Yes	Seagate defines a product as low water impact if less water depletion results from the product's manufacturing/assembly, use, or end-of-life than Seagate's alternative product offerings. Seagate has conducted life cycle assessments (LCAs) to assess the water depletion impacts of various products. These LCAs studied the water quantity required for product manufacturing/assembly, use, and end-of-life. The LCAs are ISO 14040 and ISO 14044 conformant and have been critically reviewed by a 3rd party.	<Not Applicable>	Seagate has conducted LCAs of their hard disk drive (HDDs) and solid-state drive (SSDs) products, which are two options of data storage devices. The results of these LCAs indicate that Seagate's HDDs have substantially lower water depletion impacts than SSD products. Therefore, Seagate considers their HDD products to be low water impact because the manufacturing/assembly, use, and end-of-life of HDDs require less water than the alternative Seagate product (SSDs).

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	Targets are monitored at the corporate level	Seagate has an ongoing water intensity goal to reduce water withdrawals by 2% per exabyte annually. This goal was active in 2021. To achieve this goal, Seagate has been increasing its use of grey water through the use of water recycling and water treatment to supply cooling towers. Additionally, we are pursuing process efficiencies, such as optimizing controls of systems that use water. Seagate approach to setting targets begins with data analysis of current and historical trends to determine past performance and model future outcomes. This analysis informs the development of multiple target options, which are reviewed by various internal stakeholders. Feedback is collected and used to determine the final target, which is then disseminated within the company for final approval.

W8.1a

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

Target reference number
Target 1

Category of target
Water withdrawals

Level
Company-wide

Primary motivation
Corporate social responsibility

Description of target
Seagate has an ongoing water intensity goal to reduce water withdrawals company-wide by 2% per exabyte annually. This goal was active to reduce water withdrawals from 2020 to 2021.

Quantitative metric
% reduction per unit of production

Baseline year
2019

Start year
2020

Target year
2021

% of target achieved
100

Please explain
100% of the goal was achieved because although our water withdrawals increased 6% in 2021, exabyte production increased 21% in 2021. Overall, this led to a 13% decrease in the intensity of water withdrawals per exabyte production. Seagate achieved this goal through pursuing process efficiencies, such as optimizing controls of systems that use water.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?
No, we do not currently verify any other water information reported in our CDP disclosure

W10. Sign off

W-FI

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

W10.1

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

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].
No

SW. Supply chain module

SW0.1

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

	Annual revenue
Row 1	10681000000

SW1.1

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

We do not have this data and have no intentions to collect it

SW1.2

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

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	No, we do not have this data and have no plans to collect it	

SW2.1

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

SW2.2

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

No

SW3.1

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

Product name
All hard drives and data storage solutions

Water intensity value
0

Numerator: Water aspect
Water withdrawn

Denominator
USD revenue

Comment
Units of megaliters per USD

Product name
All hard drives and data storage solutions

Water intensity value
14.89

Numerator: Water aspect
Water withdrawn

Denominator
Exabytes

Comment
Denominator is mass capacity storage exabytes shipped by Seagate.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms