

W0. Introduction

W0.1

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

MGM Resorts International (NYSE: MGM) is an S&P 500® global entertainment company headquartered in Las Vegas, Nevada. Our national and international locations feature best-in-class hotels and casinos, state-of-the-art meetings and conference spaces, incredible live and theatrical entertainment experiences, and an extensive array of restaurant, nightlife, and retail offerings. MGM Resorts creates immersive, iconic experiences through its suite of Las Vegas-inspired brands. As of December 31, 2021, the MGM Resorts portfolio encompassed 29 unique hotel and destination gaming offerings in the United States and Macau, including some of the most recognizable resort brands in the industry, such as Bellagio, MGM Grand, ARIA, and Park MGM. The Company's 50/50 venture, ROAR Digital LLC, offers U.S. sports betting and online gaming through market-leading brands, including BetMGM and partypoker. The Company is currently pursuing targeted expansion in Asia through an integrated resort opportunity in Japan. The global employees of MGM Resorts are proud of their company for being recognized as one of FORTUNE® Magazine's World's Most Admired Companies®. More information is available at [www.mgmresorts.com](http://www.mgmresorts.com). Through our "Focused on What Matters: Embracing Humanity and Protecting the Planet" initiative, MGM Resorts commits to creating a more sustainable future while striving to make a bigger difference in the lives of its employees, guests, and the communities where it operates. Details on these efforts are available at <https://www.mgmresorts.com/en/company/esg.html>. We recognize that water security is an important issue for our Company and are pleased to participate in this CDP Water Security 2022 Questionnaire.

W0.2

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

	Start date	End date
Reporting year	January 1 2021	December 31 2021

W0.3

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

China, Macao Special Administrative Region  
 United States of America

W0.4

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

USD

W0.5

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

Companies, entities or groups over which operational control is exercised

W0.6

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

No

W0.7

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

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, a CUSIP number	552953101
Yes, a Ticker symbol	MGM

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	Vital	Sufficient amounts of good quality freshwater available for use was chosen to have a vital role in MGM Resorts' direct and indirect operations as this is necessary for our direct operations to run on a daily basis and may hinder our suppliers' ability to provide quality produce that is served to our customers. Our primary use of freshwater in our direct operations includes cooling towers, food and dining services, golf courses, pools, spas, laundry, guest rooms (showers, toilets, sinks), and WASH services to guests and employees. For indirect operations, freshwater is primarily used for growing food in our agricultural supply chain and cleaning linens in our outsourced laundry. Our dependence on sufficient amounts of good quality freshwater available in direct and indirect operations will decrease over time as MGM Resorts and our suppliers become more water efficient.
Sufficient amounts of recycled, brackish and/or produced water available for use	Not very important	Important	Not very important was selected as the importance rating for direct operations as less than 0.1% of our direct operations use recycled water, which is considered not very important to our operations. Sufficient amounts of recycled, brackish, and/or produced water available for use is important in indirect operations as an insufficient amount of it may cause a reduction in the quantity of outsourced products. The primary use of recycled rainwater in our direct operations is in landscaping, urinals, toilet flushing, exterior ponds, and other non-potable uses. This occurs at three properties in our global portfolio – MGM Cotai, MGM National Harbor, and MGM Springfield. In indirect operations, recycled water is primarily used in the production of goods sold to our customers. MGM Resorts' dependence on sufficient amounts of recycled, brackish, and/or produced water available for use in direct and indirect operations will increase over time as we continue to expand our operations globally and there is increased demand for products we source.

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%	Water withdrawals by total volumes across all our facilities in each of the regions we operate (Las Vegas, U.S. regionals, Macau) are measured through direct metering by respective plant personnel on a daily or as-needed basis to support operations and regulatory requirements. Additionally, our Social Impact & Sustainability division uses a centrally managed database to produce water withdrawal reports. These are distributed to various internal and external stakeholders monthly, quarterly, annually, or as-needed to identify opportunities for enhancing water conservation and other strategic planning.
Water withdrawals – volumes by source	100%	Water withdrawal volumes by sources across all our facilities in each region we operate (Las Vegas, U.S. regionals, Macau) are measured through a centrally managed database. Water withdrawal volumes from municipal sources are added to our database monthly. The water volumes from rainwater harvesting and the eleven wells we source from are measured via sub-metering. We are currently installing smart sub-metering on all Las Vegas cooling tower systems to determine our consumptive water use from this area on a monthly basis.
Entrained water associated with your metals & mining sector activities - total volumes [only metals and mining sector]	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	<Not Applicable>	<Not Applicable>
Water withdrawals quality	100%	Managed by our Facilities division, water withdrawals are monitored for quality in accordance with EPA, State, County, and Health regulations through internal water quality monitoring processes. We monitor potable water systems daily to stay compliant with water quality criteria specified in regulations to ensure customer and employee safety. The specific permitted properties that use well water for cooling towers and water features are continuously monitored by trained staff and a third-party consultant, Nalco, for conductivity and other parameters. Furthermore, water quality for pools, spas, drinking water fountains, and drinking water dispensers are monitored daily, weekly, monthly, quarterly, and yearly per the regulation of the regulated agency.
Water discharges – total volumes	100%	Water discharges by total volumes at our facilities billed through utility invoices are measured through our centrally managed database every month. For some of our properties, measuring actual volumes of water discharges is not feasible. Therefore, we estimate water discharges for these properties using findings from a third-party water expert to determine water discharge estimates for annual filings. We are installing smart sub-metering on all Las Vegas cooling tower systems to determine water discharges in this significant area of consumptive water use.
Water discharges – volumes by destination	100%	Water discharge volumes by destination at our facilities billed through utility invoices are measured through our centrally managed database every month. For some of our properties, measuring actual volumes of water discharges is not feasible. Therefore, we estimate water discharges for these properties using findings from a third-party water expert to determine water discharge estimates for annual filings. We are installing smart sub-metering on all Las Vegas cooling tower systems to determine water discharges in this area.
Water discharges – volumes by treatment method	Not relevant	Water discharge volumes by treatment method is not relevant for MGM Resorts because all wastewater is discharged into municipal sewer systems and treated by the municipality instead of onsite. And it is not expected to become relevant in the future.
Water discharge quality – by standard effluent parameters	Not relevant	The measurement and monitoring of water discharge quality by standard effluent parameters is not relevant for our Company because all wastewater is discharged into municipal sewer systems across our global operations. Therefore, the treatment and testing of our water discharge are managed by those municipalities. The frequency of measuring and monitoring water discharge quality by standard effluent parameters is at the discretion of the municipalities, and MGM Resorts will be notified immediately in any event. We do not expect water discharge quality by standard effluent parameters to become relevant in future years.
Water discharge quality – temperature	Not relevant	The measurement and monitoring of water discharge quality by temperature are not relevant for our Company because all wastewater is discharged into municipal sewer systems across our global operations. Therefore, the treatment and testing of our water discharge are managed by those entities. However, we pre-treat water relevant to recycling docks, automotive work, cooking oil, and degreasers by use of interceptors. We implement these best management practices to reduce waste discharge from entering the sewer system. This is an added layer of water discharge quality management to reduce water treatment burdens on municipalities. We do not expect measuring and monitoring water discharge quality by temperature to become relevant in future years.
Water consumption – total volume	100%	Water consumption by total volumes across all our facilities in each region we operate (Las Vegas, U.S. regionals, Macau) is measured through our centrally managed database. For all facilities outside of Las Vegas, we identify consumptive water use as the sum of Total Withdrawals minus Total Discharges, determined via monthly utility invoices. In Las Vegas, the unique water recycling infrastructure makes measuring water discharges not feasible. Therefore, in 2021, we engaged a third-party water expert to estimate our consumptive water use in Las Vegas, which was determined to be 24%. This estimate determines consumptive water use for our annual disclosures and as-needed for planning purposes. We are installing submeters on all our Las Vegas cooling towers to identify actual consumptive water use in this area – the largest consumptive water use source according to our third-party consumptive water assessment.
Water recycled/reused	100%	A small percentage of our total water use is recycled water via rainwater harvesting at MGM Cotai, MGM National Harbor, and MGM Springfield. Facilities managers at each property measure and monitor this water using sensor inputs via the building automation system to track monthly volumes. The 2022 data reporting year will have the first full year of harvested rainwater volumes. Regional water recycling occurs at scale in Southern Nevada due to the unique infrastructure for water management developed by the Southern Nevada Water Authority. In turn, approximately 99% of all the water used inside our properties in Las Vegas is treated and returned to Lake Mead for reuse. This process, including the 'return flow credits' that our primary business region benefits from, is described at <a href="https://www.snwa.com/water-resources/current-water-supply/index.html#return">https://www.snwa.com/water-resources/current-water-supply/index.html#return</a> .
The provision of fully-functioning, safely managed WASH services to all workers	100%	100% of our facilities provide Water, Sanitation, and Hygiene (WASH) services to employees and customers across our global operations since we comply with all applicable sanitation and hygiene-related laws and regulations at all our properties. Additionally, we support WASH services in the communities in which we operate, having donated nearly 50,000 hygiene kits to local charities in 2021 and 2022. In early 2022, our Facilities and Hotel Strategy divisions completed the WBCSD WASH self-assessment tool across 31 hygiene and sanitation aspects. The results will be included in WASH-related strategic planning. We intend to update the self-assessment model every two years.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	16896.71	Higher	In 2020, total withdrawals were 14,179.37 megaliters. From 2020 to 2021, total withdrawals increased by 2,717.34 megaliters (or a water withdrawal increase of 19.16%). This increase was driven by our business reopening associated with the COVID-19 recovery. However, our total withdrawals have not returned to pre-pandemic levels. In 2019, total withdrawals were 19,270.49 megaliters, 12.32% higher than 2021 volumes. Total water withdrawals in MGM Resorts' operations are expected to decrease in the future as we continuously implement water efficiency and water conservation programs. For example, we prioritize water-efficient equipment and appliances, including automatic faucets for sinks, low-flow bathroom fixtures, and high-performance commercial dishwashers. Also, in 2021, we invested over \$3.6 million in cooling tower replacements for higher efficiency alternatives. We expect our investments in water conservation to be reflected in our water withdrawal efficiency once the impact of COVID-19 is no longer skewing our historical data trends. Examples of recent water capital projects include achieving our goal to replace over 200,000 square feet of grass with drought-tolerant landscaping and installing water-efficient cooling systems.
Total discharges	12071.51	This is our first year of measurement	For our properties with no actual wastewater volumes, we estimate our water discharge volumes. For our Las Vegas properties, we used an estimated 76.3% non-consumptive water estimate. This was derived from a third-party Water Withdrawal and Consumption Quantification assessment to estimate our water discharges for these properties. We estimate that 85% of water withdrawals for our non-Las Vegas properties are discharged. We expect our water discharge data to become more accurate over time as we are currently installing submeters, such as on all our Las Vegas cooling towers.
Total consumption	4825.2	Higher	MGM Resorts' total water consumption was higher than the previous reporting year because our business volumes recovered from the Covid-19 pandemic. However, given our investments in water conservation, we expect our water use to reduce and become more efficient as we reap the benefits of our efficiency projects and continuously invest in water conservation. For example, in 2021, we met our goal to convert over 200,000 square feet of grass to artificial turf or desert-friendly landscaping to help reduce our consumptive water use. Our total consumptive water use is calculated as total withdrawals minus total discharges. Our company's primary sources of consumptive water use are cooling-related evaporation, irrigation, swimming pools, and water features.

**W1.2d**

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

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	76-99	Much higher	WRI Aqueduct	We use the WRI Aqueduct tool to assess the baseline and future water stress of all 29 MGM Resorts properties. In 2021, we concluded that all sites are at low risk of baseline water stress. However, given our company's long-term mindset and knowing the future water supply issues facing Nevada and other areas in which we operate, we engaged our local water authority and a third-party expert to conduct a comprehensive water risk assessment of our global portfolio. Under a moderate scenario in 2050, the assessment concluded that 15 of our properties, including our entire Las Vegas Strip portfolio, are expected to experience at least a moderate water stress exposure risk.

**W1.2h**

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Not relevant	<Not Applicable>	<Not Applicable>	Fresh water is not relevant for our Company because only a small percentage of our total water use is through rainwater harvesting, which occurs at only three properties: MGM Cotai, MGM National Harbor, and MGM Springfield. The volume of rainwater collected at these properties is estimated to be less than 1% of our total water use.
Brackish surface water/Seawater	Not relevant	<Not Applicable>	<Not Applicable>	Brackish surface water/seawater is not relevant for our Company because our total withdrawals are from renewable groundwater stores or municipalities. An insignificant amount of rainwater is collected at three regional properties (MGM Cotai, MGM National Harbor, and MGM Springfield). We estimate these amount to less than 1% of our total water use.
Groundwater – renewable	Relevant	1703.22	Higher	The majority of MGM Resorts' groundwater use is from wells in the Las Vegas region (88% of total groundwater use). The increase in water withdrawal from renewable groundwater sources from the previous reporting year was driven by loosening Covid-19 restrictions and in turn our businesses reopening. In addition, in 2021, there was an increase in the number of customers that visited our properties in Las Vegas, resulting in increased water utilization for food and dining services, dishwashing, and by customers in guest rooms (e.g., showers, toilets, sinks). Water used for these services is sourced from well water supplies; thus, we experienced an increase in water withdrawal from renewable groundwater sources.
Groundwater – non-renewable	Not relevant	<Not Applicable>	<Not Applicable>	Non-renewable groundwater is not relevant for our Company because our total withdrawals are from renewable groundwater stores or municipalities. An insignificant amount of rainwater is used at three MGM Resorts properties: MGM Cotai, MGM National Harbor, and MGM Springfield. We estimate these amount to be less than 1% of our total water use.
Produced/Entrained water	Not relevant	<Not Applicable>	<Not Applicable>	Produced/Entrained water is not relevant for our Company because our total withdrawals are from renewable groundwater stores or municipalities. An insignificant amount of rainwater is used at three MGM Resorts properties: MGM Cotai, MGM National Harbor, and MGM Springfield. We estimate these amount to be less than 1% of our total water use.
Third party sources	Relevant	15193.49	Higher	The increase in water withdrawal from third-party sources from the previous reporting year was driven by the loosening of Covid-19 restrictions, and in turn our businesses reopening. In addition, in 2021, there was an increase in the number of customers that visited our resorts in Las Vegas, resulting in increased water utilization for food and dining services, dishwashing, and by customers in guest rooms (e.g., showers, toilets, sinks). Water used for these services is sourced from municipal water facilities; thus, we experienced an increase in water withdrawal from third-party sources.

**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>	Fresh surface water sources are not relevant as MGM Resorts only discharges used water to third-party destinations where it undergoes treatment prior to discharge.
Brackish surface water/seawater	Not relevant	<Not Applicable>	<Not Applicable>	Brackish surface water/seawater sources are not relevant as MGM Resorts only discharges used water to third party destinations where it undergoes treatment prior to discharge.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	Groundwater sources are not relevant as MGM Resorts only discharges used water to third party destinations where it undergoes treatment prior to discharge.
Third-party destinations	Relevant	12071.51	This is our first year of measurement	While this is our first year of measurement, we assume water discharges to third-party destinations increased in 2021, as compared to 2020, given the large increase in water withdrawals from the reopening of our Covid-19-driven closures in 2020.

**W1.3**

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

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	968014000	16896.71	572900.87833667	We anticipate our water efficiency to improve as we reap the benefits of water conservation measures and continue to invest in water efficiencies. Also, we are currently installing sub-meters to better understand our water use, which will inform more targeted reduction efforts on consumptive water use. We expect our global water withdrawal intensity to align with our water reduction targets: Reduce water per square foot by 33% (2007 baseline) by 2025 and 35% by 2030.

**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**  
1-25

**% of total procurement spend**  
1-25

**Rationale for this coverage**

As a major operator of hotels and resorts, water is a key resource for many of our suppliers. We identify suppliers with a high reliance on water through supplier risk assessments, a practice in partnership with our Social Impact & Sustainability and Global Procurement teams. Critical suppliers for water include providers of laundry services, linen and terry items, and food and beverage products. This subset of suppliers accounts for approximately 18% of our total supplier spend in 2021. We continuously engage suppliers on their management approaches to water conservation, such as requesting water-related data and hosting ongoing meetings to better understand their efficiency measures. For example, in Las Vegas, our primary laundry services provider provides annual updates on their water efficiency investments and key metrics, including water efficiency per pound of laundry (lb), plant water and energy use (gal), and property-level laundry weights (lb). While we did not directly incentivize this subset of suppliers in the reporting year, we have nominated suppliers for external awards based on their practices, including water stewardship, if applicable. We plan to require relevant suppliers to provide water risk data and information as part of our forthcoming sustainable supply chain strategy, which will be launched in 2023, among other supplier engagement activities.

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

We are committed to promoting environmental responsibility among our suppliers. So, we developed a supplier code of conduct. We have included this supplier code of conduct in 100% of new (and renewed) supplier contracts since its publication in 2021. We require all our suppliers to comply with all applicable environmental laws and regulations. Beyond compliance, we encourage our suppliers to develop an environmental policy and implement an environmental management system. We also encourage our suppliers to identify and manage chemicals that pose a hazard to the water quality and the surrounding environment if released to ensure safe handling, movement, storage, recycling or reuse, and disposal. The supplier code of conduct also encourages all suppliers to review our Company’s Environmental Policy, which outlines MGM Resorts’ dedication to water conservation, water target setting and alignment with the UN Sustainable Development Goal 6 (Clean Water and Sanitation). Improved water quality and water conservation in our supply chain may result from this engagement. By choosing suppliers who embrace water conservation, we expect the water use across our supply chain to become more efficient. For example, in Las Vegas, our laundry services provider installed a water recycling system at their plants in 2021, resulting in nearly 60% savings in water use. This significantly reduced our indirect water use with this vendor. As we collect more data through our enhanced engagement of suppliers, we will analyze and use the data collected from suppliers to set a baseline and explore water reduction targets for indirect use. The measure of success of this engagement is when 100% of our suppliers report on all requested data before the end of the reporting year.

**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**

We choose to engage with 100% of our suppliers as all new and renewed supplier contracts are required to adhere to our supplier code of conduct, which includes compliance with water-related regulations. Additionally, we developed a supplier conduct guide to further encourage action on our supplier code of conduct. We encourage our suppliers to develop an environmental policy and implement an environmental management system. We also encourage our suppliers to identify and manage chemicals that pose a hazard to the environment if released to ensure safe handling, movement, storage, recycling or reuse, and disposal. The supplier code of conduct also encourages all suppliers to review our Company's Environmental Policy, which outlines MGM Resorts' dedication to water conservation and water target setting. Continued engagement of our suppliers on water-related aspects is important for MGM Resorts to mitigate risks stemming from water security in our supply chain.

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

As a result of suppliers adhering to our supplier code of conduct, we not only ensure that we are engaging business with suppliers that are compliant with our policy and standards, but we are also able to identify, assess and mitigate risks stemming from water security issues within our supply chain. We consider the success of engagement when 100% of our suppliers comply with all the water-related requirements stated in the supplier code of conduct and have developed their own water policy and water risk management system.

**Comment**

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**W1.4c**

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

We prioritize both employee and customer engagement.

We focus our customer engagement strategy on guestroom water use. For example, we encourage customers to participate in towel and linen reuse and housekeeping opt-outs through in-room messaging. In 2021, we calculated water savings of 18.54 gallons per opt-out (GPOO). We consider this a success if we reduce our linen water use per night by 5% from housekeeping opt-out and linen and towel reuse. We measure linen water use per night and GPOO monthly in a spreadsheet model using water withdrawal data from our centrally managed database and guest behavior data provided by the MGM Technology, Digital and Data division.

We are committed to increasing employee awareness of water issues. For example, we launched an environmental-focused employee network group (ENG) in 2021 – MGM Planet Protectors. We hold monthly member meetings to (1) build an educational foundation of environmental sustainability; (2) provide a forum to get involved in environmental initiatives; and (3) create a network of environmental champions across the Company. We invite external experts to conduct monthly trainings for members. We measure success through two metrics: property representation (%) and the number of members (#). By Q2 2022, we had approximately 200 members and 100% property representation. We use a cloud-based employee engagement solution to track membership by cumulative total and by property. This solution provides real-time data. Leaders provide monthly updates to executive sponsors. We deem this initiative successful having reached 100% property representation. We are currently exploring new targets.

We set a goal to train 100% of management employees on Social Impact & Sustainability policies by 2025. We enable progress by requiring employees to complete the training through the employee portal. We deem this successful once we achieve 100% completion. We can track real-time progress through our human capital management platform.

**W2. Business impacts**

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**W2.1**

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

No

**W2.2**

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

No

## W3. Procedures

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### W3.3

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

Yes, water-related risks are assessed

### W3.3a

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

##### Value chain stage

Direct operations

##### Coverage

Full

##### Risk assessment procedure

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

##### Frequency of assessment

Annually

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

More than 6 years

##### Type of tools and methods used

Tools on the market  
Enterprise risk management  
Databases  
Other

##### Tools and methods used

WRI Aqueduct  
WWF Water Risk Filter  
Internal company methods  
External consultants  
Materiality assessment

##### Contextual issues considered

Water availability at a basin/catchment level  
Stakeholder conflicts concerning water resources at a basin/catchment level  
Water regulatory frameworks  
Status of ecosystems and habitats  
Access to fully-functioning, safely managed WASH services for all employees

##### Stakeholders considered

Customers  
Employees  
Investors  
Local communities  
Regulators  
Water utilities at a local level

##### Comment

Water-related risks are assessed as part of MGM's overall formal Enterprise Risk Management process. This process, which is managed by MGM's SVP of Internal Audit, includes a broad assessment of risks faced by MGM Resorts. The outcome of this process is a risk register which includes Risk Statements, Risk Owner(s), Risk Mitigation Activity, Risk Exposure, Link to Strategy, Primary Risk Owner(s), and Secondary Risk Owner(s). We use the WRI Aqueduct tool annually to understand the current water risk profile of our Company. We use it to assess water stress risk at all our properties in the U.S. and Macau, including the 13 Las Vegas Strip Resorts. We also use the tool as part of our annual reporting (and alignment to standards from The Value Reporting Foundation (formerly SASB)). We assess our global portfolio identify properties in regions with High or Extremely High Baseline Water Stress. Because we have a long-term mindset, in 2021, we engaged a third-party expert to assess climate-related risks and water-related impacts for our global operations; both current and future risk exposure was explored. This included an assessment of the projected future ratio of water withdrawals to the total renewable water supply for all our properties. Additionally, our detailed assessment also explored the extent of annual flooding or permanent inundation due to sea level rise at a given location in a given year. Our MGMRI Government Affairs division monitors applicable water regulations at all levels: local, county, state, federal, regional, and international. In collaboration with Risk Management, Social Impact & Sustainability, and other divisions, water-related regulatory risks are monitored continuously and managed accordingly. Refer to W6.5 for additional details on MGM Resorts' engagement with policymakers and trade associations on water risks. The regulation pertaining to access to fully-functioning, safely managed WASH services for all employees is monitored by our Facilities and Hotel Strategy divisions. These teams ensure we maintain compliance at all our properties.

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##### Value chain stage

Supply chain

##### Coverage

Partial

##### Risk assessment procedure

Water risks are assessed as a standalone issue

##### Frequency of assessment

Every two years

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

More than 6 years

#### Type of tools and methods used

Tools on the market

#### Tools and methods used

WRI Aqueduct

WWF Water Risk Filter

#### Contextual issues considered

Implications of water on your key commodities/raw materials

#### Stakeholders considered

Suppliers

#### Comment

In 2020 and 2021, we hired a third-party expert to conduct a climate risk assessment, which analyzed our company's exposure to water-related risks, including water stress and sea-level rise. As part of this assessment, regional-level water stress risk was identified, providing insight into water stress facing our suppliers in those regions.

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### W3.3b

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

We choose to assess water availability and related regulation because many MGM Resorts properties are located in water-stressed regions. The status of ecosystems and habitats is important for MGM Resorts to monitor because our agricultural food supply chain is large, given that we operate over 400 food and beverage outlets. As an operator of hospitality properties, we ensure our customers and employees have access to WASH-related services (e.g., potable drinking water, restroom facilities) and therefore monitor our compliance with the applicable regulation. Stakeholder conflicts concerning water resources in Southern Nevada are significant for MGM Resorts, given our core belief to build and sustain the communities in which we work and live. Implications of water are vital for our business because we are reliant on water in the hospitality services we offer to our guests.

To identify our most material non-financial risks, we conducted a materiality assessment. This included collecting inputs from representatives of four customers (e.g., convention clients), 18 employees, three investors, five community leaders and sustainability experts, two suppliers, one policymaker, and two industry associations. We chose to include these stakeholders to understand the importance of non-financial risks in their activities and to discover any stakeholder conflicts. Water risk was identified by many of our stakeholders and, therefore, important for our Company. In turn, we assessed these risks as part of our overall formal Enterprise Risk Management process. This process is managed by MGM's SVP of Internal Audit, and includes a broad assessment of risks faced by MGM Resorts. The outcome of this process is a risk register which includes Risk Statements, Risk Owner(s), Risk Mitigation Activity, Risk Exposure, Link to Strategy, Primary Risk Owner(s), and Secondary Risk Owner(s). ESG risks have been officially recorded in the Enterprise Risk Management Risk register. We intend to update our materiality assessment every two to three years. We expect water-related risks to increase in importance in future iterations of our materiality assessment.

Since 2017, we used the WRI Aqueduct tool to understand the water risk profile of our Company, namely, to assess water stress risk at all our properties in the U.S. and Macau, including the 13 Las Vegas Strip Resorts. Our Las Vegas resorts were exposed to moderate-high future water stress risks. The WWF Risk Filter was used to assess exposure to risks from sea-level rise. Two properties (MGM Cotai and Beau Rivage Resort & Casino) were identified with high-risk exposure to sea-level rise.

In 2021, we conducted, via a third-party expert, a detailed climate risk assessment to further assess climate risk factors and water-related impacts – such as water stress, sea level rise, and flooding – to supplement our findings from the WRI tools. Based on this assessment, we identified two properties (MGM Empire City and MGM Northfield Park) exposed to high water stress under a moderate scenario in 2050. Our Las Vegas Strip Resorts are exposed to moderate-to-high water stress risk under the same conditions. This includes input on water supply risks from the Southern Nevada Water Authority, WRI Aqueduct Water Risk Atlas results, and our third-party expert's internal modelling. The assessment also evaluated our exposure to risks from sea-level rise, identifying two properties (MGM Cotai and Beau Rivage Resort & Casino) with high exposure to sea-level rise. The physical risk scores are low for the remainder of our global portfolio. One property – Gold Strike Tunica – is exposed to high flooding risk.

Our ESG taskforce – a committee comprised of executives from strategy, investor relations, risk, finance, facilities, purchasing, and other functions – supports the work of the Social Impact & Sustainability division by approving policies and programs and supporting implementation. For example, we optimize water systems by investing in leak detection systems and submetering water-intensive areas. We also removed over 200,000 square feet of grass turf, replacing it with drought-tolerant landscaping to avoid consumptive water use for irrigation. During ongoing operations, we encourage guests to participate in our linen and towel reuse program, train employees on water-efficient cleaning techniques, and invest in water-efficient equipment. For example, dishwashers with projected water savings of 686,943 gallons per machine annually were installed at ARIA Resort & Casino.

Compliance with WASH-related services is monitored by our Facilities and Hotel Strategy divisions using internal company methods. A third-party consultant provides oversight and laboratory analysis. We completed the WRI WASH Self-Assessment. We intend to use these findings in our strategic planning to enhance our commitment to WASH beyond compliance as part of our commitment to SDG 6 (Clean Water and Sanitation).

### W4. Risks and opportunities

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## W4.1

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

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

## W4.1a

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

We define substantive financial or strategic impact to be related to risks that most directly threaten the achievement of the Company's most important long-term strategic objectives:

1. Real Estate Strategy
2. Maximizing Operating Efficiency
3. Disciplined Capital Allocation
4. Future Growth Opportunities

More specifically, a modest (low) financial impact is defined as a potential impact with a net present value of less than \$1.0M. A substantive (medium) financial impact is defined as any potential impact with a net present value between \$1.0M and \$10.0M. A severe (high) financial impact is defined as any potential impact with a net present value of \$10.0M or greater. An example indicator utilized would be the evaluation of a water-related operating expense element, such as an analysis of the market price of water in a region with high or extremely high baseline water stress versus a region with low baseline water stress.

## W4.1b

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

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	15	76-99	According to the WRI Aqueduct Water Risk Atlas, all our properties have a low baseline water stress risk. However, our long-term mindset initiated a detailed climate risk assessment, which evaluated our properties on future water stress risk. In turn, we discovered 15 properties with at least moderate exposure to future water stress risk by 2050.

## W4.1c

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

Country/Area & River basin

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

Number of facilities exposed to water risk

11

% company-wide facilities this represents

51-75

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

41-50

Comment

---

Country/Area & River basin

United States of America	Other, please specify (North Atlantic Coast)
--------------------------	--

Number of facilities exposed to water risk

3

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

11-20

Comment

---

Country/Area & River basin

United States of America	St. Lawrence
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

% company's global oil & gas production volume that could be affected by these facilities

<Not Applicable>

% company's total global revenue that could be affected

1-10

Comment

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W4.2

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

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Type of risk & Primary risk driver**

Chronic physical	Water stress
------------------	--------------

**Primary potential impact**

Increased operating costs

**Company-specific description**

Lake Mead, a reservoir on the Colorado River, supplies 94% of our water requirements for our 13 Las Vegas Strip Resorts. Inflows to the Colorado River have been significantly below average for two decades and are projected to worsen. The Southern Nevada Water Authority is taking action to mitigate drought-related impacts through new restrictions. MGM Resorts could be affected by the response to the Colorado River water shortage in that the local municipality does not secure an alternate water source. In this unlikely event, MGM Resorts may be exposed to higher water prices from price volatility, which could increase our operating expenses by as much as \$13 million.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium

**Likelihood**

Unlikely

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

6680000

**Potential financial impact figure - maximum (currency)**

13220000

**Explanation of financial impact**

We estimate the financial impact of this risk to be between \$7 million to \$13 million, which is the cost of rising water prices. Our Las Vegas Strip Resort's annual water requirement is approximately 3 billion gallons, and the average cost per thousand gallons in 2021 was \$4.37, approximately \$13,000,000 per annum. Thus, if the unit price of water was to increase by 50% (\$6.56) or by 100% (\$8.74), the potential financial impact would be the increase in water utility expenses. • Minimum: \$3 billion gallons \* \$6.56 unit price (\$/kgal) = \$19,680,000 - \$13,000,000 = \$6,680,000 • Maximum: \$3 billion gallons \* \$8.74 unit price (\$/kgal) = \$26,220,000 - \$13,000,000 = \$13,220,000

**Primary response to risk**

Increase capital expenditure

**Description of response**

MGM Resorts have been investing in major capital projects to significantly reduce water withdrawals from the Colorado River. It includes the installation of a major reuse system at Shark Reef Aquarium, building new wells, replacing grass with artificial turf or drought-tolerant landscaping, and using advanced water savings technology. For example, in 2021, we reached our goal of replacing over 200,000 square feet of real grass to artificial turf or desert-friendly landscaping to help reduce our consumptive water use. Also, in 2021, we began a multi-year cooling tower replacement project for our Las Vegas Strip Resorts. We started with four properties, requiring over \$3.6 million in initial capital investment. Through this comprehensive program, MGM Resorts will increase the cycles of concentration from 2.5 up to 5, providing a 50% reduction in water use across our cooling towers.

**Cost of response**

2000000

**Explanation of cost of response**

The total cost of response for the identified risk could be \$2,000,000. \$1,000,000 accounts for the purchase and installation of major water reuse technologies, \$500,000 accounts for building several new wells and associated fees, \$300,000 accounts for replacing remaining grass, and \$200,000 to operate the systems and technologies. • \$500,000+\$300,000+\$1,000,000+\$200,000 = \$2,000,000

W4.2a

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

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Stage of value chain**

Supply chain

**Type of risk & Primary risk driver**

Chronic physical	Water stress
------------------	--------------

**Primary potential impact**

Supply chain disruption

**Company-specific description**

With more than 4.4 million square feet of event and convention space and over 400 food and beverage outlets, MGM Resorts is highly reliant on the indirect use of freshwater for growing food in our agricultural supply chain and for cleaning linens in our outsourced laundry. Therefore, water stress could result in higher food costs.

**Timeframe**

More than 6 years

**Magnitude of potential impact**

Medium-low

**Likelihood**

Likely

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure - minimum (currency)**

2900000

**Potential financial impact figure - maximum (currency)**

4350000

**Explanation of financial impact**

We estimate the impact of this risk to be an increase of between \$2.9 million and \$4.35 million in annual operating expenses from increased prices for produce. Situations such as rising temperature may cause drought in some regions such as China and U.S. Midwest, where we partly source our food, which may increase our procurement costs as suppliers adapt to drought conditions and water price volatility. A 10 to 15% increase in the cost of produce would have a potential financial impact between \$2.9 million and \$4.35 million. • \$29 million \* 10% = \$2,900,000 • \$29 million \* 15% = \$4,350,000

**Primary response to risk**

Supplier engagement	Other, please specify (Supplier diversification)
---------------------	--

**Description of response**

From 2020 to 2021, we conducted water stress risk assessments, as part of our detailed climate risk and opportunity assessment, across the regions we operate in the U.S. and China, including Las Vegas, where 13 MGM Resorts properties are located, and some of the regions where we source our supplies. As a result of these assessments, we are working to identify critical suppliers in water-stressed regions and develop a complete inventory of suppliers in water-secure regions.

**Cost of response**

300000

**Explanation of cost of response**

The total cost of the response to this risk is \$300,000. This is the cost to conduct water stress risk assessments across all regions where we source our supplies, such as in the U. S. and China. The cost for hiring a third-party expert to conduct the assessment is \$200,000, and \$100,000 is the cost of management. \$200,000 (hiring a third party expert to conduct the assessment) + \$100,000 (cost for of management) = \$300,000

**W4.3**

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

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

**W4.3a**

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

**Type of opportunity**

Efficiency

**Primary water-related opportunity**

Improved water efficiency in operations

**Company-specific description & strategy to realize opportunity**

This opportunity is strategic to MGM Resorts because, as part of MGM Resorts Focused on What Matters platform, protecting the planet is one of four key pillars, and water management is one of three core categories in this pillar. We invest and implement water conservation measures, including installing and retrofitting water-efficient fixtures, implementing new technologies, and replacing water-intensive landscaping. Since 2007, we have avoided over 5.6 billion gallons of water due to conservation efforts. For example, at MGM Cotai in Macau, a reverse osmosis system was installed in late 2019 to improve the water efficiency of its cooling towers. The system is designed to recycle bleed-off water from the cooling towers. In turn, MGM Cotai has achieved its 12% recycled water target in 2021 and received the China Green Building 3 Star Operational Label, where water conservation is a key criterion. In the U.S., at The Park Vegas, we installed point-source drippers that use 72% less water than traditional sprinklers. Our total water use at The Park Vegas decreased by 65% since 2019. We tracked the impact of this measure via utility invoices through our centrally managed database.

**Estimated timeframe for realization**

4 to 6 years

**Magnitude of potential financial impact**

Low-medium

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

4916250

**Potential financial impact figure – maximum (currency)**

5899500

**Explanation of financial impact**

If MGM Resorts were to continue implementing water efficiency measures and achieve an estimated reduction in total water use of 25% to 30%, the estimated savings could be nearly \$6 million. In 2021, our total water consumption was approximately 4.5 billion gallons, and the unit price was about \$4.37 per thousand gallons. The reduction of 25% is equivalent to 1.125 million gallons reduced, and a 30% reduction is equivalent to 1.35 million gallons reduced. The cost per gallon is \$4.37. The estimated savings would then be between \$4,916,250 and \$5,899,500. • \$4.37 x 1.125 million gallons = \$4,916,250 - Minimum • \$4.37 x 1.35 million gallons = \$5,899,500 - Maximum

**W5. Facility-level water accounting**

**W5.1**

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

**Facility reference number**

Facility 1

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.107349

**Longitude**

-115.176582

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

2229.26

**Comparison of total withdrawals with previous reporting year**

Higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

2229.26

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

1700.88

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

1700.88

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

528.38

**Comparison of total consumption with previous reporting year**

Higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 2

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.11396

**Longitude**

-115.173019

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

1423.3

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

166.44

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

1256.87

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

1085.95

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

1085.95

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

337.35

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 3

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.09919

**Longitude**

-115.175217

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

797.19

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

797.19

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

608.24

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

608.24

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

188.95

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 4

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.095509

**Longitude**

-115.176064

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

919.89

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

919.89

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

701.86

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

701.86

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

218.03

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 5

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.09127

**Longitude**

-115.173691

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

1883.81

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

61.56

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

1822.25

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

1437.31

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

1437.31

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

446.5

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 6

Facility name (optional)

Country/Area & River basin

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

Latitude

36.102249

Longitude

-115.169968

Located in area with water stress

Yes

Primary power generation source for your electricity generation at this facility

<Not Applicable>

Oil & gas sector business division

<Not Applicable>

Total water withdrawals at this facility (megaliters/year)

1937.38

Comparison of total withdrawals with previous reporting year

Much higher

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

0

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

450.69

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1486.69

Total water discharges at this facility (megaliters/year)

1478.18

Comparison of total discharges with previous reporting year

This is our first year of measurement

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

1478.18

Total water consumption at this facility (megaliters/year)

459.2

Comparison of total consumption with previous reporting year

Much higher

Please explain

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

Facility reference number

Facility 7

Facility name (optional)

Country/Area & River basin

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

Latitude

36.10458

**Longitude**

-115.173607

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

589.73

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

589.73

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

449.95

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

449.95

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

139.78

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

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**Facility reference number**

Facility 8

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.101528

**Longitude**

-115.17469

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

444.48

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

6.62

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

437.86

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

339.13

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

339.13

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

105.35

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 9

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.10606

**Longitude**

-115.16674

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

410.93

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

410.93

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

313.53

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

313.53

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

97.4

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are not available through utility invoicing. Therefore, we are using estimates prepared by a third-party expert based on our consumptive vs. non-consumptive water use to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large increase in water withdrawals is the result of our business volumes recovering from Covid-19-driven closures in 2020.

**Facility reference number**

Facility 10

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.102852

**Longitude**

-115.178162

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

34.81

**Comparison of total withdrawals with previous reporting year**

Much lower

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

34.81

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

26.56

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

26.56

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

8.25

**Comparison of total consumption with previous reporting year**

Much lower

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are unavailable through utility invoicing. Therefore, we use estimates from a third-party assessment to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large annual decrease is the direct result of this property's continued COVID-19-related closure in 2021.

**Facility reference number**

Facility 11

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Colorado River (Pacific Ocean)
--------------------------	--------------------------------

**Latitude**

36.2579

**Longitude**

-115.105408

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

1569.24

**Comparison of total withdrawals with previous reporting year**

Lower

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

832.89

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

736.35

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

78.46

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

78.46

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

1490.78

**Comparison of total consumption with previous reporting year**

Lower

**Please explain**

In Southern Nevada, due to the unique infrastructure for water management developed by the Southern Nevada Water Authority, water discharges are unavailable through utility invoicing. Therefore, we use estimates from a third-party assessment to determine water discharges for our Las Vegas Strip Resorts. Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The annual decrease is the direct result of this property's continued COVID-19-related closure in 2021.

**Facility reference number**

Facility 12

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Other, please specify (North Atlantic Coast)
--------------------------	--

**Latitude**

39.377911

**Longitude**

-74.433792

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

566.26

**Comparison of total withdrawals with previous reporting year**

About the same

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

566.26

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

481.32

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

481.32

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

84.94

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%.

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**Facility reference number**

Facility 13

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Other, please specify (North Atlantic Coast)
--------------------------	--

**Latitude**

38.795101

**Longitude**

-77.009041

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

297.15

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

297.15

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

252.58

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

252.58

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

44.57

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large annual increase is the direct result of this property's recovery from the Covid-19 pandemic.

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**Facility reference number**

Facility 14

**Facility name (optional)**

**Country/Area & River basin**

United States of America	Other, please specify (North Atlantic Coast)
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**Latitude**

40.919682

**Longitude**

-73.865227

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

102.82

**Comparison of total withdrawals with previous reporting year**

Much higher

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

102.82

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

87.4

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

87.4

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

15.42

**Comparison of total consumption with previous reporting year**

Much higher

**Please explain**

Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%. The large annual increase is the direct result of this property's recovery from the COVID-19 pandemic between 2020 and 2021.

**Facility reference number**

Facility 15

**Facility name (optional)**

**Country/Area & River basin**

United States of America	St. Lawrence
--------------------------	--------------

**Latitude**

41.35046

**Longitude**

-81.52659

**Located in area with water stress**

Yes

**Primary power generation source for your electricity generation at this facility**

<Not Applicable>

**Oil & gas sector business division**

<Not Applicable>

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

78.59

**Comparison of total withdrawals with previous reporting year**

About the same

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

0

**Withdrawals from brackish surface water/seawater**

0

**Withdrawals from groundwater - renewable**

0

**Withdrawals from groundwater - non-renewable**

0

**Withdrawals from produced/entrained water**

0

**Withdrawals from third party sources**

78.59

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

66.8

**Comparison of total discharges with previous reporting year**

This is our first year of measurement

**Discharges to fresh surface water**

0

**Discharges to brackish surface water/seawater**

0

**Discharges to groundwater**

0

**Discharges to third party destinations**

66.8

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

11.79

**Comparison of total consumption with previous reporting year**

About the same

**Please explain**

Total water consumption is defined as total water withdrawals minus water discharges. Year-over-year changes are considered about the same if less than 5%.

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W5.1a

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

**Water withdrawals – total volumes**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water withdrawals – volume by source**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water withdrawals – quality by standard water quality parameters**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water discharges – total volumes**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water discharges – volume by destination**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water discharges – volume by final treatment level**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water discharges – quality by standard water quality parameters**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

**Water consumption – total volume**

**% verified**  
Not verified

**Verification standard used**  
<Not Applicable>

**Please explain**  
We plan to have our water use data externally assured within the next two years.

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 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 water stewardship and/or collective action Commitment to safely managed Water, Sanitation and Hygiene (WASH) in the workplace Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	MGM Resorts is committed to water stewardship in our direct operations, across our value chain, and within the communities in which we operate. We primarily express our commitment to water stewardship and water policies in our Environmental Policy and dedicated webpage to water management. We express our recognition of MGM Resorts' use of water in our business activities, such as water use in our cooling towers, food and dining services, golf courses, pools, spas, laundry, guest rooms (e.g., showers, toilets, sinks), WASH services to guests and employees, and for growing food in our agricultural supply chain and cleaning linens in our outsourced laundry. The scope of MGM's water policy applies company-wide as it aligns with our overall water goals, which cover all global operations. For example, our water policy expresses the following: Our company is highly dependent on water and thus important that our properties have access to it, or else face a shutdown of our operations. We observe several water-related standards to track our performance in our direct operations, such as the quality of our water withdrawals in accordance with federal EPA regulations. Our approach to Social Impact & Sustainability is aligned with the United Nations Sustainable Development Goals, and our water policy aligns specifically Goal #6 Clean Water and Sanitation (SDG 6). Our specific water goal is to achieve 35% less water withdrawal intensity per square foot by 2030 (2007 baseline). We also have an interim goal of 33% less water withdrawal intensity per square foot by 2025 (2007 baseline). We are committed to increasing the water efficiency of our existing buildings and implementing water-efficient technology for new developments, facility upgrades, and landscape upgrades. We also recognize the impacts of climate change, such as rising temperatures causing drought, on future water availability at some of our properties. We recognize water as a fundamental human right, and we aim to ensure that our direct operations do not encroach on the human right to water and sanitation.

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
Board-level committee	The Corporate Social Responsibility & Sustainability (CSR&S) Committee of the MGM Resorts Board is responsible for monitoring the progress of implementing water-efficient technologies to meet our 2030 goal to reduce water withdrawal intensity per square foot by 35% from a 2007 baseline. For example, in 2021, the Committee decided to pursue a major cooling tower replacement project in Las Vegas. The project began with a \$3.6 million investment for new cooling systems at four Las Vegas Strip Resorts. This multi-year initiative involves installing more efficient systems for environmental savings and sub-meters for tracking consumptive water use and discharge.

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - all meetings	Monitoring implementation and performance Overseeing major capital expenditures Reviewing and guiding 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 Setting performance objectives	In recent years, quarterly Committee meeting has included discussion on climate-related matters, including but not limited to reviewing and giving input on climate risk management and mitigation, including related to water.

W6.2d

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

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues	Primary reason for no board-level competence on water-related issues	Explain why your organization does not have at least one board member with competence on water-related issues and any plans to address board-level competence in the future
Row 1	Yes	Our board director and chair of the CSR&S Committee is a global expert in environmental policy, clean energy, and education. Expertise in natural resource management was a factor in their election to the MGM Resorts Board of Directors in 2005.	<Not Applicable>	<Not Applicable>

W6.3

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

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

President

**Responsibility**

Assessing future trends in water demand  
Assessing water-related risks and opportunities  
Managing water-related risks and opportunities

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

Half-yearly

**Please explain**

The President, MGM Resorts Design & Development, reports to the board on a biannual basis regarding the progress of annual water reduction targets and the implementation of water efficiency and water conservation programs within our new and existing buildings and landscaping. The President is also responsible for assessing future trends in water demand and assessing and managing water-related risks and opportunities across the entire MGM Resorts operation.

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

Chief Executive Officer (CEO)

**Responsibility**

Assessing future trends in water demand  
Assessing water-related risks and opportunities  
Managing water-related risks and opportunities

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

Annually

**Please explain**

Our CEO and President oversees climate-related matters on behalf of management. They also act as a liaison between the CSR&S Committee and senior management. Two divisions collaborate to lead our overall approach to climate: Social Impact & Sustainability and MGM Resorts Design & Development (MRDD). Our Chief People, Inclusion & Sustainability Officer and President of Design & Development collaborate to champion progress toward interim and longer-term water goals. They are supported by goal champions and an ESG taskforce comprised of executives from Finance, Investor Relations, Legal, Risk, Facilities, Global Procurement, and other key functions.

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

Chief Sustainability Officer (CSO)

**Responsibility**

Assessing future trends in water demand  
Assessing water-related risks and opportunities  
Managing water-related risks and opportunities

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

Annually

**Please explain**

Our CEO and President oversees climate-related matters on behalf of management. They also act as a liaison between the CSR&S Committee and senior management. Two divisions collaborate to lead our overall approach to climate: Social Impact & Sustainability and MGM Resorts Design & Development (MRDD). Our Chief People, Inclusion & Sustainability Officer and President of Design & Development collaborate to champion progress toward interim and longer-term water goals. They are supported by goal champions and an ESG taskforce comprised of executives from Finance, Investor Relations, Legal, Risk, Facilities, Global Procurement, and other key functions.

**W6.4**

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

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	The MGM Board of Directors Compensation Committee has historically considered the CEO and named executive officers' participation in ESG initiatives in determining whether to increase, reduce or eliminate their annual bonuses. The Company's ESG initiatives include goals related to water management.

**W6.4a**

**(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?**

	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Operating Officer (COO) Other C-suite Officer (Chief Legal Officer)	Improvements in efficiency - direct operations	The Company's annual incentive bonus program is based on achieving a target level of EBITDAR. Upon meeting these targets, the CEO and named executive officers (NEOs) are eligible for 10% of their annual bonus, given progress on implementing MGM Resorts' ESG strategy. The Human Capital and Compensation Committee determines the provision of incentives in this area by efforts undertaken to achieve the Company's publicly disclosed 2025 and 2030 Social Impact & Sustainability goals. Improvements in efficiency – direct operations were used as the indicator for the provision of monetary incentives to the CEO and NEOs as it is directly aligned with MGM's goal to reduce global water withdrawal intensity per square foot by 33% by 2025 and 35% by 2030 in direct operations.
Non-monetary reward	No one is entitled to these incentives	<Not Applicable>	Incentives from ESG initiatives are monetary for the CEO and named executive officers.

**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

**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?**

To ensure that all our direct and indirect activities seeking to influence policy are consistent with MGM Resort's water policy and water commitments, we established a process that all activities must be approved first by the CSR Committee. In this process, the CSR Committee ensures that the engagement to be pursued is aligned with MGM values and risks and opportunities associated with the engagement are identified and assessed. Additionally, this process includes collaboration and partnership between internal corporate and operations teams to identify and evaluate proposed public policy initiatives in the context of our water conservation goals and commitments. The CSR committee then presents its findings to the board, and approval of engagement is conducted by the Board of Directors. For example, MGMRI Government Affairs participated in the negotiation of and advocated for the final passage of Assembly Bill 6 (AB6) in the 2021 Nevada regular legislative session. AB6 revises provisions governing an application for a temporary change relating to appropriated water.

**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)
- Annual-Report.pdf

**W7. Business strategy**

**W7.1**

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	Water-related issues have been managed as part of operational efforts to reduce water consumption and are thereby incorporated directly into long-term business objectives. In 2017, we aligned our water management approach to SDG 6 Clean Water and Sanitation and aimed to enable progress on our water targets – (1) to reduce water per square foot by 33% by 2025 (2007 baseline), (2) to reduce water per square foot by 35% by 2030 (2007 baseline). In 2019, we achieved our 2025 water goal to reduce water per square foot by 30% from a 2007 base year. We have reset that goal to 33% by 2025, from the same base year. We are also exploring more ambitious, longer term water goals with a horizon of at least 2035.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	To achieve our long-term water objectives of developing and implementing appropriate water risk mitigation plans, we actively incorporate water-related risks into our formal Sustainable Facilities plans and Enterprise Risk Management processes. For example, results from our 2021 Water Withdrawal and Consumption Quantification analysis identified cooling towers as the largest consumptive water source at our properties. As such, we aimed to replace older cooling tower units at our properties, beginning with those in water-stressed regions. In 2021, we invested over \$3.6 million to replace cooling towers with more efficient replacements. We expect to complete these before 2033.
Financial planning	Yes, water-related issues are integrated	11-15	Water cost savings and efficiency measures are integrated into the financial planning process at MGM Resorts. We have a dedicated budget for environmental initiatives to enable progress on our financial and environmental goals. For example, we have invested over \$48 million in efficiency projects at our U.S. properties since 2019. For example, at ARIA Resort & Casino in 2021, we purchased and installed water-efficient dishwashing machines with projected water savings of nearly 700,000 gallons and \$129,000 per machine annually. In 2021, we added approximately \$10 million in our capital expenditure to be allocated to developing new water conservation measures to help achieve our target of becoming water neutral in 2035.

**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)**

100

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

-23

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

69

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

29

**Please explain**

As a result of the Covid-19 pandemic, in 2020, water-related capital expenditures (CAPEX) came to a halt, and operating expenses (OPEX) were well-below pre-pandemic levels, given our business closures. Therefore, there was a significant year-over-year increase in both CAPEX and OPEX between 2020 and 2021. The anticipated trend for the forthcoming reporting year is a reduction in water-related CAPEX as the investments in 2021 were multi-year projects. OPEX is expected to continually increase as 2021 still experienced several closures due to the Covid-19 pandemic, whereas 2022 is expected to nearly return to pre-pandemic business volumes. Examples of CAPEX in 2021 were guest room pipe replacements to prevent leaks and turf conversions to reduce irrigation water needs. OPEX includes water-intensive products and services, including food and beverage products, laundry services, and linen & terry.

**W7.3**

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

	Use of scenario analysis	Comment
Row 1	Yes	We recognize that water-related impacts are a manifestation of climate change. As part of the incorporation of ESG risks into our enterprise risk management processes, we completed an independent climate risk assessment. This included a detailed review of our potential exposure to policy risks and seven types of physical risks, including water stress, sea-level rise, and flooding. Our assessment considered multiple scenarios for potential physical risk exposure, specifically: • RCP 2.6: Aggressive mitigation actions to halve emissions by 2050. This scenario is likely to result in warming of less than 2 degrees Celsius by 2100 • RCP 4.5: Strong mitigation actions to reduce emissions to half of the current levels by 2080. This scenario is more likely than not to result in warming in excess of 2 degrees Celsius by 2100. • RCP 8.5: Continuation of business as usual with emissions at current rates. This scenario is expected to result in warming in excess of 4 degrees Celsius by 2100

**W7.3a**

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

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related Climate-related	Water-related • Timeframe – 2040 • Scenario – Business as usual • Unit of measure – Change from baseline • Coverage - Global Climate-related • Time Periods – 2020 (Baseline), 2030, 2050 • Scenarios – RCP8.5, RCP4.5, RCP2.6 • Risks Assessed – Policy, Water Stress, Flood, Heatwave, Coldwave, Hurricane, Wildfire, Sea Level Rise • Coverage – Global	According to the WRI Water Risk Atlas, in 2040, under a business-as-usual scenario, Las Vegas will experience a 1.2x decrease in water supply while water demand will remain as normal. Beyond the supply/demand balances in LV, water demand in Nevada is expected to increase 1.7X compared to the baseline in 2040, while water supply is expected to decrease 1.2X. Beyond the situation in LV itself, the question is also how the region will be competing to access water with the limited supply. Inflows to the Colorado River have been significantly below average for two decades and are projected to worsen. Since the Southern Nevada Water Authority is not currently using its full Colorado River allocation, near-term shortage declarations are not anticipated to impact current customer use. Conserved Nevada Colorado River water will continue to be stored for future use. Sea level rise risks are very low across most sites. However, Beau Rivage and MGM Cotai have extremely high exposure to sea-level rise. Gold Strike is surrounded by a high river flood risk area; however, the hotel property, as well as the road connecting to it, are not at high risk.	The results from this risk assessment, which was conducted in 2021 will be included in our upcoming strategic planning and capital allocation processes.

**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**

Our detailed climate risk assessment highlighted our company's exposure to water stress risk, and we, therefore, recognize the need for greater capital investment in water conservation measures. We are therefore exploring an internal price on water to help build a business case for increased investment in water-related capital projects.

**W7.5**

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

	Products and/or services classified as low water impact	Definition used to classify low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	Yes	Water Efficient Guest Rooms	<Not Applicable>	During ongoing operations, we encourage customers across our global operations to participate in towel and linen reuse through targeted in-room messaging and housekeeping opt-outs. The measure of success of our customer engagement is when we achieve water savings of 15 gallons per opt-out in all of our Las Vegas Hotels that result from customers reusing towels and linen and opting out of our housekeeping services. In 2021, in Las Vegas, we calculated water savings of 18.54 gallons per opt-out; thus, we consider this engagement a success. More over, we also install or retrofit our hotel guestrooms with water-efficient fixtures (e.g., faucets, sinks and showerheads). For example, ARIA Resort & Casino conserves an estimated 33% of water by utilizing efficient plumbing fixtures.

**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 Site/facility specific targets and/or goals Basin specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	In 2017, and as part of a broader review of our Environmental Management System, MGM Resorts decided to set water targets that focused on mitigating water-related risks. This led to us setting water reduction targets to reduce volumes of water withdrawal. We used 2007 as the baseline, as this is the most reflective of our normal operations. Progress against goals is tracked quarterly within a centrally managed database and is discussed annually with the CSR & Sustainability Committee of the Board. In 2019, the ESG taskforce initiated a formal materiality assessment to obtain internal and external stakeholder input on priority ESG issues. The assessment concluded with 15 material ESG issues, including water-related risks. Additionally, we have identified future water stress risks through the WRI Aqueduct tool since 2017. In 2021, the critical issues of water stress, flooding, and sea level rise were subsequently identified through a detailed climate risk and opportunity assessment conducted in 2020. In 2022, we enhanced the ambition of our interim water intensity target to reduce water withdrawal intensity by 33% by 2025. We are currently exploring additional water targets. Many of our properties have earned green building certifications, including LEED Gold and Platinum certifications from the U.S. Green Building Council. Part of these certifications require water use targets.

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**(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**

Reduced environmental impact

**Description of target**

In 2017, we announced a goal to reduce water use per square foot by 30% by 2025, using a 2007 baseline. Baseline global water per square foot was 76.4 gallons per square foot in 2007, and our 30% reduction goal implies a target water per square of 53.4 gallons per square foot by 2025. In 2019, we achieved our 2025 water goal to reduce water per square foot by 30% from a 2007 base year. We have reset that goal to 33% by 2025, from the same base year. This target is important because we operate many of our properties in the desert destination of Las Vegas so it is important to make our water use as efficient as possible. Therefore, we set this target to guide progress toward this vision.

**Quantitative metric**

Other, please specify (% reduction in water use per square foot)

**Baseline year**

2007

**Start year**

2017

**Target year**

2025

**% of target achieved**

100

**Please explain**

In our baseline year of 2007, global water intensity was 76.4 gallons per square foot. In 2017 when we set our water goal, our prior years (2017) global water use per square foot was 56.3 gallons per square foot. We achieved our 2025 water goal by the end of 2019 and significantly exceeded it in 2020, but 2020 reductions were mainly driven by Covid-related closures. Goal achievement in 2019 was partly based on water conservation efforts and based on a restatement of previously reported data. Actual well water use data became available from regional water authorities in 2020; previously, we used well water allocation as a proxy for withdrawal as actual withdrawal was not available. In 2019, we achieved our 2025 water goal to reduce water per square foot by 30% from a 2007 base year. We have reset that goal to 33% by 2025, from the same base year.

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**Target reference number**

Target 2

**Category of target**

Water use efficiency

**Level**

Company-wide

**Primary motivation**

Reduced environmental impact

**Description of target**

In 2017, we announced a goal to reduce water use per square foot by 35% by 2030, using a 2007 baseline. The baseline global water per square foot was 76.4 in 2007, and the target water per square for 2030 is 49.6 gallons per square foot. We achieved our 2030 water goal by the end of 2020 and 2021, but years' reductions were mainly driven by Covid-related closures. This target is important because we operate many of our properties in the desert destination of Las Vegas so it is important to make our water use as efficient as possible. Therefore, we set this target to guide progress toward this vision.

**Quantitative metric**

Other, please specify (% reduction in water use per square foot)

**Baseline year**

2007

**Start year**

2017

**Target year**

2030

**% of target achieved**

100

**Please explain**

In 2017, we announced a goal to reduce water use per square foot by 35% by 2030, using a 2007 baseline. The baseline global water per square foot was 76.4 in 2007, and the target water per square for 2030 is 49.6 gallons per square foot. We achieved our 2030 water goal by the end of 2020 and 2021, but years' reductions were mainly driven by Covid-related closures.

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

Other, please specify (Employee Training)

**Level**

Company-wide

**Motivation**

Corporate social responsibility

**Description of goal**

In 2021, MGM Resorts set the goal to provide training to all employees in management on Social Impact & Sustainability policies and goals. This includes our water-related targets and policies. The provision of training to employees is important to increase their awareness of MGM Resorts' water-related policies, goals among our operational and corporate employees. This can help encourage them to take action to reduce their water use in their respective activities. We are implementing this goal by making it a required training on our employee portal – My MGM. We further encourage participation by sending email reminders from the Office of the Chief People, Inclusion & Sustainability Officer. Our first full year of target data will be CY2022.

**Baseline year**

2021

**Start year**

2021

**End year**

2025

**Progress**

In Progress

**Goal**

Other, please specify (Remove over 200,000 square feet of real grass at MGM Resorts Las Vegas Strip Resorts)

**Level**

Basin level

**Motivation**

Risk mitigation

**Description of goal**

In 2021, MGM Resorts completed its goal to remove 200,000 square feet of real grass across the Las Vegas Strip Resorts. Grass irrigation is a primary source of consumptive water use for MGM Resorts, so this target is essential for reducing our consumption of Colorado River water. Irrigation water use at MGM Resorts in Las Vegas is estimated at 14% of total consumptive water use, and by achieving this target, we will avoid at least 11 million gallons of consumptive water. According to the Southern Nevada Water Authority, one square foot of non-functional grass uses approximately 73 gallons of water per year, whereas the same area of drought-tolerant landscaping uses about 18 gallons. As of Q2 2022, only 11,902 square feet of real grass remains at our Las Vegas Strip Resorts, and projects are underway to replace this remainder by the end of 2022.

**Baseline year**

2013

**Start year**

2013

**End year**

2021

**Progress**

Achieved

**Goal**

Other, please specify (Recycled Water Target at MGM Cotai)

**Level**

Site/facility

**Motivation**

Reduced environmental impact

**Description of goal**

MGM Cotai opened in January 2018 as the first privately developed building in Macau to receive the China Green Building (Macau) Design Label and the only resort to achieve the highest award. As part of this building certification, MGM Cotai was required to achieve a 12% recycled water target. MGM Cotai uses recycled rainwater in its cooling towers, and progress is tracked via a building automation system. In 2021, the property achieved its target. This target is important as it directly helps MGM Cotai diversify its water sources. Additionally, it offers a case study on rainwater harvesting for other MGM Resorts properties.

**Baseline year**

2018

**Start year**

2018

**End year**

2021

**Progress**

Achieved

## W9. Verification

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### W9.1

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

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

## W10. Sign off

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### W-FI

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**(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.**

Please see attached for our Social Impact & Sustainability Metrics & Goals for CY2021. Water-related disclosures are on pages 4, 18, and 21. We also invite you to visit our dedicated page to Water on our corporate website (<https://www.mgmresorts.com/en/company/esg/protecting-the-planet/water.html>).  
MGM 2021-report-metrics.pdf

### W10.1

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

	Job title	Corresponding job category
Row 1	President	President

### W10.2

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

Yes

## Submit your response

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**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

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

**Please confirm below**

I have read and accept the applicable Terms