

W0. Introduction

---

W0.1

---

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

Las Vegas Sands Corp. (NYSE: LVS) is the pre-eminent developer and operator of world-class Integrated Resorts that feature luxury hotels, best-in-class gaming, retail, dining and entertainment, Meetings, Incentive, Convention and Exhibition (MICE) facilities, and many other business and leisure amenities. We pioneered the MICE-driven Integrated Resort, a unique, industry leading and extremely successful product that serves both the business and leisure tourism markets.

Starting with a single property in 1990, our footprint and impact extends worldwide, from Las Vegas to Macao and Singapore. We have a track record of successfully developing and operating some of the largest and most complex business and leisure properties. We are as passionate about where we build, as what we build and at the heart of our company are unshakable values. We're committed to listening to our guests and Team Members, to considering the environmental impact of our decisions and to contributing to the well-being of the communities in which we do business.

Our properties in the United States include The Venetian Resort Las Vegas, a luxury resort on the Las Vegas Strip, and the Sands Expo and Convention Center (the "Sands Expo Center," and together with The Venetian Resort Las Vegas, the "Las Vegas Operating Properties") in Las Vegas, Nevada. Through our 70.0% ownership of Sands China Ltd. ("SCL"), we own and operate a collection of Integrated Resorts in the Macao Special Administrative Region ("Macao") of the People's Republic of China ("China"). These properties include The Venetian Macao Resort Hotel ("The Venetian Macao"); Sands Cotai Central; The Parisian Macao; The Plaza Macao and Four Seasons Hotel Macao, Cotai Strip (the "Four Seasons Hotel Macao"); and the Sands Macao. In Singapore, we own and operate the iconic Marina Bay Sands, which has become one of Singapore's major tourist, business and retail destinations since its opening in 2010.

We are dedicated to being a good corporate citizen, anchored by the core values of serving people, planet and communities. We drive environmental performance through the award-winning Sands ECO360 global sustainability program. Through our Sands ECO360 global sustainability program, we develop and implement environmental practices to protect natural resources, offer our team members a safe and healthy work environment, and enhance the resort experiences of our guests. We are committed to creating and investing in industry-leading policies and procedures to safeguard our patrons, partners, employees and neighbors.

Please note that the sale of Sands Casino Resort Bethlehem was completed in May 2019. Our 2018 disclosure to CDP includes this property, as they were still part of our company in the reporting year.

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 2018	December 31 2018

W0.3

---

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

- China, Macao Special Administrative Region
- Singapore
- 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 financial 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
We have excluded our Cotai Water Jet ferry service from our disclosure.	Our Cotai Water Jet ferry service operations are excluded because their water withdrawal is very limited in scope. The operation's primary consumption of water is through the use of restrooms. Data for Cotai Water Jet is difficult to collect and the impacts are believed to be considered insignificant. We nonetheless continue to monitor these operations as necessary for potential water risks and impacts.

**W1. Current state**

**W1.1**

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

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Our primary use of freshwater in direct operations is to provide LVS Integrated Resort services (i.e. luxury suites, dining, meeting space). These services are vital to operating our business. Our primary use of freshwater in indirect operations is through our supply chain and procurement practices such as purchase of goods from industries that use water (i.e. agriculture/food, linen cleaning). Use of these goods is important to continuously provide services as stated above. We do not anticipate freshwater dependency to change in direct or indirect operations in the future, as our business model remains the same. We will however continue to increase water efficiency and diversify water supply in our resorts. For example, our recent well reconstruction project reduced our municipal water use in Las Vegas by approximately 20%. At The Parisian Macao, we built our infrastructure to use greywater from the municipality once available. Similarly, we anticipate the dependency on freshwater supply in indirect operations to remain static. Suppliers will continue to adopt new water strategies and technologies as water becomes scarcer. For example, Our Sands China Ltd. linen supplier has an Environmental Code, which requires all facilities to recycle water and develop water conservation strategies.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	In our direct operations, our primary use of recycled, brackish, and/or produced water is through the purchase of reclaimed water and the use of condensate water at Marina Bay Sands for irrigation, toilet flushing systems, exterior ponds, and some water features. Access to recycled water is important to our business as it reduces our dependence on scarce freshwater. In indirect operations, our primary use of recycled, brackish, and/or produced water is through our supply chain and procurement practices. It is important that our linen, agricultural, and other suppliers have access to recycled, brackish, and/or produced water, along with adequate infrastructure and practices in place to use it adequately, as it reduces our overall supply chain risks related to water. For example, our Sands China Ltd. linen-cleaning supplier has an Environmental Code, which requires recycling of clean wastewater streams from cooling water and boiling systems. Maintaining this greywater system is important to their operations. We do not anticipate dependency on recycled, brackish, or produced water to change in direct or indirect operations in the future as our business model remains the same and further, this water source is substitutable with freshwater.

**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%	Total volumes of water withdrawals are reported monthly by property sustainability teams through a centralized online platform, and analyzed by the Global Sustainability Department. Water data is taken from utility bills for municipal water, or sub-metered data for rainwater capture, condensate recovery, well water withdrawal, and nano-filtration water withdrawal. Total volumes of water withdrawals are monitored through analysis of month over month and year over year trends. Reasons for changes in withdrawals are then identified by property sustainability teams. For example, we analyze the effects of warmer weather on cooling towers, changes in occupied room nights on use of showers and restrooms, and changes in restaurant covers on water use in back of house areas.
Water withdrawals – volumes from water stressed areas	100%	Total volumes of water withdrawals from water-stressed areas are reported monthly by property sustainability teams through a centralized online platform and analyzed by the Global Sustainability Department. Data is taken from utility bills for municipal water, or sub-metered data for rainwater capture, condensate recovery, well water, and nano-filtration and is both region (Singapore, Macao, Las Vegas, and Bethlehem) and source specific. Total volumes of water withdrawals by region are monitored through analysis of month over month and year over year trends. Reasons for changes in withdrawals are then identified by property sustainability teams. Water-stressed areas are determined using an internal company water model which leverages two industry tools, including the WWF Risk Filter and WRI Aqueduct (see W1.2d). According to this approach, we currently do not withdraw from water-stressed regions. As we understand water issues are dynamic we evaluate our approach as needed.
Water withdrawals – volumes by source	100%	Total volumes of water withdrawals by source are reported monthly by property sustainability teams through a centralized online platform, and analyzed by the Global Sustainability Department. Water data is taken from utility bills for municipal water, or sub-metered data for rainwater capture, condensate recovery, well water withdrawal, and nano-filtration water withdrawal and is both region (Singapore, Macao, Las Vegas, and Bethlehem) and source specific. Sources include third party (municipal), renewable ground water (well and nano-filtration) and fresh water (rain water and condensate recovery). Reasons for changes in withdrawals by source are then identified by property sustainability teams. For example, we look at how operational changes such as our well reconstruction, and an increase in nano-filtration system capacity at The Venetian Resort impacts our water withdrawal volumes by source.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sectors]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Relevant water withdrawals are monitored for quality in accordance with building code and all applicable regulations. We also have our own internal water quality monitoring systems such as ECOLab at a majority of our properties that serve as an additional quality test of potable water in addition to testing by local water authorities. These tests happen continuously and are monitored on a daily basis in order to ensure that our water exceeds standard requirements and to protect our guests and workers. Further, we routinely test (daily, weekly, monthly, as needed) our pools and spas against various water quality parameters such as microbial properties. Water that is withdrawn from the municipality, well and nano-filtration system for usage in our cooling towers is routinely tested for conductivity, a measure of suitability for its use.
Water discharges – total volumes	100%	At properties where water discharge to municipal sources is billed by direct discharge quantity, total discharge volumes are tracked monthly using discharge sub-meters. At properties where water discharge to municipal sources is billed as an estimate of consumption rather than direct discharge, LVS has developed a company-specific water discharge modeling tool with the help of a third party consultant to estimate total discharge volumes and evaluate the fate of our effluent, segregating our discharge by destination, and estimating our total discharge as an organization. The model is updated as needed with chiller plant efficiency, interior and exterior Grand Canal information, sub-metered data such as lagoon water, irrigation efficiency, and geographic specific evaporation, temperature and humidity rates.
Water discharges – volumes by destination	100%	At properties where water discharge to municipal sources is billed by direct discharge quantity, total discharge volumes are tracked monthly using discharge sub-meters. At properties where water discharge to municipal sources is billed as an estimate of consumption rather than direct discharge, LVS has developed a company-specific water discharge modeling tool with the help of a third party consultant to estimate total discharge volumes and evaluate the fate of our effluent, segregating our discharge by destination, and estimating our total discharge as an organization. The model is updated as needed with chiller plant efficiency, interior and exterior Grand Canal information, sub-metered data such as lagoon water, irrigation efficiency, and geographic specific evaporation, temperature and humidity rates.
Water discharges – volumes by treatment method	Not relevant	Monitoring of water discharges volumes by treatment method is not relevant to Las Vegas Sands because all water discharges are sent to, and managed (including testing and treatment) by municipal waste water treatment plants. As this will be the process for water discharges in future years, we do not expect monitoring of this to become relevant in the future. Further, all of our properties comply with applicable environmental laws related to discharge requirements. For example, the City of Las Vegas requires 'Class I' facilities to analyze their wastewater pre-discharge, while 'Class II' facilities must only comply with applicable discharge regulations. As a Class II facility, we comply with all discharge regulations around water quality. The frequency of monitoring is up to the discretion of the municipalities. We are informed immediately if there are any abnormal water quality issues with discharge.
Water discharge quality – by standard effluent parameters	Not relevant	Monitoring of water discharges quality by standard effluent parameters is not relevant to Las Vegas Sands because all water discharges are sent to, managed (including all relevant effluent parameters) by municipal waste water treatment plants. As this will be the process for water discharges in future years, we do not expect monitoring of this to become relevant in the future. All of our properties comply with applicable environmental laws related to discharge requirements. For example, the City of Las Vegas requires 'Class I' facilities to analyze their wastewater pre-discharge, while 'Class II' facilities must only comply with applicable discharge regulations. As a Class II facility, we comply with all discharge regulations around water quality. The frequency of monitoring is up to the discretion of the municipalities. We are informed immediately if there are any abnormal water quality issues with discharge.
Water discharge quality – temperature	Not relevant	Monitoring of water discharge quality including temperature is not relevant to Las Vegas Sands because all water discharges are sent to, and managed (including temperature testing) by municipal waste water treatment plants. Further, as we do not discharge directly into open water bodies, tracking water discharge by temperature is unnecessary for our company operations. As this will be the process for water discharges in future years, we do not expect monitoring of this to become relevant in the future. All of our properties comply with applicable environmental laws related to discharge requirements. For example, the City of Las Vegas requires 'Class I' facilities to analyze their wastewater pre-discharge, while 'Class II' facilities must only comply with applicable discharge regulations. As a Class II facility in Las Vegas, we comply with all discharge regulations around water quality, however we are not required to track temperature.
Water consumption – total volume	100%	Through detailed monthly water withdrawal reporting, monitoring, and auditing, and our company specific water discharge model, we are able to calculate total water consumption. We estimate global water consumption across all of our operations to be approximately 15-20% of total withdrawal. Water consumption is calculated annually using our internal water model developed with the help of a third party consultant and CDP's recommended approach of Consumption = Withdrawal – Discharge. The model considers various parameters including sub-metered water use by our chiller plants, evaporation rates of exterior water bodies using regional humidity rates, and estimated loss to groundwater through property specific irrigation practices and approximate efficiency of irrigation systems such as Rain Bird which is used at a majority of our properties. Water data that is entered into the model is taken from utility bills or sub-metered data.
Water recycled/reused	Not relevant	Currently we do not use water or wastewater more than once in our operations before discharging it to the municipality and therefore recycled and reused water is considered not relevant. We anticipate recycled water and reused water to be relevant in the future as we continue to look for ways to diversify our water sources and reuse or recycle non-potable water that has already been used in our operations. For example, we are currently evaluating ways to reuse water from our water features and gondola canals for non-potable uses in our resorts.
The provision of fully-functioning, safely managed WASH services to all workers	100%	We complete the WBCSD Water, Sanitation and Hygiene (WASH) self-assessment tool to assess our commitment of these services to our workers every one to three years. Through this self-assessment, access to fully-functioning, safely managed WASH services for all employees is measured based on 32 WASH standards focused on workplace water supply, sanitation and hygiene. We work with property facilities and sustainability teams to complete this self-assessment and consolidate and evaluate the assessment results every one to three years. Results are incorporated into our water-related risk assessment. We also comply with all applicable sanitation and hygiene related laws and regulations at all of our properties.

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	11196	About the same	Our total water withdrawals increased by 2% in 2018 compared to 2017. We consider the 'about the same' threshold as an increase or decrease in withdrawal by 5%. We believe this 2% increase is due to new small areas of our resorts becoming operational (for example, opening a new restaurant in a previously non-occupied space), however this change still falls below our 5% threshold for 'about the same' category for total water withdrawals. We anticipate that our future total withdrawal volumes will likely remain about the same or increase given new development projects and increasing visitation. However, we remained committed to water conservation and have on-going water projects at all of our resorts as well as corporate water reduction goals.
Total discharges	9444	About the same	Our total water discharge remains about the same compared to the previous reporting year. We consider the 'about the same' threshold for total discharge as an increase or decrease in discharge by 5%. Discharge is about the same compared to last year, as our withdrawal is also about the same. Our total discharge correlates strongly with withdrawal given the service driven (non-manufacturing) nature of our business. We use a water discharge model developed with the help of a third party consultant to determine discharge values that are not directly sub metered, while also considering losses to evaporation due to factors such as our irrigation practices and outdoor pools. We anticipate that our future discharge volumes will likely remain about the same or will increase given new development projects and increasing visitation, which have shown a positive correlation with an increase in water withdrawal. However, we remained committed to water conservation and have on-going water projects at all of our resorts as well as corporate water reduction goals.
Total consumption	1752	About the same	Our total water consumption remains about the same compared to the previous reporting year. We consider the 'about the same' threshold for consumption as an increase or decrease in the percentage of consumption (compared to our withdrawal) by 5%. For example, in 2017 our consumption was 18% of total water withdrawal, whereas for 2018 our consumption was 15% of total water withdrawal. This 3% decrease is below our 5% increase or decrease threshold and therefore our water consumption is considered "about the same" as last year. Our business operations remained relatively the same compared to last year, therefore our total water consumption also remained about the same. Our total consumption was calculated using our internal water model which calculates water discharge and consumption based on various parameters including chiller plant efficiency, interior and exterior canal water evaporation, site specific sub-metered data, and geographic specific evaporation, temperature and humidity rates. We anticipate that our future consumption volumes will likely remain the same or increase due to new development projects and increasing visitation, which have shown a positive correlation with an increase in water consumption. However, we remained committed to water conservation and have on-going water projects at all of our resorts as well as corporate water reduction goals.

**W1.2d**

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

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	0	About the same	WRI Aqueduct	Water stressed areas are determined using an internal company water model, created with the help of a third party consultant, that leverages two leading industry tools including the WWF Water Risk Filter and WRI Aqueduct tool. We also consider internal information such as geographic specific water audits at our resorts and water risk assessments when evaluating the risk level of each region that we operate in and to determine the company's overall water risk exposure. To determine whether a property is located in a water stressed area, we average the final risk scores from WWF and WRI, and consider a threshold of greater than 3, which is aligned with industry standards, to be a water stressed region. 100% of our properties including The Venetian Resort Las Vegas, Sands Bethlehem, Marina Bay Sands, and all properties under Sands China Ltd. scored between 2.4 and 2.7, falling into 'some or moderate risk' category. According to this approach, we currently do not operate nor withdraw water from any areas that are considered to be a water-stressed region. Compared to the previous year, our water withdrawal from water stressed areas is the same, as last year we also did not withdraw water from water stressed areas. As we understand that water issues and risks dynamically change over time, we evaluate our water stressed regions as needed and further consider specific model indicators such as baseline water stress and water quality to influence and guide our corporate and property specific water strategy.

**W1.2h**

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	30	Much higher	Our sources of fresh surface water withdrawal include rainwater and condensate capture at Marina Bay Sands (MBS) in Singapore. Water withdrawal from freshwater is relevant as the above water sources are used for irrigation and some toilet flushing systems at MBS. Rainwater capture was approximately the same this year compared to last year. However, we recently expanded our condensate capture system at Marina Bay Sands, which increased our total capture of fresh water. Therefore, in comparison with the previous reporting year the amount of freshwater withdrawal was much higher. We define the 'much higher' threshold as an increase greater than 15% compared to the previous year. The total water withdrawal from this source represents less than 1% of our total water withdrawal. We anticipate rainwater capture and condensate capture volumes to fluctuate based on weather conditions and rainfall trends in Singapore.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	We do not withdraw water from brackish surface water/seawater sources, as we do not use this type of water in any of our operations. The primary use of water in our operations is for guest and resort services which uses potable water obtained through municipal (third party) sources. The secondary use of water in our operations is for cooling towers which is obtained onsite through renewable ground water, rainwater/condensate or from municipal sources. In order to generate potable water from brackish surface or sea/water we would require special desalination equipment and capital investment, which has proven unnecessary thus far. Further, some of our resorts such as The Venetian Resort Las Vegas, do not operate in regions that have access to brackish surface water. Therefore, this water source is considered not relevant. We do not anticipate to withdraw brackish surface water/seawater in future years because of the reasons stated above.
Groundwater – renewable	Relevant	159	Much higher	We operate one well which is permitted to withdraw water from a renewable ground water source in Las Vegas. In 2017, our well was undergoing reconstruction and only withdrew 0.01% of its normal amount. However, as of 2018, the well is in full operation. Therefore when comparing withdrawal of renewable groundwater to the previous reporting year, our total withdrawal was much higher. We define the 'much higher' threshold as an increase of 15% or more. Water withdrawal from renewable groundwater is relevant to our Las Vegas property as well water and our nano-filtration system, which captures and filters on-site 'nuisance water', are used in the cooling tower to generate building cooling. In the future, we anticipate our withdrawal from renewable groundwater to increase or remain about the same as we carry out on-going improvements to the well and look for ways to expand the capacity of our nano-filtration system to further decrease reliance on scarce freshwater.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	We do not withdraw water from non-renewable groundwater sources and therefore it is considered not relevant. The primary use of water in our operations is for guest and resort services which uses potable water obtained through municipal (third party) sources. The secondary use of water in our operations in our cooling towers which is obtained onsite through renewable ground water, rainwater/condensate or from municipal sources. The Venetian Resort Las Vegas is our only property that uses groundwater directly. This property has access to renewable groundwater sources, including what the city of Las Vegas considers 'nuisance water', and therefore it is both more environmentally responsible and commercially feasible to use these sources of water rather than non-renewable groundwater sources. We do not anticipate to withdraw from non-renewable groundwater in future years and have no planned development projects that would require us to do so.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	We do not generate produced water and therefore it is considered not relevant. As a luxury hospitality and gaming company we do not conduct operations such as manufacturing or drilling that would require us to manage produced water. We do not anticipate to use produced water in future years as our business model will remain the same.
Third party sources	Relevant	11007	About the same	Our total water consumption from third party sources (municipal water) remained about the same. Now that our resorts have been in operation for longer than one full year, including The Parisian Macao, we saw a leveling out of water consumption compared to last year and therefore withdrawal from third party sources was about the same. We define the 'about the same' threshold as an increase or decrease in municipal withdrawal by 5%. Water withdrawal from municipal sources is relevant as it is our main source of water to provide resort services and for use in our daily operations. We anticipate withdrawal from third party sources to increase or remain about the same in future years as we seek out new development projects, bring new spaces within our resorts online, increase food and beverage outlets and as we see an increase in visitation. We remained committed to water conservation and have on-going water projects at all of our resorts as well as corporate water reduction goals.

**W1.2i**

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Not relevant	<Not Applicable>	<Not Applicable>	We do not discharge to fresh surface water as all of our direct discharge goes to municipalities in accordance with building code and local, regional, and federal regulations. In the United States, the Clean Water acts specifies national water quality criteria for pollutants in surface water and further makes it unlawful to discharge any pollution into navigable waters. We apply these principles throughout our global properties. We do not anticipate water discharge to fresh surface water to be relevant in the future as our business model remains the same.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	We do not discharge to brackish surface water/seawater as all of our direct discharge goes to municipalities in accordance with building code and local, regional, and federal regulations. In the United States, the Clean Water acts specifies national water quality criteria for pollutants in surface water and further makes it unlawful to discharge any pollution into navigable waters. We apply these principles throughout our global properties. We do not anticipate water discharge to fresh surface water to be relevant in the future as our business model remains the same.
Groundwater	Relevant	363	About the same	This source of water discharge is relevant as water from our resorts' outdoor irrigation and landscaped areas can percolate into groundwater. Our internal water model calculates groundwater discharge based on various parameters including sub-metered data and irrigation efficiency of our Rain Bird systems. Our water model estimates that 3% of water is lost via evaporation and landscaping practices. This source of water discharge remains about the same as there were no major changes to landscaping practices at our resorts that would cause an increase in water use and subsequently an increase in groundwater discharge. In the future, water discharge to groundwater is expected to remain about the same or increase as new areas of the resort become operational including outdoor areas which may cause an increase in irrigation needs.
Third-party destinations	Relevant	9081	About the same	This discharge destination is relevant as all of our direct water discharge is sent to municipalities in accordance with regional and federal regulations (such as US Clean Water Act and NPDES permitting). The majority of our discharge water is generated through resort services, which is ultimately discharged through the sanitary sewage system and sent to the municipality. Our internal water model calculates discharge to third-party sources using property bill data, cooling tower sub-metered information and a variety of facility specific parameters. Water discharge to third party destinations remained about the same as this discharge correlates strongly with overall water withdrawal and our withdrawal remained about the same when compared to last year. We anticipate discharge to third party destinations to remain about the same or increase as we seek out new development projects, bring new resort spaces online, increase food and beverage outlets and as we see increased visitation.

**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**

Less than 1%

#### **% of total procurement spend**

Less than 1%

#### **Rationale for this coverage**

As an Integrated Resort, we clean millions of pounds of linens and towels each year. We have engaged suppliers related to laundry cleaning and linen procurement, as they are important to our daily resort operations and pose opportunities to conserve water and energy. Further, we have identified laundry cleaning suppliers to be critical tier one suppliers. Although this group of suppliers make up less than 1% of our total suppliers and procurement spend, we selected them for reporting and engagement as they pose risks and opportunities that can be addressed through education and collaboration. Suppliers are not directly incentivized to report; however, they are recognized for demonstrating environmental stewardship through our annual Supplier Excellence Awards. Further, through relationship development, we have the ability request certain reporting information and to educate and collaborate on environmental risks and opportunities.

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

Linen cleaning suppliers are asked for metrics such as gallon per linen processed and total plant water use. This information has led to a collaborative partnership between LVS and a linen supplier in Macau. The partnership resulted in the creation, testing, and purchasing of new towels, rugs, and bathrobes that require less water, energy, and chemicals to clean for Sands China Ltd. properties. We are currently looking for ways to expand this program to our other resorts. This type of information has also resulted in the decision to purchase more water efficient onsite laundry machines at the Venetian Resort Las Vegas. Success is measured by the continuation of the relationship with the supplier, ability to reduce environmental footprint, and ability to reduce costs.

#### **Comment**

## W1.4b

---

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

**Type of engagement**

Onboarding & compliance

**Details of engagement**

Requirement to adhere to our code of conduct regarding water stewardship and management

**% of suppliers by number**

76-100

**% of total procurement spend**

76-100

**Rationale for the coverage of your engagement**

Environmental sustainability is integrated into supplier selection and management mechanisms through the compliance and onboarding process. 100% of our suppliers must acknowledge and comply with the Supplier Code of Conduct which requires suppliers to "use commercially reasonable efforts to conduct operations in a manner that is environmentally responsible, conserves natural resources, and minimizes pollution and harmful emissions". Additionally, through the Supplier Code of Conduct, suppliers "shall make continuous improvements in their environmental protection strategies, measure the result and further comply with all environmental laws and regulations." If a supplier does not comply with the Supplier Code of Conduct then we do not conduct business with that supplier. Thus, our coverage of engagement is 100% of suppliers as this is standard practice for our business and also integral to operating as a responsible corporation.

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

The beneficial outcomes of our engagement includes increased awareness of sustainability and environmental issues with our supply base. Showing our expectation of commitment from suppliers to protect the environment from the very beginning of engagement, paves the way to more targeted engagement and assessment with suppliers at the product level. We periodically assess our contracts and update them with the new procedures and policies, including environmental information. We measure success by our ability to attain 100% supplier compliance and acknowledgment of the Supplier Code of Conduct which is periodically checked through auditing and third party due diligence. Since adding environmental criteria into our Supplier Code of Conduct we have seen a positive response from our suppliers and a willingness to engage on environmental issues.

**Comment**

When evaluating suppliers we also consider their alignment with our Sustainability Procurement Policy. The Policy aims to minimize negative environmental impacts by ensuring the procurement of products and services that: 1) conserve natural resources, materials and energy 2) maximize recyclability and recycled content, and 3) reduce toxicity.

---

**Type of engagement**

Innovation & collaboration

**Details of engagement**

Encourage/incentivize innovation to reduce water impacts in products and services

**% of suppliers by number**

Less than 1%

**% of total procurement spend**

Less than 1%

**Rationale for the coverage of your engagement**

We select and engage with select suppliers that we know to be large consumers of water or who can provide products, technology, or services that can help us increase water efficiency.

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

We have worked with Sands China Ltd.'s linen supplier to procure new fabrics that require significantly less water, energy, and chemicals to clean. We clean millions of pounds of linen each year. Our work with this supplier has resulted in significant water, energy, and chemical reductions. Additionally, we have trained one of our Marina Bay Sands suppliers offering cleaning services for the resort, on water conservation. The training has resulted in water savings. Marina Bay Sands has also worked with one of their suppliers to develop a custom condensate recovery system, which captures cooling tower condensate water to be used in irrigation and toilet flushing. This system reduces our dependence on fresh water sources. Success of these initiatives is measured by the continuation of the relationship with the supplier, ability to reduce water consumption, diversify water sources, and ability to reduce costs.

**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?**

Our engagement strategy with other partners in the value chain (not including direct suppliers) involves seeking out unique opportunities to work with those that can have an impact on our sustainability goals or our business, and those that can benefit from partnership with our company. In 2017, Marina Bay Sands Singapore partnered with the World Wide Fund for Nature (WWF) to improve the sustainability practices of fish farms in Malaysia through the Aquaculture Improvement Project (AIP). As a large purchaser of seafood, we saw this value-chain partnership as an opportunity to improve the livelihoods of fishing communities, foster environmental stewardship, and protect our oceans. This partnerships encourages and incentivizes fish farmers to take on water stewardship and water quality monitoring through sustainable farming practices. Success of the partnership is measured through our sustainable seafood goals including the goal of procuring 50% of annual seafood spend from responsible sources by 2020. One of the primary roles of the AIP is to reduce the impacts of aquaculture practices that can arise from poor water usage practices, inefficient feeding, and other water-related issues. The program requires farms to implement sustainable farming practices such as water quality monitoring and precision feeding in order to advance through the program.

We approach and prioritize other value-chain partnerships similarly, by adapting strategies where the social, environmental, and economic benefits extend beyond our business into the community or value chain. We look at whether the organization's mission is aligned with our corporate sustainability strategy, the direction and capability of the organization, and whether the organization can help us address key environmental issues.

## 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?**

Yes, fines, enforcement orders or other penalties 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**

1

**Total value of fines**

2000

**% of total facilities/operations associated**

10

**Number of fines compared to previous reporting year**

Higher

**Comment**

During 2018, one of our properties in Macao was subjected to a water-related fine in the amount of 15,000 MOP or approximately 2,000 USD. This fine is in the process of being appealed as the case at hand is not fully substantiated. We proactively put procedures in place to ensure that this type of issue does not arise again. This fine relates to only one of our global properties, which equates to approximately 10% of our facilities.

## W3. Procedures

---

### W3.3

---

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

Yes, water-related risks are assessed

### W3.3a

---

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



## Direct operations

### Coverage

Full

### Risk assessment procedure

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

### Frequency of assessment

Six-monthly or more frequently

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

>6 years

### Type of tools and methods used

Tools on the market  
Enterprise Risk Management  
Databases  
Other

### Tools and methods used

WRI Aqueduct  
WWF-DEG Water Risk Filter  
COSO Enterprise Risk Management Framework  
Regional government databases  
Internal company methods  
External consultants

### Comment

We use also regional databases such as snow pack recharge and Lake Mead water levels (for our Las Vegas property) to inform our risk assessment.

## 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?

>6 years

### Type of tools and methods used

Other

### Tools and methods used

Internal company methods  
External consultants

### 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

---

**(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 the basin/catchment level is relevant and always considered in our water risk assessment, as adequate water supply is vital to sustaining our Integrated Resort operations. We use water to provide an array of resort services to guests and visitors including amenities such as our pools, spas, water features, restaurants and bathrooms. Water is also used operationally by our chiller plants, irrigation systems, cleaning operations, and our WASH services. The water basins that we withdraw water from include the Colorado River Basin, Xi Jiang River, and the Delaware River. At The Venetian Resort Las Vegas, we rely on the availability of renewable groundwater and 'nuisance' ground water to operate our cooling towers, thereby reducing our reliance on the municipal system. As part of our water risk assessment, we utilized WRI's Water Risk Atlas tool, WWF's Water Risk Filter, and a third party consultant, to identify and assess risk indicators that relate to water availability including water scarcity, seasonal variability, inter-annual variability, drought severity, and upstream storage. We look at these specific indicators, our overall risk score, and internal information to evaluate water availability at the catchment level.
Water quality at a basin/catchment level	Relevant, always included	Water withdrawal and discharge quality at the basin/catchment level is relevant and always considered in our water risk assessment as this affects the health and safety of the stakeholders (i.e. employees and guests), our ability to operate our chiller plants efficiently, and our general business operations. We have installed water quality monitoring systems such as ECOLab at the majority of our properties, and continuously consult with water quality experts to develop best in class Standard Operating Procedures to ensure we meet the highest water standards required. As part of our water risk assessment, we utilized WRI's Water Risk Atlas, WWF's Water Risk Filter, and a third party consultant, to identify and assess risk indicators that relate to water quality including indicators such as water pollution, nitrogen loading, pesticide loading, soil salinization, organic loading, sediment loading, mercury loading, potential acidification, and thermal alteration. Internal water risk assessments are also used to assess water quality at a basin/catchment level at specific geographic locations and have been identified as opportunity for mitigation. The quality of water withdrawn is important to our chiller plant operations as a decline in water quality from groundwater and/or municipal sources could reduce the efficiency of our equipment and could introduce cost implications as equipment maintenance becomes more frequent. Through property risk assessments we have identified the cost implications of introducing future onsite filtration capabilities to mitigate potential decreases in water quality, should it become necessary. In terms of water quality discharge, all of our properties comply with applicable environmental laws related to discharge and drainage requirements. All of our direct water discharge is sent to municipal waste water treatment plants which is then treated by local municipalities to protect public health, the environment, and downstream water quality.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Stakeholder conflicts concerning water resources at a basin/catchment level are relevant and always considered in our water risk assessment as it is important to consider stakeholder (such as governments, communities, and NGO) needs in order to proactively manage and avoid arising stakeholder conflicts. Stakeholder needs and potential conflicts are assessed through comprehensive research on the state of water resources in the regions where we operate, direct engagement with water utilities such as the Southern Nevada Water Authority, Public Utilities Commission in Singapore, and Macao Water in Macao, and through evaluation of WWF's Water Risk Filter indicators including water strategy of the government, sophistication of legislation, enforcement of legislation, and basin stakeholder forum. Insights related to existing or potential water-related stakeholder conflicts from these assessments are integrated into our Enterprise Risk Management process annually. For example, in the Colorado river basin, basin-level scarcity and associated regulatory risks are forecasted to be realized by 2020, which could cause conflicts among states included in the Colorado River Compact. While Nevada maintains the smallest water allocation amongst all states in the Lower Diversion, and the second lowest water allocation overall, these risks are evaluated and incorporated into our overall water strategy.
Implications of water on your key commodities/raw materials	Not relevant, explanation provided	As a luxury hotel and gaming company, we do not own or operate any manufacturing facilities that produce or rely directly on key commodities. Although we do not directly consider the impacts of water on 'key commodities or raw materials', we do consider the impacts realized by our utility and agricultural suppliers. We do not anticipate a direct assessment of key commodities or raw materials to be necessary or relevant at present, however, in the future, if water scarcity becomes extreme and access to agricultural goods and/or other key commodities provided by our suppliers become diminished, then we would consider this contextual issue to be relevant.
Water-related regulatory frameworks	Relevant, always included	Water-related regulatory frameworks are relevant and always considered in our annual water risk assessment, as these regulations have the potential to influence how and where we develop new resorts. Internally, we monitor impending legislation and regulatory frameworks for any new policies related to water, energy, waste, or other utilities. We also convene with local water agencies in certain regions to discuss water regulation, risks, and stewardship. For example, in Singapore we engage with the Public Utilities Board Water Network where we provide feedback on policies and programs to encourage greater ownership and stewardship of Singapore's water resources. We also stay up to date on water mandates that could impact our water allocation from local water agencies such as the Southern Nevada Water Authority. . In addition, water-related regulatory frameworks are also identified using the WRI's Water Risk Atlas tool and WWF's Water Risk Filter by assessing indicators such as regulatory risk, water strategy of government, sophistication of legislation, and enforcement of legislation.
Status of ecosystems and habitats	Relevant, always included	The status of ecosystems and habitats are relevant and always considered in our water risk assessment as ecosystem and habitat degradation could occur during resort construction or renovation. As part of our development practices, we follow LEED practices for environmental impact assessments and consider measures such as endangered species protection, soil control, and erosion control. The status of ecosystems and habitats are also identified and assessed using the WRI's Water Risk Atlas tool and WWF's Water Risk Filter, through assessing indicators such as threats to biodiversity, threatened amphibians, and upstream protected land.
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 are relevant and always considered in our water risk assessment as cleanliness and sanitation is imperative in our daily operations for Team Members and guest health and safety. 100% of our employees have access to clean, fully functioning bathrooms with, sinks, toilets, and sanitary products which are regularly cleaned, monitored, and kept stocked with sanitary supplies. Through the WBCSD WASH self-assessment tool, access to fully-functioning, safely managed WASH services for all employees is measured based on 32 WASH standards focused on workplace water supply, sanitation and hygiene. We work with property facilities and sustainability teams to complete this self-assessment, consolidate and evaluate the assessment results every one to three years. Results of this assessment are incorporated into our water-related risk assessment.
Other contextual issues, please specify	Please select	

**W3.3c**

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

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Customers are relevant and always included in our water risk assessment as they are integral to our businesses operations. Our ability to provide resort services and amenities depends on our secured access to clean, safe and reliable potable water for drinking and operations, as well as non-potable water to operate facility equipment. We have developed a Water Safety Plan in Macao to ensure water supplied to hotel rooms and other areas meet high sanitation standards as well as our own internal water quality standards. In 2017, our Sands China Ltd. properties updated their Business Continuity Plan after experiencing a disruption in water supply from the local municipality during Typhoon Hato. Although our properties remained open during the typhoon, the event disrupted some of our operations and thus impacted our customers. We also engage our customers in water conservation efforts through our linen and towel reuse program. We encourage our hotel guests not to change linen and towel everyday via in-room communications. The program has resulted in conservation of millions of gallons of water every year for all our properties. The water related risks that impact our customers considered in our risk assessment include water quality, water scarcity, and disruption of water suppliers due to abnormal weather conditions. Any of these water related risks that have a direct impact on our operations, impact our ability to provide services to our customers.
Employees	Relevant, always included	Employees are relevant and always included in our water risk assessment as we have a global employee base of more than 50,000 whom are integral to the continued operation of our business. Similar to our customers, our ability to provide, access to clean, safe and reliable potable water for drinking and operations impacts the health and safety of our employees as well as our ability to conduct our business. We complete the WBCSD WASH Self-assessment to ensure our employees have access to Water, Sanitation, and Hygiene (WASH) services, and comply with all local, state, and federal regulations to ensure our employees are working in healthy and safe conditions. We also monitor water quality through ECOlab and other water monitoring systems. We educate our employees about water conservation in the work place and at home. During some water conservation campaigns we provide water efficient aerators to Team Members at a discounted price for their family use. We have also developed standard operating procedures for major operating departments such as housekeeping, public area cleaning, stewarding, and food and beverage, with specific water conservation practices that employees are encouraged to follow to minimize unnecessary water use on property. These measures help address risks such as water quality, water scarcity, access to drinking water, and access to sanitation.
Investors	Relevant, always included	Investors are relevant and always included in our water risk assessment as we see a growing interest from investors in sustainability efforts and performance. Water risks such as water scarcity, flood and extreme weather (such as typhoons) can pose potential challenges to our operations, and thus are relevant to our investors. We disclose information about our Sands ECO360 program to investors including our work related to combating climate change, improving water efficiency, reducing and diverting waste and more through CDP, DJSI, and our Sands ECO360 report. Our Sands ECO360 report, which contains information related to our water performance and initiatives, is also, when possible, distributed at the shareholder meetings. Our progress against environmental goals is also frequently shared with the investors through our quarterly earnings call. We work with the Investors Relationship department to respond to specific investor inquiries related to sustainability in a timely manner.
Local communities	Relevant, always included	Local communities are relevant and always included in our water risk assessment as our development projects impact the community economically, environmentally, and socially. As a global developer and operator of Integrated Resorts, we recognize the importance of liaising with local officials and communities before resort development begins and throughout our operations. We conduct community and economic impact studies prior to construction, and continue with LEED environmental impact assessments during construction when it is appropriate. Our newest resort The Parisian was constructed with two sets of pipes and storage tanks: one for potable water, and one for reclaimed greywater once it becomes available from local utility to reduce the dependence on the city's potable water sources. Local community concerns are included in our water risk assessment as well as other internal company assessments. Risks such as flood, drought, and water quality are equally important to us and the communities we operate in. Through WWF Water Risk Filter, the risk indicator of basin stakeholder forum is also assessed and considered in our risk assessment. Further, each of our property sustainability team engages with the local communities in which they operate on water issues through outreach activities. We also provide tours to our local community members and showcase our sustainability initiatives including our water reclamation system, water efficient cooling tower technology, low flow fixtures, and more.
NGOs	Relevant, always included	Non-governmental organizations are relevant and always included in our water risk assessment as their subject matter expertise of environmental issues is valuable to our company's risk evaluation process. We recognize that as a global developer and operator of Integrated Resorts, it is important to engage with non-governmental organizations and incorporate their expertise and feedback into our overarching strategy. We engage with regional NGOs on water issues through direct partnerships and other methods. For example, Marina Bay Sands has an on-going partnership with the World Wildlife Fund for Nature (WWF) in Singapore. This partnership aims to improve aquaculture practices and fish farm water quality monitoring in the surrounding Singapore and Malaysian region. We assess this program annually and incorporate risks that WWF has identified in our annual risk assessment. NGOs are a stakeholder group that Sands China Ltd. engages through their annual external stakeholder engagement process. These groups are engaged via email correspondence and telephone interviews. We also leverage the subject matter expertise of major NGOs such as World Wildlife Fund and Environmental Defense Fund by incorporating their research related to water risks into our annual risk assessment.
Other water users at a basin/catchment level	Relevant, always included	Other water users at a basin/catchment level are relevant and always included in our water risk assessment as engaging and collaborating with other water users and peers in our industry is important to collectively identify opportunities and mitigate risks that the hospitality industry as a whole is exposed. We work with peers along the Las Vegas strip, the Cotai strip, and in Singapore to collaborate on water issues such as water scarcity and identify opportunities such as new technologies that can increase water efficiency, or hotel operation programs that can conserve water. We frequently share water-related best practices with other stakeholders in the hospitality industry and in the regions where we operate through various forums such as USGBC, the WaterSmart Innovations conference in Las Vegas, and through ASHRAE membership.
Regulators	Relevant, always included	Regulators are relevant and always included in our water risk assessment as regulation changes can impact our operations. For example, if Lake Mead's water elevation dips below a certain water level, then Nevada would be required by the Secretary of the Interior to reduce its Colorado River water allocation and thus withdrawal. The resulting decrease in the allocation would be distributed amongst Nevada's water users and could affect our business operations. We evaluate these types of regulation changes and their impact on our operations regularly. We also raise awareness on our water practices among policy makers by sending them our Sands ECO360 report and offering Sands ECO360 tours. In Singapore, we engage with the Public Utilities Board (PUB), which is a statutory board of the Ministry of the Environment and Water Resources, by providing feedback on policies and programs to encourage greater ownership and stewardship of Singapore's water resources.
River basin management authorities	Relevant, always included	River basin management authorities are relevant and always included in our water risk assessment as these groups manage and mitigate issues related to drought, scarcity, and supply which can impact our business. Our sustainability and facilities team at each of our properties in Las Vegas, Singapore, and Macao engage these groups through direct relationships via in person meetings and email. In 2018, we met with river basin management authorities in each region to discuss short, medium, and long term risks that could affect their respective region and identified opportunities for further collaboration. We learned of future availability of new water resources in Singapore and Macao and discussed Macao's initiatives that are in place to safeguard against typhoons, drought, floods, and poor water quality. Further, we also work with these groups to understand water utility price trends and water efficiency technologies. The results of this engagement along with direction relationships with river basin management authorities are included in our water risks assessment.
Statutory special interest groups at a local level	Not relevant, explanation provided	As an Integrated Resort company that does not directly discharge into water bodies or consume large amounts of water, we are not obliged to consult with any body or organization on water issues due to a statutory or regulatory requirement. Therefore, this stakeholder is not relevant or included in our water risk assessment. This stakeholder is not anticipated to be relevant in the future, as the nature of our business will remain the same.
Suppliers	Relevant, always included	Suppliers are relevant and always included in our water risk assessment as we have a large and diverse global supply base. One of our tier one critical suppliers, our linen cleaning supplier, depends heavily on the water supply. In addition, agricultural suppliers also depend heavily on the water supply. We obtain some water consumption data and information from our linen cleaning suppliers in Las Vegas to understand their business' dependence on water and identify conservation opportunities. We also consider our local water utilities such as the Las Vegas Valley Water District, the Singapore Public Utilities Commission, or The Macao Water Supply Company, to be a supplier and engage with them on new technologies, water rebate opportunities, and efficiency measures. Risks considered include water quality, scarcity, and access.
Water utilities at a local level	Relevant, always included	Most of our resorts rely on the municipal water supply from local utilities such as Southern Nevada Water Authority in Las Vegas, the Public Utilities Commission in Singapore, and the Macao Water Supply Company in Macao, to sustain operations and therefore local water utilities are relevant and always included in our risk assessment. Water tariffs from water utilities are monitored on a monthly basis globally and factored into the water risk assessment. We engage with water utilities through direct relationships with the utilities via in person meetings, email, and telephone conversations and our company's participation in various programs such as water conservation rebate programs, and ad-hoc engagements on water risk issues. The risks considered include water quality, scarcity, and access.
Other stakeholder, please specify	Please select	

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

Las Vegas Sands Corp. has an Enterprise Risk Management ("ERM") program that identifies and assesses company risks. The water-related risk assessment is part of the ERM program and is led by the Chief Procurement and Sustainability Officer. After risks are assessed and ranked, mitigation plans are developed and considered during company strategic and budget planning. Elements of risk mitigation strategies are evaluated against whether they address the risk adequately. Management continues to execute mitigation and improvement strategies, and monitors their implementation as well as their effectiveness along with key risk indicators through the audit plan. During our last assessment, we considered the recent COSO/WBCSD framework on ESG integration to ERM.

Our water risk analysis leverages two internationally recognized and industry proven water risk assessment tools: WWF Water Risk Filter and WRI Water Aqueduct. Both tools have global geographic coverage of water risks which are aligned with a risk time scale of between 5 and 10 years. We utilize these tools by inputting the geographic locations of all Las Vegas Sands resorts and analyzing the scores of various risk indicators of each model (WWF considers 40 indicators, while WRI considers 15) for each property. In addition to the overall final basin related risk scores from the two models, we also consider the intensity of water use by calculating water withdrawn per square foot as an indicator of overall water efficiency. Internal property specific water audits and water risk assessments are also used to determine risks related to water. The top risks are then evaluated with likelihood and potential impact to the company and consolidated to be ranked among all other risks the company is facing through the ERM program.

Outcomes from these risk assessment processes are used to develop sustainability action plans for each of our properties globally. For example, future resources are allocated towards implementing mitigation plans or projects that reduce environmental risks, including water and climate risks, depending on the results of the risk assessment. Last year, we dedicated resources towards water capture, reclamation, and efficiency projects.

---

## 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?**

At the company level, we assess water-related risk as part of the Enterprise Risk Management (ERM) program by identifying the risk's likelihood and potential impact. In addition, we also look at the timeframe, management method and cost of management. The scale of the impact severity is defined as "1" for "minor" which is \$0-25 million, "2" for "moderate", which is \$26-100 million, "3" is for "major", which is \$101-250 million and "4" is for "severe", which is \$251-500 million, and "5" is "catastrophic" which is over \$500 million. When identifying or assessing risks for LVSS, substantive financial impact is defined as a scale of impact of \$101 million or more in our direct operations. The \$101 million threshold is still less than 1% of the company annual revenue. Substantive change is considered to be the closure or halting of services from one our critical tier one suppliers or a change in revenue of \$101 million or more in our direct operations.

We also evaluate risks through our internal water risk model which leverages two leading industry tools including the WWF Water Risk Filter and WRI Aqueduct tools. To determine whether a property is located in a water stressed area, we average the final risk scores from WWF and WRI, and consider a threshold of greater than 3, which is aligned with industry standards, to be a water stressed region. According to this approach we currently do not withdraw water from any water-stressed regions.

Even though water-related risks exist, there are none that currently have the potential to have a substantive financial or strategic impact on business. We update our assessment on a regular basis.

Examples of substantive impacts considered include the disruption to business caused by Typhoon Hato in 2017 and the resulting disruption to the local water supply. The impacts of the typhoon were not considered substantive as all Sands China Ltd. properties remained at least partially open and all impacts were below the \$101 million threshold. This risk was considered detrimental but not substantive. Please see our response to W2.1 in our 2017 response to learn more about our recovery and relief efforts as well as our amendments to the Business Continuity Plan. We have also considered the impact of risks realized by our critical tier on suppliers.

While the risks might not be "substantive" to the entire company, the sustainability team still actively reviews and mitigates climate and water-related risks that are significant to the department.

---

### 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	We assess environmental related risk as part of the Enterprise Risk Management (ERM) program by identifying the risk's likelihood and potential impact. The scale of impact severity is defined as "1" for "minor" which is \$0-25 million, "2" for "moderate", which is \$26-100 million, "3" is for "major", which is \$101-250 million and "4" for "severe", which is \$251-500 million, and "5" is "catastrophic" which is over \$500 million. When identifying or assessing risks, substantive financial impact is defined as a scale of impact of \$101 million or more. The \$101 million threshold is less than 1% of the company annual revenue. With the help of a third party consultant, the sustainability team identifies and evaluates water-related risks in direct operations by using the tools of WRI Aqueduct and WWF Water Risk Filter along with our internal company risk assessment method. We also evaluate some supply chain water-related risk as part of risk assessment conducted by the procurement team. We categorize risk into physical, regulatory, reputation and market, and technological risk types. The impact of the water-related risks identified do not meet the financial impact threshold. The risks identified including increased energy costs, restricted utility consumption due to severe weather patterns, prolonged excessive heat or haze, pricing volatility and mandatory conservation measures currently fall into the company's "minor" category with a 25%-50% of likelihood. The water-related risks identified will not impact how LVS executes its major business strategy. Therefore, even though the water-related risks exist, there are currently none with the potential to have a substantive financial or strategic impact on business. While the risks are not "substantive" to the entire company, the sustainability team still actively reviews and mitigates water-related risks that are significant to the department. We evaluate risks periodically and complete a risk assessment annually.

**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	Evaluation in progress	Tier one critical suppliers are evaluated on their potential impact to the business and the risk's likelihood. As our linen cleaning suppliers fall into this category, we have evaluated how a disruption to their business due to various risks would impact our own operations. We are further evaluating the likelihood and potential impact resulting from a lack of access or disruption of supply of quality freshwater. As our annual spend on laundry services is less than \$101 million, this supplier currently falls under the threshold of substantive risk. We are further evaluating and quantifying potential impacts on the business should water risks be realized by our suppliers and expect this evaluation to be complete in the near future.

**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?**

No

**W4.3b**

**(W4.3b) Why does your organization not consider itself to have water-related opportunities?**

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	We assess and prioritize water-related opportunities by identifying likelihood, potential impact, and time horizon and then develop strategies and identify costs to realize the opportunity. When identifying or assessing opportunities for LVS, substantive opportunity is defined as a scale of impact of \$101 million or more. The \$101 million threshold is less than 1% of the company annual revenue. The sustainability team identifies and evaluates a list of water-related opportunities in the areas of direct operations and supply chain evaluating opportunities such as resource efficiency, resilience, products and services, and markets on a quarterly basis. We not only look at opportunities within existing operations but also for future development projects where implementation is feasible. The most material opportunity we have currently identified include opportunities for water efficiency. Through our Sands ECO360 Program, we saved 16 million gallons of water and approximately \$876,000 due water efficiency projects in 2017. Although important, these water-related opportunities will not impact how LVS executes its major business strategy as this initiative falls below the \$101 million threshold for substantive opportunity. Therefore, even though opportunities exist, there are none with potential to have a substantive financial or strategic impact on business. While the opportunities might not be "substantive" to the company, the sustainability team still actively review and try to realize water-related opportunities that are significant to the department. We evaluate opportunities periodically and complete a formal assessment annually.

**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	Description of business dependency on water Description of business impact on water Description of water-related performance standards for direct operations Description of water-related standards for procurement Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	Company-wide was selected for the scope of our water policies as these global policies apply to 100% of our resorts and operations. o We have a publically available "Environmental Responsibility Policy" that applies to our global operations and includes our commitment to conservation of natural resources (in particular, energy and water) as the corner stone of our Sands ECO360 program, a description of the business dependency and impact on water, an acknowledgement of providing safe, healthy, and environmentally friendly workplaces, and a recognition of the interdependency of our key environmental themes. o We have an internal "Sustainable Procurement Standard" which specifies sustainability requirements for plumbing fixture water efficiency. o We updated our publically available Sustainable Development Standards for all new development and renovation projects. It has one major section for water, including plumbing, appliance, and landscaping performance; Blackwater/graywater recycling; processed water use; and water system design. o We have set company water performance targets and goals that align with the United Nations' SDG6 Clean Water and Sanitation. We have set a public goal of reducing water globally across our resorts by 3% per square foot by 2020. We develop various Team Member engagement programs to educate our employees about water conservation at work and home.

**W6.2**

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

Yes

**W6.2a**

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

Position of individual	Please explain
Chief Financial Officer (CFO)	LVS' Executive Vice President and Chief Financial Officer (CFO), who is also a board member, is the senior executive with direct oversight of Sands ECO360 Global Sustainability program with responsibility of environmental issues including water-related issues. He reviews the strategic direction and progress of global sustainability efforts with the Chief Procurement and Sustainability Officer, and reports to the Board of Directors as needed. The CFO is positioned with the strongest ability to act on water-related issues which can pose both financial risk (e.g water tariffs, increasing water costs, extreme weather events) and opportunities (e.g. water efficiency, water diversification). The CFO is also best positioned to ensure our sustainability program and projects are executed properly by, overseeing strategic direction, major project execution, and progress against goals and targets. In addition, the CFO's background in engineering is incredibly valuable to our sustainability efforts given the nature of our initiatives.

**W6.2b**

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Providing employee incentives Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	The Board of Directors discuss water-related issues as needed including overseeing major capital expenditures and reviewing and guiding business plans or major plans or action. For example, the board reviews any new development projects, which are a primary source of capital expenditure and part of the company's major business strategy. Further, the board reviews and guides annual budgets including sustainability related expenditures. Typically, our company does not engage in acquisitions and divestiture strategies. However, if we were to engage in these activities, these responsibilities would fall with the board. The CFO, who is also a board member, directly oversees all sustainability efforts, including monitoring implementation and performance, overseeing strategic direction and major project execution, and reviewing progress against water goals and targets for addressing water-related issues. The CFO also reviews employee incentives such as bonuses related to company executives' ability to meet environmental performance targets. Additionally, our internal Sustainable Development Standards are a major component of overall business strategy and integrated into business plans, major plans of action, and capital expenditures. These standards provide guidance on how to integrate water conservation, reuse, and reduction practices into new development projects.

**W6.3**

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

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

Chief Procurement Officer (CPO)

**Responsibility**

Both assessing and managing water-related risks and opportunities

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

Quarterly

**Please explain**

The Chief Procurement and Sustainability Officer (CPSO) reports directly to the Chief Financial Officer and oversees the Global Sustainability Department. The responsibilities of the CPSO include leading the Enterprise Risk Management process related to environmental issues including water, reviewing and guiding sustainability strategy, environmental related risk (including water risks) management policies, approving environmental targets, and managing the execution of the Sands ECO360 program globally. Water related responsibilities lie with the CPSO as he holds dual responsibilities of both sustainability and procurement within the company. The CPSO's monitoring process for water-related issues include assessing the sustainability team's progress towards environmental goals including water, energy, and waste on a weekly basis. The CPSO meets with the CFO at least quarterly to review the Sands ECO360 program's strategic direction, progress, and substantive risks or opportunities.

**W6.5**

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

- Yes, direct engagement with policy makers
- Yes, trade associations
- Yes, 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?**

As part of the Sands ECO360 strategy, we continuously monitor corporate activities, including external stakeholder engagements, affiliations, memberships, and other activity types to ensure that such activities align with the overall corporate sustainability strategy especially related to climate change and water. Every year, we evaluate our involvement and position in policy making, associations, research organizations and other main stakeholders. We also evaluate the direction and capability of such organizations every year. Further, our government affairs department flags any upcoming legislation that could have an impact on our water or energy utilities. We allocate the financial and personnel resources required for these involvements globally and align our activities with our overall water strategy. Overall, we are committed to environmental responsibility by promoting sustainable development and reducing the impact of our operations on the natural environment. Concurrently, we also strive to enhance the resort experience of our guests as well as the quality of life in the communities in which we live and operate. If there is inconsistency between the water policies of the trade organizations we are involved in and our own company water commitments, then we assess the severity of the inconsistency with the trade organization and discuss our response internally on case by case basis.

**W6.6**

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

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

LVS-2018.12.31-10K-FINAL.PDF

See page 27

**W7. Business strategy**

**W7.1**

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	In 2016 we revised our Sands ECO360 strategy and aligned it with the Sustainable Development Goals. We outlined SDG6 Clean Water and Sanitation and the associated target of 'substantially increasing water-use efficiency across all sectors' as a strategic priority for our business. We have set a public goal of reducing water globally across all of our resorts by 3% per square foot by 2020. We also set qualitative 2030 water goals such as stabilizing water consumption, establishing a leak detection and management system, improving our sub metering infrastructure, automating irrigation sensors, attaining 100% adoption of our Sustainable Development Standards and piloting water reclamation technology. These goals and targets translate into property specific ECOtracker water goals and efficiency targets every year. These efforts help mitigate physical risks such as drought and scarcity by reducing our dependence on freshwater through diversification and efficiency projects. We consider long-term time horizon to be between 11-15 years for both water and climate relate issues and align this time frame with our overarching business strategy. As a publically traded company, we must balance our short term business objectives with long-term time horizon of water and climate related risks. Our ECOtracker projects are implemented on an annual basis and developed off 5 year incremental cycles. Our long-term 2030 vision drives the water and climate projects selected for implementation.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	Our Sands ECO360 global sustainability strategy integrates water efficiency and conservation goals throughout our four pillars: (1) Green Buildings; (2) Environmentally Responsible Operations; (3) Green Meetings and Events; (4) Stakeholder Engagement. We have set short and long-term strategies with both quantitative and qualitative goals that translate into annual ECOtracker property efficiency projects. These strategies and goals were influenced by water-related risks and opportunities we identified, such as regulatory change; global water supply; corporate reputation; and changing consumer behaviors. By building and managing environmentally certified buildings, we are able to diversify our water supply, reduce our consumption, and capitalize on water-related opportunities. Our targets and goals help mitigate physical risks such as risk of drought and water scarcity by reducing our dependence on freshwater through diversification and efficiency projects. We consider long-term time horizon to be between 11-15 years for both water and climate relate issues and align this time frame with our overarching business objectives and strategy. As a publically traded company, we must balance our short term business objectives with long-term time horizon of water and climate related risks. Our ECOtracker projects are implemented on an annual basis and developed off 5 year incremental cycles. Our long-term 2030 vision drives the water and climate projects selected for implementation.
Financial planning	Yes, water-related issues are integrated	11-15	Water-related issues such as water efficiency and conservation, physical risks (i.e. drought and water scarcity), and dependence on freshwater are integrated into the financial planning process of our Sands ECO360 sustainability strategy. We have a dedicated budget for water efficiency and conservation projects to ensure that properties have access to financial resources to carry out projects. Property sustainability teams estimate gallons of water saved and ROI's for each project and submit these proposals to the Global Sustainability Department. The Global Sustainability Department assesses estimated water performance against water goals and incorporates these goals into water budgets. Water budgets are approved annually and distributed to each property. Our targets and goals help mitigate physical risks such as risk of drought and water scarcity by reducing our dependence on freshwater through diversification and efficiency projects. These issues are considered along two time horizons. Project based financial planning such as water reclamation or efficiency consider a time horizon of up to 10 years to allow properties to allocate resources around the availability of financial capital. For resort development financial planning, we consider a time horizon of 15 years or longer. This type of planning considers water use and consumption for the full life expectancy of our buildings and integrates standards around water efficiency into design and construction.

**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)**

-32

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

10

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

3

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

8

**Please explain**

We track CAPEX according to the investment required to implement ECOtracker water efficiency projects such as upgrades to our nano-filtration system, modifying our water features, and upgrading appliances such as kitchen dishwashers. We track OPEX according to annual spend on water utilities. From 2017 to 2018, we decreased CAPEX by approximately 32% due to changes in the size and scale of the water projects implemented as well as the ongoing sale of Sands Bethlehem, which has reduced our oversight of water projects at that property. We anticipate an increase of CAPEX by 10% in 2019 based on current 2019 water project investments. This figure may change as more or less water projects are implemented. From 2017 to 2018, we saw a 3% increase in water OPEX due increases in consumption and water tariffs, as well as general year over year variance. We anticipate OPEX to increase from between 1% to 10% in 2019 due to increasing visitation and as new resort spaces become operational.

**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, but we anticipate doing so within the next two years	The biggest challenge for us to use climate-related scenario analysis is that we are not able to conduct an analysis that can provide actionable, business-specific, insights without the help of niche subject matter experts and consultants that have strong experience in climate scenario analysis, hospitality and gaming, and translating climate analysis into tangible business action. From a resource stand point, the necessity to consult with external entities that may or may not provide applicable business specific insights, creates a financial barrier. In the next two years, we are planning to talk to experienced subject matter experts and consultants to learn more about climate-related scenario analysis and their applicability to our business. If we believe the methodology is mature and valuable and applicable to our sector, we will engage a consultant to help us conduct a climate-related scenario assessment and integrate the results into our strategy.

**W7.4**

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

**Row 1**

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

No, but we are currently exploring water valuation practices

**Please explain**

In order to make the business case for water conservation and efficiency projects we see a growing need to explore water valuation practices and integrate these in our Sands ECO360 strategy. We plan to explore an internal price on water in the near future.

**W8. Targets**

**W8.1**

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

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Brand/product specific targets and/or goals Country level targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	In 2016 we set 2020 performance targets that align with the United Nations Sustainable Development Goals. We outlined SDG6 Clean Water and Sanitation and the associated target of 'substantially increasing water-use efficiency across all sectors' as a strategic priority for our business. We have set a public goal of reducing water globally across all of our resorts by 3% per square foot by 2020. We track and monitor our progress towards this goal on a weekly basis with our property sustainability teams and assess new technologies and efficiencies measures that will help us meet this goal as part of our overarching sustainability strategy. We develop annual internal facility specific water targets for each property depending on square footage and ability to implement water conservation and efficiency projects on an annual basis. We also set qualitative 2030 water goals such as stabilizing water consumption, establishing a leak detection and management system, improving our sub metering infrastructure, automating irrigation sensors, attaining 100% adoption of our Sustainable Development Standards and piloting water reclamation technology. All qualitative and quantitative goals pertain to our products which is hotel room nights and the use of casino space, meeting space, retail space and other amenities.

**W8.1a**

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

**Target reference number**

Target 1

**Category of target**

Water use efficiency

**Level**

Company-wide

**Primary motivation**

Commitment to the UN Sustainable Development Goals

**Description of target**

Our global 3% reduction in water use per square foot from the 2015 baseline target is aligned with the SDG6 target to increase water-use efficiency across all sectors and thus helping to achieve water security.

**Quantitative metric**

Other, please specify (% reduction per square foot)

**Baseline year**

2015

**Start year**

2016

**Target year**

2020

**% achieved**

100

**Please explain**

On a per square footage basis we have already met our 3% water reduction goal. We continue to reduce our water consumption on a per square foot basis and also maintain additional internal water goals for each property in order to continue reducing our water consumption. In 2018 we achieved a decrease in gallons consumed per square foot by 3.3% compared to our 2015 baseline.

**W8.1b**

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

**Goal**

Reduce environmental impact of product in use phase

**Level**

Company-wide

**Motivation**

Commitment to the UN Sustainable Development Goals

**Description of goal**

As a luxury hospitality and gaming company, our product is hotel room nights and the use of casino, meeting and retail space and other amenities. We have set company-wide goals to reduce the environmental impact of our product by identifying 5 year incremental goals including stabilizing water consumption, establishing leak prevention, detection and management systems, improving our sub meter infrastructure, automating irrigation sensors, and piloting water reclamation technology. We also updated our Sustainable Development Standards which specify water standards for new development and renovation projects including performance metrics for plumbing, fixtures, appliances, and landscaping; blackwater/graywater recycling recommendations; processed water use; and water system design. We are aiming for 100% internal adoption of these standards. Our company-wide goals to reduce our environmental impact and commitment to SDG6 ultimately will help advance us towards achieving water security. Further, our commitment reflects our understanding that to safeguard access to water we must do our part to reduce and conserve and we recognize that our operations in desert and coastal areas present a strong need for our company to protect water quality and conserve water. Water is vitally important to our direct operations, and we must manage and conserve this resource to our best ability. These goals are companywide and pertain to all of our Integrated Resorts globally.

**Baseline year**

2015

**Start year**

2016

**End year**

2030

**Progress**

To date, we have rolled our new Sustainable Development Standards and have on-boarded the necessary internal stakeholders to act on water performance recommendations. We are currently formalizing a systematic leak prevention, detection, and management program, and have already made improvements at individual properties. We continue to consider onsite greywater recycling for use in our cooling towers and other non-potable uses. We also currently procure reclaimed water and capture condensate water for irrigation. Our sub-metering infrastructure continues to advance. Currently we have sub-meters that allow us to understand our major sources of water consumption including cooling tower use, groundwater and nano-filtration withdrawal, and rainwater capture. Pairing 100% of our sub-metering infrastructure with an advanced online data platform will help us track our water consumption and improve operations. We set internal goals to assess our progress and use indicators such as adoption of SDS, water treatment, reclamation, and efficiency technologies at each property as measures of success. Our threshold for success is qualitative in nature as we strive for global robust leak management and detection systems; implementation of our SDS standards across all new renovation, remodel, and development projects; and implementation of efficiency projects that help us meet and exceed our external target of reducing water use per square foot by 3% by 2020.

**W9. Linkages and trade-offs**

**W9.1**

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

Yes

**W9.1a**

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

**Linkage or tradeoff**

Tradeoff

**Type of linkage/tradeoff**

Increased energy use

**Description of linkage/tradeoff**

The water-energy nexus is particularly relevant to our business operations as it is directly linked to our facility operations. In order to maintain the highest water quality standards, we sterilize water by heating it to temperatures that exceed compliance requirements. Specifically, in our Marina Bay Sands and Sands China Ltd. properties, we heat the water 4 degrees Celsius above the compliance requirement of 60 degrees Celsius. This process has had a positive impact on water quality, however it uses more energy. An increase in energy use has been observed through tracking of utility of data after implementation of these procedures. There was no change in the reporting year.

**Policy or action**

To manage the additional energy use required to sterilize water we offset the energy use through energy efficiency projects, which is consistent with the business strategy to reduce climate-related impacts. These actions occur throughout our properties to reduce environmental impacts related to energy and water. As this initiative to heat water above compliance requirements was put in place in 2017, but remains on-going there was no observed change in the reporting year.

**W10. Verification**

W10.1

---

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

No, but we are actively considering verifying within the next two years

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	Executive Vice President and Chief Financial Officer	Chief Financial Officer (CFO)

W11.2

---

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

Yes

Submit your response

---

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms