Western Digital Corp - Water Security 2023

W0. Introduction

W0.1

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

Western Digital is on a mission to unlock the potential of data by harnessing the possibility to use it. With both Flash and HDD franchises, underpinned by advancements in memory technologies, we create breakthrough innovations inspired by the convergence of human potential and digital transformation that enable the world to actualize its aspirations. Our broad portfolio provides powerful data storage solutions for everyone, from the smallest intelligent devices to the largest public clouds. Core to our values, we recognize the urgency to combat climate change and have committed to ambitious carbon reduction goals approved by the Science Based Targets initiative. Learn more about Western Digital and the Western Digital®, SanDisk® and WD® brands at www.westerndigital.com.

We believe responsible and sustainable business practices support our long-term success. As a company, we are deeply committed to protecting and supporting our people, our environment, and our communities. That commitment is reflected through sustainability-focused initiatives as well as day-to-day activities, including our adoption of sustainability-focused policies and procedures, our publicly-recognized focus on fostering an inclusive workplace, our constant drive toward more efficient use of materials and energy, our provision of measures to ensure employee health and safety, our careful and active management of our supply chain, our community-focused volunteerism programs and philanthropic initiatives, and our impactful, globally-integrated ethics and compliance program.

- We seek to protect the human rights and civil liberties of our employees through policies, procedures, and programs that avoid risks of compulsory and child labor, both within our company and throughout our supply chain.
- We foster a workplace of dignity, respect, diversity, and inclusion through our recruiting and advancement practices, internal communications, and employee resource groups.
- We educate our employees annually on relevant ethics and compliance topics, publish accessible guidance on ethical issues and related company resources in our Global Code of Conduct, and encourage reporting of ethical concerns through any of several global and local reporting channels.
- We support local communities throughout the world, focusing on hunger relief, environmental quality, STEM (science, technology, engineering, and math) education, especially for underrepresented and underprivileged youth, and promotion of equality.
- We utilize a robust integrated management system, with associated policies and procedures, to evaluate and manage occupational health and safety risks, environmental compliance, and chemical and hazardous substance risks.
- We innovate to reduce the energy used by our products, the energy used to manufacture them, and the amount of new materials required to manufacture them.

Financial, sustainability, and ESG investor information is available at investor.wdc.com and https://www.westerndigital.com/company/corporate-responsibility

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	July 1 2021	June 30 2022

W0.3

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

China
India
Israel
Japan
Malaysia
Philippines
Thailand
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?

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	US9581021055

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	Vital	Direct use: Water is used in wafer and media production processing. The majority of this processing does not require high quality fresh water, so we consider water quality and quantity “important” to operations. We work to conserve freshwater by prioritizing the usage of recycled water and water that has potentially been in contact with process chemicals for use in production processes. We believe freshwater is a valuable resource and only rely on it when necessary, for example, for reagent mixing and domestic water supply. During the reporting period, our global average for recycled water use at our sites is 20.1%. Indirect use: Wide ranges of supplies, grinding media, and chemical agents are needed to produce our products. The production involves complex processes, various industries and multi-level supply chains. Requirements for good quality freshwater vary significantly but should generally be considered "Vital."
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Neutral	Direct Use: Water is used for cleaning equipment, wet grinding, physical separation, pumping tailings, power generation and cooling, etc. We work to conserve freshwater by prioritizing the usage of recycled water and water that has potentially been in contact with process chemicals for operational demands. The majority of this demand can be met by brackish water from recycled and/or saline water sources and is ranked “vital for operations.” To enhance the security of the available water supply, we work to establish alternative water supply sources. During the reporting period, our global average for recycled water use at our sites is 20.1%. Indirect use: The production of our goods involves complex processes, various industries and multi-levels of supply chains. The amount of recycled/brackish water needed for each purpose along the value chain varies significantly, but it is generally considered "Neutral".

W1.2

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

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	76-99	Monthly	Metering systems	This is a fundamental metric in our water data and important for utility cost management. We monitor this data at each facility on a monthly basis via metering systems in place. The scope of "facility" includes large scale manufacturing facilities (component and final assembly site) and major R&D facilities
Water withdrawals – volumes by source	76-99	Monthly	Metering systems	This is a fundamental metric in our water data and we monitor this data at each facility on a monthly basis. The scope of "facility" includes large scale manufacturing facilities (component and final assembly site) and major R&D facilities.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Water withdrawals quality	Not monitored	<Not Applicable>	<Not Applicable>	Not monitored due to metering limitation. Also, we do not have a method to reasonably estimate the number
Water discharges – total volumes	76-99	Monthly	Metering systems	This is a fundamental metric in our water data and we monitor water discharges at each facility on a monthly basis via on-site metering systems. The scope of "facility" includes large scale manufacturing facilities (component and final assembly site) and major R&D facilities. Due to the limitations of some of our metering systems, not all facilities are able to report this number
Water discharges – volumes by destination	76-99	Monthly	Metering systems	This is a fundamental metric in our water data and we monitor water discharges at each facility on a monthly basis via on-site metering systems. The scope of "facility" includes large scale manufacturing facilities (component and final assembly site) and major R&D facilities. Due to the limitations of some of our metering systems, a limited number of facilities can report this number.
Water discharges – volumes by treatment method	Not monitored	<Not Applicable>	<Not Applicable>	Not monitored due to metering system limitations.
Water discharge quality – by standard effluent parameters	100%	Continuously	Facilities monitoring equipment	Monitored following local regulations
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not monitored	<Not Applicable>	<Not Applicable>	Not monitored due to metering system limitations.
Water discharge quality – temperature	Not monitored	<Not Applicable>	<Not Applicable>	Not monitored due to metering system limitations.
Water consumption – total volume	76-99	Yearly	Calculation methodology	Calculated annually based on metered discharge and withdrawal data. Discharge and water volumes are monitored at each facility on a monthly basis via on-site metering systems. E.g. withdrawal minus discharge equals consumption.
Water recycled/reused	76-99	Monthly	Facilities monitoring equipment	Monitored at sites where this category of water usage is applicable.
The provision of fully-functioning, safely managed WASH services to all workers	Not monitored	<Not Applicable>	<Not Applicable>	Not monitored, however water, sanitation and hygiene (WASH) services are provided. We believe that WASH services are a fundamental requirement for our staff at our operations. Each site must ensure WASH services are available and meet the local workplace health and safety regulations, as well as the requirements of international coalitions like UNICEF and the Responsible Business Alliance.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	18035	Higher	Increase/decrease in business activity	Lower	Increase/decrease in efficiency	The amount of water withdrawals (mainly city water usage) increased in this reporting period due to production expansions and employee returning to site after pandemic. Western Digital also plans to initiate programs such reclaiming water with Reverse Osmosis (RO) technology, increasing capacity and efficiency of our water recycling plant, and optimization of water usage in our production lines. We are also looking into process engineering improvements to reduce water consumption in production line. Thus, we are expecting drop of water usage (withdrawal from city water) with this initiative.
Total discharges	11096	Higher	Increase/decrease in business activity	Lower	Increase/decrease in efficiency	The amount of water discharge increased in this reporting period in conjunction with the increase of water withdrawal, which arose from manufacturing growth. We expect that total water discharge to drop in line with our withdrawal reduction initiatives.
Total consumption	6939	Lower	Increase/decrease in business activity	Lower	Increase/decrease in efficiency	The amount of water consumption is affected by total withdrawal and water discharged. High water withdrawals and high water discharged result in lower water consumption. We are expecting our water reduction from source and water recycling initiatives to impact net water consumption in a positive way.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	11-25	Lower	Increase/decrease in business activity	Lower	Increase/decrease in efficiency	WRI Aqueduct	Western Digital used the WRI Aqueduct tool to assess whether water withdrawals are located in geographic areas of water stress. We applied the WRI Aqueduct tool by entering in the location of each facility where water withdrawal occurs and calculating the percentage of water withdrawn for FY22 from all locations with water stress. Water stressed areas are defined as the locations where baseline water stress equals or exceeds 40%, or baseline water depletion equals or exceeds 50%. For this reporting period, this includes water withdrawals at the following locations: Shanghai, China; Bangalore, India; Kfar-Saba, Omer, and Tefen Israel; Bang Pa In, Thailand; Prachinburi, Thailand; and Longmont, Colorado.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Our operation does not use this type of water.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Our operation does not use this type of water.
Groundwater – renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Our operation does not use this type of water.
Groundwater – non-renewable	Relevant	1345.1	Lower	Increase/decrease in business activity	Some of our facilities are using groundwater for operational purposes, and there was fluctuations of production activities. We are anticipating that this amount will increase due to continued increase of production and more employee's returning to site post COVID.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Third party sources	Relevant	13885.3	Lower	Increase/decrease in business activity	The third-party source is the municipality supplier. Some sites had production volume increases and "returning to site programs. There were also start-ups of large-scale manufacturing processes. As a result, the amount of new water needs increased the global total consumption of water from third party sources. We anticipate that this amount will continue to increase in the next few reporting periods due to the expected expansion of manufacturing operations.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	4171.3	Higher	Increase/decrease in business activity	Fresh surface water discharge includes the discharge to rivers, and the amount is measured with metering systems. The discharge is treated appropriately per local laws and other regulations. The amount of discharge increased from the previous reporting year due to increased production and the employee return to site. We anticipate that there will be further increases due to similar situations.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	
Third-party destinations	Relevant	5013.7	Lower	Please select	Third-party destinations include the discharge to off-site treatment facilities. This amount does not include water to other organizations for further use. The amount is lower than the last reporting period, but may increase in the next few reporting years due to expansion of manufacturing operations.

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	18793000000	18035		We anticipate that the relationship will stay relatively constant moving forward.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	Yes	<Not Applicable>

W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Candidate List of Substances of Very High Concern for Authorisation above 0.1% by weight (EU Regulation)	Less than 10%	Our products (including SSD, Cards, USB drives, embedded drives and HDD) contains lead and lead compounds in following applications: ● High temperature solder alloys ● Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezo electronic devices, or in a glass or ceramic matrix compound These applications are exempted for use in some of the regulations and some have reporting requirements.
Candidate List of Substances of Very High Concern (UK Regulation)	Less than 10%	Our products (including SSD, Cards, USB drives, embedded drives and HDD) contains lead and lead compounds in following applications: ● High temperature solder alloys ● Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezo electronic devices, or in a glass or ceramic matrix compound These applications are exempted for use in some of the regulations and some have reporting requirements.
Guidelines for Controlling the Use of Key Chemical Substances in Consumer Products (China Regulation)	Less than 10%	Our products (including SSD, Cards, USB drives, embedded drives and HDD) contains lead and lead compounds in following applications: ● High temperature solder alloys ● Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezo electronic devices, or in a glass or ceramic matrix compound These applications are exempted for use in some of the regulations and some have reporting requirements.
Other, please specify (IEC 62474 &GADSL Industry substance list)	Less than 10%	Our products (including SSD, Cards, USB drives, embedded drives and HDD) contains lead and lead compounds in following applications: ● High temperature solder alloys ● Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezo electronic devices, or in a glass or ceramic matrix compound These applications are exempted for use in some of the regulations and some have reporting requirements.
Other, please specify (Restriction of Hazardous Substances in Electrical and Electronic Equipment (EU Regulation))	Less than 10%	Our products (including SSD, Cards, USB drives, embedded drives and HDD) contains lead and lead compounds in following applications: ● High temperature solder alloys ● Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g., piezo electronic devices, or in a glass or ceramic matrix compound These applications are exempted for use in some of the regulations and some have reporting requirements.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	Yes	<Not Applicable>	<Not Applicable>

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

No, we do not currently assess the impact of our suppliers, but we plan to do so within the next two years

Considered in assessment

<Not Applicable>

Number of suppliers identified as having a substantive impact

<Not Applicable>

% of total suppliers identified as having a substantive impact

<Not Applicable>

Please explain

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements	Comment
Row 1	No, and we do not plan to introduce water-related requirements within the next two years	

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement
Innovation & collaboration

Details of engagement
Educate suppliers about water stewardship and collaboration

% of suppliers by number
51-75

% of suppliers with a substantive impact
<Not Applicable>

Rationale for your engagement
Western Digital requested information from the top 90% of total procurement spend, single/sole source, strategic and logistics suppliers (245 suppliers in total). These group of suppliers was chosen because they are the critical and key suppliers who manufacture high-volume components, use the highest amount of water for their production processes or provide services for the transportation of the products and components.

Impact of the engagement and measures of success
Success of engagement is measured by the number of suppliers who pass the RBA Validated Audit Program (VAP) audit without findings in C5. Water Management. By successfully passing the audit, suppliers demonstrate that they are monitoring their water sources, use and discharge; conserving water; controlling contamination; treating discharge and ensuring optimal performance and regulatory compliance.

Comment
Western Digital requested a response from the in-scope suppliers (top 90% spend suppliers, single/sole sources, strategic, and logistics suppliers) to the CDP Climate Change and Water Security modules for the 2022 reporting cycle.

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder
Customers

Type of engagement
Innovation & collaboration

Details of engagement
Collaborate with stakeholders on innovations to reduce water impacts in products and services

Rationale for your engagement
Western Digital engages directly with any customer who has an interest or concern about how Western Digital is impacted by and is managing these risks. We have established a streamlined process so that customers can engage directly on any Corporate Social and Environmental Responsibility (CSER) topic including but not limited to water resources, and the information they need for support. We engage these customers in particular to ensure their needs are being met and questions answered.

Impact of the engagement and measures of success
We measure success in these engagements by how successfully we address customers' concerns and provide them with the information they are seeking. Thus, we have launched initiatives to help our customers achieve their sustainability goals.

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?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment
Row 1	Yes	Fines, but none that are considered as significant	

W2.2a

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

Row 1

Total number of fines
9

Total value of fines
4073

% of total facilities/operations associated
11.8

Number of fines compared to previous reporting year
Higher

Comment
Western Digital does not view these fines as significant. These were isolated occurrences that have since been corrected and are being monitored through our Integrated Management System, including monitoring of water quality, to prevent recurrence.

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified	Please explain
Row 1	No, we do not identify and classify our potential water pollutants	<Not Applicable>	Western Digital has no plan to identify and classify water pollutants in the next 2 years.

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

Coverage
Full

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

Frequency of assessment
Annually

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

Type of tools and methods used
Tools on the market
Enterprise risk management
Databases

Tools and methods used
Other, please specify (WRI Aqueduct, company Business Continuity Management Process and Resilinc Software)

Contextual issues considered
Other, please specify (Potential water-related risks including extreme weather events, water supply and usage)

Stakeholders considered
Customers
Employees
Water utilities at a local level

Comment
Western Digital's Energy Resource Management (ERM) Program and Business Continuity Management System (BCMS) program addresses water risks. As part of our ERM Program, operations report monthly water supply and usage data. These complement our BCMS program, ensuring risks are assessed, managed and monitored. Western Digital also conducts strategic vulnerability assessments approximately every 10 yrs. of key facilities to evaluate likelihood of a "Black Swan" event.

Value chain stage
Supply chain

Coverage
Partial

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

Frequency of assessment
Annually

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

Type of tools and methods used
Tools on the market
Other

Tools and methods used
Internal company methods
Other, please specify (Resilinc)

Contextual issues considered
Implications of water on your key commodities/raw materials
Other, please specify (Potential water-related risks including extreme weather events, water supply and usage)

Stakeholders considered
Suppliers

Comment
Western Digital regularly monitors our supply chain to identify risk and has built-in contingency plans to confirm that risks do not lead to substantive financial or strategic impact. Two significant commodity supply points lie in water-stressed California. Frequent competitive and operational planning reviews of major, critical supplies and supply chains provide warning of pending water stress-related regulatory and cost issues to allow us to plan for supply continuity before a large impact. Western Digital has subscribed to Resilinc's Event watch service since 2014 which maintains a data base of our internal and supplier manufacturing facilities and their geographic locations. The service provides early warning notices to all facilities located in the expected impact zones and requires them to respond within 24 hours if the event had a significant impact on their order fulfilment capability or capacity, and to report their recovery plan and expected recovery times.

Value chain stage
Other stages of the value chain

Coverage
Partial

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

Frequency of assessment
Annually

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

Type of tools and methods used
Other

Tools and methods used
Internal company methods

Contextual issues considered
Please select

Stakeholders considered
Customers

Comment
While the use of our products does not require water, Western Digital regularly monitors other aspects of our value chain to identify risk and has built in contingency plans to confirm that risks do not lead to substantive financial or strategic impact.

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.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	Western Digital has defined the specific requirements to plan, establish, implement, operate, monitor, review, maintain and continually improve a Business Continuity Management System to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise. Through implementation of this process, Western Digital business functions regularly assess potential impacts, both internal and external. These may include impacts arising directly or indirectly from climate change and water-related risk and their effects on our direct operations as well as our supply chain, among others.	Western Digital regularly monitors our supply chain to identify risk and has built-in contingency plans to confirm that risks do not lead to substantive financial or strategic impact. Two significant commodity supply points lie in water-stressed California. Frequent competitive and operational planning reviews of major, critical supplies and supply chains provide warning of pending water stress-related regulatory and cost issues to allow us to plan for supply continuity before a large impact. Since 2014 Western Digital has subscribed to Resilinc's Event Watch service. With this tool, we maintain a database of our internal and supplier manufacturing facilities and their geographic locations. The service provides early warning notices to all facilities located in the expected impact zones and requires them to respond within 24 hours if the event had a significant impact on their order fulfilment capability or capacity, and to report their recovery plan and expected recovery times. This allows Western Digital's Procurement team to be kept apprised of any significant impact in the supply and order fulfilment chain so we can determine if it is necessary to activate our response plan. We also evaluate which sites may be in water-stressed areas using WRI's Aqueduct application and performed Vulnerability Assessment Study globally to identify material climate change related hazards and potential water related risk.	We are working with our customers, suppliers and other stakeholders to identify risk and opportunities to conserve water and understand water challenges and to implement solutions.	Knowing which sites are at risk helps us monitor ongoing threats and implement mitigating activities as needed.

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?

When addressing whether the liabilities related to operational and/or supply chain risks and opportunities are substantive, Western Digital takes into account both quantitative and qualitative factors. Quantitatively, we consider the impact on various financial metrics depending on the circumstances, such as: revenue; total, current or fixed assets; cash and cash equivalents; operating income; working capital; and net income. Qualitatively, the factors we consider depend on the event or issue we are evaluating but could include supply chain impact; consumer spending impacts; competitive impact; alternatives, substitutions or replacements; legal or regulatory requirements; contractual requirements; or impact on strategic relationships. On a case-by-case basis we assess whether quantitative or qualitative impacts are large enough and likely enough to occur to be considered substantive and warrant further action.

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	Western Digital conducts a water risk assessment annually using WRI's Aqueduct tool, and follows our internal business continuity management system (BCMS) process to conduct and regularly update business impact assessments at each of our factory locations. Sites were flagged through our internal Business Continuity Management System (BCMS) and the Aqueduct tool for potential flooding and drought risk. Western Digital also launched a new Vulnerability Assessment Program to review climate-related and other physical hazards, human factors, and transition factors which could impact our operations. Ultimately, the project will help us identify vulnerabilities and create a robust resilience framework across all global facilities. In the near term, the assessment will help us identify locations with high vulnerability scores so that we can develop suitable plans for risk mitigation. We have concluded that none of these represent substantive risk to our business at this time, due in part to steps we have taken to mitigate those risks. We continually monitor such risks and take action to avoid or reduce them, depending on the likelihood and potential impact of each risk.

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	Western Digital regularly monitors portions of our value chain that are at risk and has built in contingency plans to try to ensure that risks do not lead to substantive financial or strategic impact on our business. Two of our significant commodity supply points, our wafer fabs, are located in a water stressed area in California. Frequent competitive and operational planning reviews of major and critical supplies and supply chains provide warning of pending water stress related regulatory and cost situations. This allows various options for supply continuity planning to take place before the situation becomes urgent. We monitor the water level in the area close to our facility and request suppliers in Thailand to provide the updated information of water risk assessments. We also request our suppliers to provide a Business Continuity Plan in case of floods, droughts and/or pandemics and update the plan on a yearly basis. We also monitor suppliers for IPE compliance.

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

Water plays an important role in our manufacturing processes, and we seek opportunities to both significantly reduce water withdrawal and optimize the use of recycled water. Western Digital has invested in water reclamation and water reuse solutions at certain sites, and there are continued opportunities for investment to apply successful solutions at additional manufacturing locations. For example, in FY22 Shanghai facilities implemented additional water reclamation projects that upgraded wastewater recycle system replacing existing polymetric membrane to ceramic membrane. This new technology successfully increased the recycling ratio from 80% to 90%.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

The cost to realize this opportunity has not yet been estimated. However, our strategy to realize this opportunity focuses on investments to advance water reclamation. Progress towards higher rates of water reclamation will result in a reduction of water withdrawals and thus reduction in costs.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Commitment to reduce water withdrawal and/or consumption volumes in direct operations Commitment to water stewardship and/or collective action Reference to company water-related targets	Given our dependence on water for cleaning equipment, wet grinding, physical separation, pumping tailings, power generation and cooling, etc. Western Digital aims to minimize potential impacts on water resources. Our Integrated Management System (IMS) Policy states our commitment to protect the environment by mitigating global risks to prevent environmental pollution and ensure environmental protection, including water risks. Our Energy Resource Management (ERM) Program addresses performance standards for IMS projects, operations and sites to 1) develop/implement a water management plan, identify risks and opportunities, and support water related planning; 2) establish criteria for consistent monitoring, analysis and reporting; 3) establish an approach for maintaining a sustainable site water balance; 4) establish an approach to conduct water management risk assessments, identify challenges, mitigation activities and define a basis for water management improvements. Key water management parameters must be quantified in our reporting network. These are core elements of our sustainable water management system, along with quality/quantity monitoring, environmental/social impact analysis, water supply, storage, efficient usage, treatment and system evaluation/improvement. We continue to improve our strategy to assess risks, efficiency and transparency.

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 or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	The CEO, CFO, CLO and other executive leaders regularly review information about the potential impact of water related issues and natural disasters on business continuity and financial performance. They oversee plans to mitigate related risks and present that information to the Board.
Director on board	The Board periodically reviews information relating to the potential impact water-related issues and natural disasters on business continuity and how to mitigate risks. This information has been presented to the Board by the CEO, CFO, CLO and other members of management. The Governance Committee is responsible for assisting our Board in overseeing our corporate responsibility and sustainability policies and programs. The committee also has specific responsibility for periodic review of Western Digital's environment-related policies, practices, and programs, including as related to water and climate change.
Board-level committee	The Governance Committee is responsible for assisting our Board in overseeing our corporate responsibility and sustainability policies and programs. The committee also has specific responsibility for periodic review of Western Digital's environment-related policies, practices, and programs, including as related to water and climate change.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy	The Governance Committee receives updates from our sustainability group and management at least three times each year and discusses implementation of new sustainability initiatives, including those related to water. Our sustainability team reports on climate-related risks and opportunities to our full Board at least annually. The Board also meets periodically with our chief audit executive to review our overall ERM program and policies. Throughout the year, our Board receives updates on specific risks and mitigating measures in the course of its review of our strategy and business plan, and through reports to our Board by its respective committees and senior members of management. If water-related issues rise to the level of a key enterprise risk, they will be reviewed as part of this process.

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	Five of eight Board members have technical or managerial experience regarding Corporate Sustainability and Responsibility, specifically experience in assessing corporate social responsibility initiatives critical to our Board's role in overseeing our corporate responsibility and sustainability policies and programs. Technical or managerial experience indicates expertise derived from direct and hands-on experience or direct managerial experience with the subject matter during his/her career.	<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, please specify (Vice President, Global Operations)

Water-related responsibilities of this position
Assessing water-related risks and opportunities
Managing water-related risks and opportunities

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

Please explain
Each of our major business unit and functional area heads, with the assistance from their staff, work with our internal audit and ERM function to identify risks that could affect achievement of business strategy or objectives and develop risk mitigation measures, contingency plans and a consolidated risk profile. The risk profile is then reviewed and discussed with our CEO and CFO before presentation to the Audit Committee. Our Chief Audit Executive also develops a risk-based internal audit plan utilizing the ERM consolidated risk profile. The VP, Global Operations leads Western Digital's Business Continuity program and supports the process outlined above. He/she is responsible for ensuring manufacturing sites collect information relating to water issues/natural disasters that may impact the company, assessing the risk annually and implementing initiatives to mitigate any potential risks.

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, trade associations

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?

As stated on Western Digital's website, Western Digital seeks to affect government action only on issues and areas that directly impact our business. Potential support of any water-related policy initiative would need to be presented to the appropriate senior executives, legal, and government affairs staff for discussion, and those leaders are aware of and/or participate in leading our sustainability strategy, which includes water. The company is implementing a consolidated, long-term sustainability strategy, while it continues to focus on delivering immediate sustainable value for customers and other stakeholders. Decisions on matters such as these will take into consideration the degree of alignment between the proposed initiative and Western Digital's overall CSER and water strategies.

W6.6

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

No, and we have no plans to do so

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	5-10	Integration of water-related issues into long-term strategic planning is prioritized based on the materiality of such issues relative to other enterprise risks. Western Digital's Energy Resource Management (ERM) Program Office sets an annual water conservation target to protect water supply, which feeds into our long-term business objective of reducing water risks, increasing resiliency, and controlling water costs.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	In line with our long-term sustainability objectives, our strategy for water use reductions in fiscal year 2021 included implementation of several new water reclamation projects. At our Shanghai facility, these reclamation projects achieved a reclamation ratio of 95%, the highest in the region.
Financial planning	Yes, water-related issues are integrated	5-10	Per our long-term sustainability strategy, we integrate water-related issues into financial planning as needed to mitigate against the risks of water supply disruption, flooding at our sites or other water risks.

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)

-2

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

-2

Please explain

In this reporting period, there were no investments for water management related facilities or water conservation projects. All saving projects are operation-efficiency improvement with no investment. With regard to OPEX, our spend decreased due to decreased market demand. Considering near-term market conditions, we are anticipating similar trending.

W7.3

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

	Use of scenario analysis	Comment
Row 1	Yes	Western Digital conducted a Vulnerability Assessment Study aligned with the TCFD standards. This study included water-related hazards assessment associated with climate change. The study includes a baseline study (year 2020) and future analysis (years 2030 and 2050). We applied the RCP4.5 scenario for 2030 analysis and both RCP4.5 and 8.5 for the 2050 analysis. The input from Vulnerability Study will be incorporated to Western Digital's detailed business continuity management system (BCMS) process.

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 Climate-related	Western Digital in conjunction with an independent third-party with expertise in this area, performed Vulnerability Assessment Study globally. The process began with a workshop to identify material hazards and/or events relevant to our facility, people, suppliers and vendors. We reviewed our experience with hazardous events in the past and got advice from our partner to identify what climate change related hazards are relevant and material to our value chain. Example of identified hazards include heavy rainfall, stormwater flooding and drought. To evaluate the vulnerability level, we took Exposure, Sensitivity and Adaptive capacity into considerations. For defining Exposure level, we sourced statistical data from external authorized organizations and obtained technical insight from our consultant partners. For example, the exposure level of heavy rain is defined based on historical precipitation data. Sensitivity level is defined following the expected level of impact (neutral impact, moderately detrimental impact and highly detrimental impact). Adaptive capacity score is given based on the effectiveness of measures to protect people and facilities. Unlike exposure score and sensitivity score, higher adaptive capacity score means lower vulnerability. We calculated the potential impact of hazards by multiplying exposure score with sensitivity score. Then, we divided potential impact score by adaptive capacity score to factor in mitigation measures in place to calculate realistic vulnerability score against each hazard. This assessment includes a baseline assessment (year 2020) and future forecasted assessment (years 2030 and 2050). For future forecasted assessment, we apply RCP4.5 scenario for year 2030 assessment and RCP4.5 and 8.5 for longer term assessment (year 2050). The process of assessment includes a transition drivers review aligned with the TCFD framework, so our vulnerability study is completed in alignment with TCFD expectations. As the result of the assessment, heavy rainfall and droughts are identified as moderately high risks at several locations. As the result of improvements made through our historical BCMS process, we consider that there are good mitigation measures already in place, but we continue to review further options for mitigation and prioritize them against OpEx and CapEx needs for implementation.	Possible water-related events: drought, extreme weather and flooding.	Climate-related: Our vulnerability assessment study is aligned with TCFD, and identified risks and opportunities relating to water. These scenario insights are reviewed by Western Digital's Sustainability and Enterprise Risk Management teams and incorporated into Western Digital's strategy and risk management processes as appropriate. Water-related: Our vulnerability assessment study covers the assessment of water-related risks. These inputs are incorporated into our business continuity management system process.

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

In the past, Western Digital implemented an internal price on water specifically for our San Jose CA manufacturing facility. After weighing the pros and cons of charging business units for their water use, the company decided it was not a worthwhile accounting practice when water demands fluctuate based largely on production volumes and other consolidation activities. Global Operations actively works with water users to identify water savings and implement capital projects to do so.

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	No, and we do not plan to address this within the next two years	<Not Applicable>	Important but not an immediate business priority	

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?
Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, and we do not plan to within the next two years	No, and we do not plan to within the next two years.
Water withdrawals	Yes	<Not Applicable>
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	No, and we do not plan to within the next two years.
Other	No, and we do not plan to within the next two years	No, and we do not plan to within the next two years.

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number
Target 1

Category of target
Water withdrawals

Target coverage
Company-wide (direct operations only)

Quantitative metric
Reduction in total water withdrawals

Year target was set
2022

Base year
2021

Base year figure
17771953.3

Target year
2022

Target year figure
17416514.2

Reporting year figure
18035001.8

% of target achieved relative to base year

Target status in reporting year
Underway

Please explain
Western Digital's global ERM (Energy and Resources management) program team implemented several water conservation projects across our portfolio. We achieved a 2.8% reduction from water consumption in FY2021. We saw a moderate increase in withdrawals in FY22 due to production volume increases and return to site programs. There were also start-ups of large-scale manufacturing processes.
We anticipate that this amount will be reduced in the next few reporting periods due to our reduction program and initiatives by increasing our recycling and reuse rate across our manufacturing operations.

W9. Verification

W9.1

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

W9.1a

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

Disclosure module	Data verified	Verification standard	Please explain
W1 Current state	Global total water withdrawn, total water consumption, total water discharged and water recycle.	ISAE 3000	ISAE 3000 is the assurance standard for compliance, sustainability and outsourcing audits.

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Value chain stage	Please explain
Row 1	Not mapped – and we do not plan to within the next two years	<Not Applicable>	

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Value chain stage	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Value chain stage	Type of risk	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	No – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	Yes	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	No	

W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	% virgin fossil-based content	% virgin renewable content	% post-industrial recycled content	% post-consumer recycled content	Please explain
Plastic packaging sold	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Plastic packaging used		None	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	

W10.8a

(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	% of plastic packaging that is reusable	% of plastic packaging that is technically recyclable	% of plastic packaging that is recyclable in practice at scale	Please explain
Plastic packaging sold	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Plastic packaging used	None	<Not Applicable>	<Not Applicable>	<Not Applicable>	

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	Senior Director, Corporate Sustainability	Environment/Sustainability manager

SW. Supply chain module

SW0.1

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

	Annual revenue
Row 1	18793000000

SW1.1

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

This is confidential

SW1.2

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

	Are you able to provide geolocation data for your facilities?	Comment
Row 1	Yes, for some facilities	We are not providing data for every sales and support location, only for significant manufacturing locations.

SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

Identifier	Latitude	Longitude	Comment
Shanghai	31.22	121.41583	We are not providing data for every sales and support location, only for significant manufacturing locations.
Penang – SSD	5.284605	100.472015	We are not providing data for every sales and support location, only for significant manufacturing locations.
Prachinburi	14.08333	101.66667	We are not providing data for every sales and support location, only for significant manufacturing locations.
Bang Pa In	14.245862	100.601476	We are not providing data for every sales and support location, only for significant manufacturing locations.

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

HDD

Water intensity value

0.0018

Numerator: Water aspect

Water withdrawn

Denominator

Petabyte of memory storage capacity

Comment

Western Digital's hard disk drive (HDD) operations rely heavily on an internal supply chain, therefore our water intensity in HDD manufacturing is different than for our solid state drive (SSD) operations.

Product name

SSD

Water intensity value

0.0001

Numerator: Water aspect

Water consumed

Denominator

Petabyte of memory storage capacity

Comment

Western Digital's SSD operations rely heavily on external supply chain partners, therefore our water intensity in SSD manufacturing is different than for our HDD operations.

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 indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

No

Please confirm below

I have read and accept the applicable Terms