Marvell Technology Group, Ltd. - Water Security 2020



W0. Introduction

W0.1

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

Note: This CDP Report contains forward-looking statements regarding Marvell's environmental policies, procedures and future actions related thereto within the meaning of the federal securities laws that involve risks and uncertainties. Words such as "anticipates," "expects," "intends," "plans," "projects," "believes," "seeks," "estimates," "can," "may," "will," "would" and similar expressions identify such forward-looking statements. These statements are not guarantees of results and should not be considered as an indication of future activity or future performance. Actual events or results may differ materially from those described in this CDP Report due to a number of risks and uncertainties, including, but not limited to: the ability of Marvell to implement its plans with respect to environmental matters in the time frame anticipated or at all; Marvell's reliance on independent foundries and subcontractors for the manufacture, assembly and testing of its products; the impacts and costs associated with changes in environmental regulations; and other risks detailed in Marvell's SEC filings from time to time. For other factors that could cause Marvell's results to vary from expectations, please see the risk factors identified in Marvell's Quarterly Report on Form 10-K for the fiscal year ended February 1, 2020 as filed with the SEC on March 23, 2020, and other factors detailed from time to time in Marvell's filings with the SEC. Marvell undertakes no obligation to revise or publicly update any forward-looking statements.

Forward-Looking Statements under the Private Securities Litigation Reform Act of 1995

This press release contains forward-looking statements within the meaning of the federal securities laws that involve risks and uncertainties. Words such as "anticipates," "expects," "intends," "projects," "believes," "seeks," "estimates," "can," "may," "will," "would" and similar expressions identify such forward-looking statements. These statements are not guarantees of results and should not be considered as an indication of future activity or future performance. Actual events or results may differ materially from those described in this press release due to a number of risks and uncertainties, including, but not limited to: risks related to the impact on our business of the novel coronavirus (COVID-19) pandemic which have impacted, and may continue to impact, our workforce and operations and the transportation and manufacturing of our products; risks related to the impact of the COVID-19 pandemic which have impacted, and may continue to impact the operations of our customers, distributors, vendors, suppliers, and partners; increased disruption and volatility in the capital markets and credit markets as a result of COVID-19, which could adversely affect our liquidity and capital resources; the impact of COVID-19, or other future pandemics, on the U.S. and global economies; disruptions caused by COVID-19 resulting in worker absenteeism, quarantines and restrictions on our employees' ability to work and travel; the effects that the current credit and market conditions caused by, or resulting from, COVID-19 could have on the liquidity and financial condition of our customers and suppliers, including any impact on their ability to meet their contractual obligations; the impact of international conflict and economic volatility in either domestic or foreign markets including risks related to trade conflicts, regulations, and tariffs, including but not limited to, restrictions imposed on our Chinese customers; the risks associated with manufacturing and selling products to Tier 1 infrastructure customers; the effec

We are subject to laws and regulations worldwide, which may differ among jurisdictions, affecting our operations in areas including, but not limited to: intellectual property ownership and infringement; tax; import and export requirements; anti-corruption; foreign exchange controls and cash repatriation restrictions; data privacy requirements; competition; advertising; employment; product regulations; environment, health and safety requirements; and consumer laws. Although our management systems are designed to maintain compliance, we cannot assure you that we have been or will be at all times in compliance with such laws and regulations. If we violate or fail to comply with any of them, a range of consequences could result, including fines, import/export restrictions, sales limitations, criminal and civil liabilities or other sanctions. The costs of complying with these laws (including the costs of any investigations, auditing and monitoring) could adversely affect our current or future business.

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 2019	December 31 2019

W0.3

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

China

Germany India

Israel

Japan

Singapore

Taiwan, Greater China

United States of America

W0.4

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

USI

W0.5

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

Companies, entities or groups over which operational control is exercised

W0.6

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

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Facilities with low impact and low headcount are	Marvell has small satellite offices in various locations globally. These offices are typically rented cubes/desks in a small office space. They are infrequently used
excluded from the questionnaire.	and collectively make up less than 5% of total square footage and employee headcount.

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	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Good quality freshwater is important to Marvell's direct operations as it is mainly used for drinking water, food preparation in company cafeterias, and general restroom usage. We also use limited quantities of freshwater for closed-system chiller and process water applications. Indirect use of water for Marvell's fabrication process is vital as clean, purified water is required in our products to ensure that they are up to the highest specifications, as any contamination will damage circuits. Though the manufacturing process is low in terms of its use, fresh water is vital in the fabrication portion of manufacturing our products.
Sufficient amounts of recycled, brackish and/or produced water available for use	Neutral	In direct operations, Marvell uses recycled water for landscaping purposes with in our owned site at Santa Clara. Marvell selected neutral as we only use recycled water landscaping purposes. The water type used is not critical to direct operations. Indirect use of water through contract manufacturers is neutral as they may use recycled water for cooling purposes, but not in their manufacturing operations.

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%	Marvell confirms water withdrawals volume through official water bills. These are estimated based on headcount where data is unavailable on an annual basis.
Water withdrawals – volumes by source	100%	Marvell tracks water withdrawals based on third party water bill or landlord depending on data availability. Tracking is done on a annual bases. These are estimated based on headcount where data is unavailable on an annual basis.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<not applicable=""></not>	<not applicable=""></not>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<not applicable=""></not>	<not applicable=""></not>
Water withdrawals quality	100%	Water provided to Marvell from third party is assumed to be of acceptable quality for its purposes and is monitored through billing annually
Water discharges – total volumes	100%	Water discharges are assumed to be sent to third parties, and are monitored through billing, and through annual estimates based on headcount.
Water discharges – volumes by destination	100%	Water discharge volumes by destination are assumed to be sent to third parties, and are calculated from monthly billing statements, and through annual estimates based on headcount.
Water discharges – volumes by treatment method	100%	Water discharge is handled and treated by third party suppliers. Marvell does not directly treat its own water. Water discharge volumes by treatment method are assumed to be sent to third parties, and is calculated from monthly billing statements, and through annual estimates based on headcount.
Water discharge quality – by standard effluent parameters	100%	Water discharge is handled and treated by third party suppliers. Marvell does not directly treat its own water. Water discharge quality by standard effluent parameters are assumed to be sent to third parties, and is calculated from monthly billing statements, and through annual estimates based on headcount.
Water discharge quality – temperature	100%	Marvell, as a fabless semiconductor company, does not produce its own products directly. Because of this, our facilities discharge water at the appropriate temperatures set by third-party suppliers.
Water consumption – total volume	100%	Water usage in our facilities is monitored with the use of water meters from third party sources, monthly billing statements and through annual estimates based on headcount. Water consumption, however, has been very low is usually consumed mostly through evaporation or through landscaping. Water consumption is estimated on an annual basis based on total water withdrawal data provided through monthly billing statements.
Water recycled/reused	100%	Marvell facilities that use recycled water have their own attached meters, which are tracked and monitored on a monthly basis.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Marvell offices provide fully-functioning WASH services for workers, and is tracked internally through annual personnel and site reviews.

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?

		Comparison with previous reporting year	Please explain
Total withdrawals	81.54	Lower	Water withdrawal is lower as Marvell has relied less on estimation of water withdrawal, and was able to obtain more accurate information billing information for the expanded inventory. We anticipate lower water withdrawals in the future as we consolidate facilities and implement more water efficient water fixtures.
Total discharges	63.6	Lower	Water discharge is lower as Marvell has relied less on estimation of total discharges, and was able to obtain more accurate information billing information for the expanded inventory. We anticipate lower water discharges in the future as we consolidate facilities and implement more water efficient water fixtures.
Total consumption	17.94	Lower	Water consumption is lower as Marvell has relied less on estimation of water consumption, and was able to obtain more accurate information billing information for the expanded inventory. We anticipate lower water consumption in the future as we consolidate facilities and implement more water efficient water fixtures.

W1.2d

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

		% withdrawn from areas with water stress	Comparison with previous reporting year		Please explain
Ro	w Yes	Less than 1%	Higher	WRI	Marvell uses the WRI Aqueduct as part of the Water Risk Assessment. We are selecting less than 1% as
1				Aqueduct	we are expanding our tool base on water related risk assessment tools.

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>	<not applicable=""></not>	Marvell does not withdraw water from freshwater sources, as we source our water through third-party suppliers.
Brackish surface water/Seawater	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not withdraw water from brackish surface water or seawater sources, as we source our water through third-party suppliers.
Groundwater – renewable	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not withdraw water from renewable groundwater sources, as we source our water through third-party suppliers.
Groundwater – non-renewable	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not withdraw water from non-renewable groundwater sources, as we source our water through third-party suppliers.
Produced/Entrained water	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not use produced or entrained water that is generated in its facilities, as we source our water through third-party suppliers.
Third party sources	Relevant	81.54	Lower	Water withdrawal is lower as Marvell has relied less on estimation of water withdrawal, and was able to obtain more accurate billing information for the expanded inventory. Third party sources are relevant to our operations as Marvell third party sources (and/or landlords) provide water to our facilities.

W1.2i

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

	Relevance		Comparison with previous reporting year	Please explain
Fresh surface water	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not discharge directly to fresh surface water areas, as our water discharges are sent to third-party suppliers.
Brackish surface water/seawater	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not discharge directly to brackish water or seawater areas, as our water discharges are sent to third-party suppliers.
Groundwater	Not relevant	<not applicable=""></not>	<not applicable=""></not>	Marvell does not discharge directly to groundwater areas, as our water discharges are sent to third-party suppliers.
Third-party destinations	Relevant	63.6	Lower	Water discharge is lower as Marvell has relied less on estimation of water discharge data, and was able to obtain more accurate billing information for the expanded inventory. Third party sources are relevant to our operations as Marvell discharges to third party sources from our facilities.

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

We actively engage with all suppliers to participate and comply with RBA requirements, as RBA keeps track of many standards that our sector should be following. For example, it keeps track of whether or not respondents comply with the use of Conflict Minerals. We perform periodic audits to ensure their participation is active and in compliance with environmental issues, including their business continuity programs, to mitigate climate change impacts.

Impact of the engagement and measures of success

We engaged these suppliers in processing IC and boards products. They are required to utilize RoHS-REACH compliant materials. Success means that Marvell's product passes the material compliance evaluation test, i.e. Suppliers that manufacture Marvell's processors are passing RoHS-REACH certification. For example, in 2019, all of our suppliers achieved RoHS or REACH compliance. This means that components were produced with chemicals that are below set thresholds according to RoHS-REACH standards. By complying with these standards, Marvell's suppliers are producing components that minimize the release of harmful material into the environment. As a result, no energy is expanded for environmental clean-up of EU restricted substances, resulting in a reduction of their GHG emissions. We define our success measures by products meeting these requirements. Suppliers that meet these KPIs are considered successful. Suppliers that are not able to meet these standards are deprioritized.

Comment

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

Type of engagement

Other

Details of engagement

Other, please specify (Share information about your products and relevant certification schemes (i.e. Energy STAR))

% of suppliers by number

76-100

% of total procurement spend

76-100

Rationale for the coverage of your engagement

We engage with our direct customers through the Responsibility Business Alliance (RBA).. The RBA environmental platform allows Marvell and its suppliers to share their initiatives, including corporate and social responsibility metrics, as well as environmental metrics, with its valued customers that request Marvell to submit completed questionnaires to the RBA. This involves discussion of Marvell's extensive compliance program aimed to meet various US and global regulations focused on minimizing impact to the environment and climate change. The following are some of the regulations and legislation that Marvell's compliance program is based upon: Dodd-Frank Conflict Minerals Legislation; European Union Directives: on waste electrical and electronic equipment (WEEE Directive), on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive), and on improving the protection of human health and the environment using REACH.

Impact of the engagement and measures of success

Impacts from these engagements in 2019 found that all of our suppliers achieved compliance including RoHS-REACH, where components are produced with chemicals that are below set thresholds according to EU standards. As a result, customers receive the benefit of purchasing environmentally/green products. In addition, RBA also requests information regarding waste and water. With continuous product testing, Marvell is able to track compliance to EU RoHS-REACH requirements and are reported to our customers who request us to respond. We define our success based upon customer acceptance of Marvell RoHS-REACH product certification and after reviewing Marvell's data in RBA's reporting system. Marvell considers it a success when our customers request us to respond their request for RoHS-REACH certification and RBA access to our report, this customers are more likely to work with us on efficiencies and buy our products, as opposed to customers that to not require information.

Comment

W1.4c

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

Marvell engages with our employees as they are the key stakeholders within our campuses, and require adequate water supplies mainly used for their consumption, . As key stakeholders, employees are able to report issues, such as plumbing leaks and water quality concerns, as they arise by using our employee request ticketing system (ServiceNow). We prioritize request based on the level of impact to employees and/or building infrastructure. For example request reporting a water leak are addressed quickly since a water leak can impact employee safety by causing a slip hazard and can possibly impact our buildings infrastructure depending on the location of the water leak as well as the time the leak has been happening. As issues are brought to the Facilities team's attention by employees, Facilities work to resolve employees' requests in a timely manner. In doing so, we can ensure employees' safety and address water issues that would impact building infrastructure and/or unnecessarily waste water. The plumbing requests are measured in our Facilities' monthly metrics and we measure success by resolving and closing employee requests that are submitted.

Marvell is committed to conducting its business in a lawful and ethical manner, including engaging with suppliers that are committed to the principles set forth in the Marvell Supplier Code of Conduct ("Supplier Code").

Marvell's Supplier Code encourages suppliers to operate in full conformance with the laws, rules and regulations of the countries in which they operate and to meet internationally recognized environmental, social and governance standards.

Business and labor practices of our Suppliers and their employees, agents and subcontractors (collectively referred to as "Suppliers") must adhere to the standards of this Supplier Code when conducting business with or on behalf of Marvell. Compliance with this Supplier Code is required in addition to any other obligations in any agreement Suppliers may have with Marvell.

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?

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.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an 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

Enterprise Risk Management

Tools and methods used

WRI Aqueduct

WWF Water Risk Filter

Other, please specify (Internal Enterprise Risk Management Framework)

Comment

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an enterprise risk management framework

Frequency of assessment

More than once a year

How far into the future are risks considered?

Up to 1 year

Type of tools and methods used

Enterprise Risk Management

Tools and methods used

Other, please specify (Internal Enterprise Risk Management Framework)

Comment

Other stages of the value chain

Coverage

None

Risk assessment procedure

<Not Applicable>

Frequency of assessment

<Not Applicable>

How far into the future are risks considered?

<Not Applicable>

Type of tools and methods used

<Not Applicable>

Tools and methods used

<Not Applicable>

Comment

W3.3b

CDP

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

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Water availability at a basin/catchment level is withdrawn by third parties and supplied to Marvell. Using the WWF Water Risk Filter and WRI, facilities are inputted into the water tools, and identifies locations with low water availability at the basin/catchment level-related risks.
Water quality at a basin/catchment level	Relevant, always included	Water availability (in addition to quality) at a basin/catchment level is withdrawn by third parties and supplied to Marvell. Using the WWF Water Risk Filter and WRI, facilities locations are inputted into the water tools, and identifies locations with low water quality at the basin/catchment level-related risks.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Stakeholder conflicts concerning water resources at a basin/catchment level is relevant to Marvell as the WWF's water risk filter identifies "conflict new events," as a potential water-related-risk indicator. Using the WWF Water Risk Filter and WRI, facilities locations are inputted into the water tools, and identifies locations with potential risk of Stakeholder conflicts concerning water resources at a basin/catchment level.
Implications of water on your key commodities/raw materials	Not relevant, explanation provided	Implications of water on key commodities/raw materials not relevant as Marvell is a fabless semiconductor company, and does not produce its own products directly. As our operations are fabless and do not manufacture any products directly, Marvell does not expect this issue to be relevant in the future.
Water-related regulatory frameworks	Relevant, always included	Water-regulatory frameworks is relevant to Marvell as the WWF's Water Risk Filter identifies "freshwater law status," and "implementation status of water management plans" as a potential water-related-risk indicator. Using the WWF Water Risk Filter and WRI, facilities locations are inputted into the water tools, and identifies locations with a potential high risk on operations from water regulatory frameworks.
Status of ecosystems and habitats	Relevant, always included	Status of ecosystems and habitats is relevant to Marvell as the WWF's water risk filter identifies "fragmentation status of rivers," as a potential water-related-risk indicator. Using the WWF Water Risk Filter and WRI, facilities locations are inputted into the water tools, and identifies locations with a potential high risk fragmentation of rivers.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Access to fully-functioning, safely managed WASH services for all employees is relevant to our operations as it is mainly used for drinking water, food preparation in company cafeterias, and general restroom usage. Using the WBCSD's Global Water Tool, facilities locations are inputted into the water tools, and identifies locations that have high risk in countries that do not have access to WASH services.
Other contextual issues, please specify	Please select	

W3.3c

CDP Page 7 of 14

	Relevance	Please explain
	&	
Customers	Relevant, always included	We engage with our direct customers through the Responsibility Business Alliance (RBA), an organization of which Marvell is a member. RBA's responsibility is to assist companies in collecting information on their corporate activities and their supply chain activities. This responsibility is also part of Marvell's standard operations. For Marvell's direct operations and the supply chain, Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors. • Financial • Operational • Strategic • Sales • Engineering • Information • Organizational
Employees	Relevant, sometimes included	Marvell's considers employees to be stakeholders for our water-related risk assessments. The Marvell Park is adjacent to San Tomas Aquinas Creek to the east, and the Calabazas Creek to the west. It is classified as "Zone X" by the Santa Clara Valley Water District, and FEMA. "Zone X" is defined as: Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year floods. A 100-year flood is defined as: the flood elevation that has a 1% chance of being equaled or exceeded each year. A 500-year flood is defined as: the flood elevation that has a .2% chance of being equaled or exceeded each year. During a 100 year or a 500-year flood event, the water is expected to remain inside the creek beds. The main risk for flooding at Marvell Park would be during a levee failure, or a mechanical failure at a nearby pump station. In either case, it is reasonable to expect that Marvell Park could be covered with roughly one to three feet of flowing water and would remain flooded for 1-2 days. Flooding of this nature could damage electrical rooms, the data center, stock in shipping/receiving areas, office PCs, and other equipment. As a part of the plan to reduce any flood-related damages and down time by advance planning Marvell will send out mass communication to employees with instructions to follow during a flood.
Investors	Relevant, sometimes included	Investors are included as part of the risk assessment as the Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors. • Financial • Operational • Strategic • Sales • Engineering • Information • Organizational
Local communities	Not relevant, explanation provided	Marvell, as a fabless semiconductor company, does not produce its own products directly. As our primary operations are in office space environments, local communities is not relevant to the water-risk assessments. Water-risks affect our supply chain partners who use water for manufacturing.
NGOs	Not relevant, explanation provided	Marvell, as a fabless semiconductor company, does not produce its own products directly. As our primary operations are in office space environments, NGOs are not relevant to the water-risk assessments. Water-risks affect our supply chain partners who use water for manufacturing.
Other water users at a basin/catchment level	Relevant, always included	We always include the provider of our water, the Santa Clara Valley Water District, in our water related risk assessments. Since they are the source of water in our Santa Clara campus, we work with them as part of our obligation to abide with all local and federal use limits for water. We also monitor our water consumption and discharge as part of our obligation to local regulations to reduce water use so that all water users at this level would benefit.
Regulators	Relevant, always included	Marvell, would be subject to local water regulations, conditions, and laws for areas that we operate. Regulators are included as part of the risk assessment as the Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors. • Financial • Operational • Strategic • Sales • Engineering • Information • Organizational
River basin management authorities	Relevant, always included	Marvell, would be subject river basin management authorities, conditions, and laws for areas that we operate. River basin management authorities are included as part of the risk assessment as the Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors. • Financial • Operational • Strategic • Sales • Engineering • Information • Organizational
Statutory special interest groups at a local level	Not relevant, explanation provided	Marvell, as a fabless semiconductor company, does not produce its own products directly. As our primary operations are in office space environments, statutory interest groups at a local level are not relevant to the water-risk assessments. Water-risks affect our supply chain partners who use water for manufacturing. We are not aware of any "Statutory special interest groups at a local level" that has approached Marvell.
Suppliers	Relevant, always included	Suppliers are included in the risk assessment process as Marvell is committed to conducting its business in a lawful and ethical manner, including engaging with suppliers that are committed to the principles set forth in the Marvell Supplier Code of Conduct ("Supplier Code"). Marvell's Supplier Code encourages suppliers to operate in full conformance with the laws, rules and regulations of the countries in which they operate and to meet internationally recognized environmental, social and governance standards. The business and labor practices of our Suppliers and their employees, agents and subcontractors (collectively referred to as "Suppliers") must adhere to the standards of this Supplier Code when conducting business with or on behalf of Marvell. Suppliers are required to promptly inform Marvell when any situation develops that causes the Supplier to operate in violation of this Supplier Code. Compliance with this Supplier Code is required in addition to any other obligations in any agreement Suppliers may have with Marvell.
Water utilities at a local level	Relevant, sometimes included	If Marvell is subject to drought, and or regulatory directives, Marvell would comply with all local laws and regulations set forth by water utilities at a local level.
Other stakeholder, please specify	Please select	

W3.3d

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

For Marvell's direct operations and the supply chain, Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors.

- · Financial
- · Operational
- · Strategic
- · Sales
- · Engineering
- · Information
- · Organizational
- · Legal / Regulatory

In addition, Marvell are exploring different tools such as WRI Water Aqueduct Tool and WWF Water Risk Filter as part of our water-related risk assessments. Marvell facilities sites are located all over the world and these tools were selected as they cover various geographical areas, and provide reliable water risk data.

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?

W4.1a

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

Marvell assesses climate and water-related risks as part of the ERM process by identifying a risk's potential impact. The scale of impact severity is defined as "1-1.99" for a "low risk/opportunity, but not substantive" which ranges < \$0-\$5 million as an impact, "2-3" for a "medium risk/opportunity, but not substantive" which ranges impacts that are less than \$15 to \$20 million, and "4-5" for a "high risk/opportunity, substantive" which ranges from any risk/opportunity impact of greater than \$20 million. As such, Marvell defines a substantive financial impact from any risk or opportunity that would impact the company by dollar amounts that are above \$20 million.

An example of a substantive impact that has been considered is Marvell's exposure to Taiwan Semiconductor Manufacturing Company (TSMC), which produces products that our suppliers use in production of Marvell's product lines. If unexpected floods or other climate related impacts occurred where access to the the TSMC, was impeded, Marvel can potentially see a a decrease in more than \$20 million of revenue, as a results of potential shutdowns that would affect our suppliers. To date, this has not occurred as Marvell has a supply chain strategy with focuses on qualifying a second source to efficiently manage global manufacturing capabilities. This allows Marvell flexibility in managing capacity as volume production increases or in cases when a supplier is impacted by disasters due to climate change or other emergencies.

Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors.

- \cdot Financial
- · Operational
- · Strategic
- · Sales
- · Engineering
- · Information
- · Organizational
- · Legal / Regulatory

CDF

(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	Please explain
	reason	
Row	Risks exist,	Even though Marvell does consider freshwater to be important and vital to its direct and indirect uses, Marvell does not consider itself exposed to water risks in its direct operations with the
1	but no	potential to have a substantive financial or strategic impact because only the Marvell Santa Clara campus has been identified as a site with water risk and the risk is low. The Marvell Santa Clara
	substantive	Campus is adjacent to San Tomas Aquinas Creek to the east, and the Calabazas Creek to the west. It is classified as "Zone X" by the Santa Clara Valley Water District, and FEMA. "Zone X" is
	impact	defined as: Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year
	anticipated	floods. A 100-year flood is defined as: the flood elevation that has a 1% chance of being equaled or exceeded each year. A 500-year flood is defined as: the flood elevation that has a .2%
		chance of being equaled or exceeded each year. During a 100 year or a 500-year flood event, the water is expected to remain inside the creek beds. The main risk for flooding at Marvell Park
		would be during a levee failure, or a mechanical failure at a nearby pump station. In either case, it is reasonable to expect that Marvell Park could be covered with roughly one to three feet of
		flowing water and would remain flooded for 1-2 days.

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	but no substantive impact anticipated	Water related issues is mitigated by Marvell's supply chain strategy practice of qualifying a second source to efficiently manage high volume global manufacturing capabilities. This allows Marvell flexibility in managing capacity as volume production increases or in cases when a supplier is impacted by disasters due to climate change or other emergencies. This process includes estimated time to recover during disasters impacting any manufacturing supplier. This process is managed by the VP of Procurement and supported by Quality System. Even though Marvell does consider freshwater to be important and vital to its direct and indirect uses, Marvell does not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact because only the Marvell Santa Clara campus has been identified as a site with water risk and the risk is low. The Marvell Santa Clara Campus is adjacent to San Tomas Aquinas Creek to the east, and the Calabazas Creek to the west. It is classified as "Zone X" by the Santa Clara Valley Water District, and FEMA. "Zone X" is defined as: Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year floods. A 100-year flood is defined as: the flood elevation that has a 1% chance of being equaled or exceeded each year. A 500-year flood is defined as: the flood elevation that has a .2% chance of being equaled or exceeded each year. During a 100 year or a 500-year flood event, the water is expected to remain inside the creek beds. The main risk for flooding at Marvell Park would be during a levee failure, or a mechanical failure at a nearby pump station. In either case, it is reasonable to expect that Marvell Park could be covered with roughly one to three feet of flowing water and would remain flooded for 1-2 days.

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?

W4.3b

 $\label{eq:washing} \mbox{(W4.3b) Why does your organization not consider itself to have water-related opportunities?}$

Primary Please explain reason		Please explain
Row	Evaluation in	Marvell is evaluating substantive water-related opportunities. It is important to Marvell to have an adequate supply of clean water for employee use (drinking, washing, etc.). We're collecting
1 progress data for 2019 in order to compare against 2020 data and gauge our water usage changes to identify opportunities.		data for 2019 in order to compare against 2020 data and gauge our water usage changes to identify opportunities.

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

Position	Please explain
of	
individual	
Board-	The Nominating and Governance Committee of the Board of Directors of Marvell is responsible for matters relating to the organization and membership of the Board, and for other issues relating to the
level	Company's sound and proper corporate governance, including the publication and administration of the Company's Corporate Governance Guidelines and Practices including ESG related issues. The
committee	Committee is responsible for overseeing disclosures regarding corporate social responsibility and sustainability matters, monitoring and evaluating the Corporate Guidelines and other corporate policies
	to ensure that all governance standards are being met.

W6.2b

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

	issues are a scheduled agenda	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1		Overseeing acquisitions and divestiture Overseeing major capital expenditures Reviewing and guiding major plans of action Reviewing and guiding strategy	The Committee is responsible for overseeing disclosures regarding corporate social responsibility and sustainability matters, monitoring and evaluating the Corporate Guidelines and other corporate policies to ensure that all governance standards are being met.

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 of Facilities and Security)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

The Vice President of Facilities and Security oversees water related issues for Marvell sites. If a disaster was to occur, as necessary, he would report the key water-related incidents, mitigation, and actions taken, to the COO. One-way water related issues would be brought to the Vice President of Facilities and Security attention is by the assigned Facility Manger or Site Contact.

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	
Row 1	No, not currently but we plan to introduce them in the next two years	

W6.5

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

Yes, trade associations

Yes, 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?

Marvell is committed to conducting its business in a lawful and ethical manner, including engaging with suppliers that are committed to the principles set forth in the Marvell Supplier Code of Conduct ("Supplier Code").

Marvell's Supplier Code encourages suppliers to operate in full conformance with the laws, rules and regulations of the countries where they operate and to meet internationally recognized environmental, social and governance standards.

Business and labor practices of our Suppliers and their employees, agents and subcontractors (collectively referred to as "Suppliers") must adhere to the standards of this Supplier Code when conducting business with or on behalf of Marvell. Suppliers are required to promptly inform Marvell when any situation develops that causes the Supplier to operate in violation of this Supplier Code. Compliance with this Code is required in addition to any other obligations in any agreement Suppliers may have with Marvell.

Marvell is committed to protecting the environment, and environmental responsibility is at the core of how we operate. Suppliers shall comply with applicable environmental laws and regulations; develop, implement and maintain environmentally responsible business practices; obtain and keep current all required environmental permits, and comply with any reporting requirements applicable to such permits; and implement systematic approaches to identifying, managing, reducing and disposing or recycling all hazardous waste.

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?

	, v	Long-term time horizon (years)	Please explain
Long-term business objectives	No, water-related issues were not reviewed and there are no plans to do so	<not applicable=""></not>	No, water-related issues were not reviewed and there are no plans to do so.
Strategy for achieving long-term objectives	No, water-related issues were not reviewed and there are no plans to do so	<not applicable=""></not>	No, water-related issues were not reviewed and there are no plans to do so.
Financial planning	No, water-related issues were not reviewed and there are no plans to do so	<not applicable=""></not>	No, water-related issues were not reviewed and there are no plans to do so.

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

For Marvell's direct operations and the supply chain, Marvell's Executive Leadership Team (ELT) identifies key risks in each of below listed categories and determines the absolute impact and likelihood. The risks are classified into a risk matrix and the ELT considers the risk tolerance relative to industry peers as well as areas of focus. Mitigation plans are developed and executed for each of these significant risks and areas of focus. Periodically, Marvell updates the assessment and discuss with the board of directors. • Financial • Operational • Strategic • Sales • Engineering • Information • Organizational Due to reasons of propriety and confidential nature, 0 has been reported for all categories for disclosure.

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	No plans for the next two years	No plans for the next two years

W7.4

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

Dow 1

Does your company use an internal price on water?

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

Please explain

Marvell, as a fabless semiconductor company, does not produce its own products directly, and does not anticipate setting an internal price on water. Our office water use has remained relatively the same due to local, state, and federal regulations currently enforced.

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
Site/facility specific targets and/or goals		Most of our water use comes from our faucets, flushing toilets, and landscaping. Water monitoring and limiting devices have been installed in these areas to limit water use.

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, but we are actively considering verifying within the next two years

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	COO –Chief Operations officer	Chief Operating Officer (COO)

W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

SW0.1

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

	Annual revenue
Row 1	

SW0.2

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

Please select

SW1.1

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

SW1.2

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

	Are you able to provide geolocation data for your facilities?	
Row 1	Please select	

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? Please select

SW3.1

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

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms