

CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-000341



SITE DETAILS

Site: **Suntory Spirits Limited Kyushu Kumamoto Plant**

Address: 478 Hachimansui Kita-Amagi, Kumamoto 861-3104, Kashima town, Kami-Mashiki-gu, JAPAN

Contact Person: Miyuki Suzuki

AWS Reference Number: AWS-000187

Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Platinum

Date of certification decision: 2023-Feb-07

Validity of certificate: 2026-Feb-07

AUDIT DETAILS

Audited Service(s): AWS Standard v2.0 (2019)

Audit Type(s): Re-Certification Audit

Audit Start Date: 2022-Sep-20

Lead Auditor: Tanya Christensen

Audit team participants:

Naoya Ogawa

Site Participants:

Mitsunori Iwase, Sustainability Management Division

Harumichi Seta, Sustainability Management Division

Yoko Mori, Sustainability Management Division

Mayumi Asa, Sustainability Management Division

Miyuki Suzuki, Sustainability Management Division

Shinichiro Sakoda, Kyushu Kumamoto Plant, Senior General Manager

Takeshi Uekita, Kyushu Kumamoto Plant, Senior General Manager-Administration

Seiji Hirooka, Kyushu Kumamoto Plant, General Affairs & Public Relations Group

Masataka Kobayashi, Kyushu Kumamoto Plant, General Manager-Technique of Engineering Division

Yuki Makado, Kyushu Kumamoto Plant, Assistant General Manager of Engineering Division

Akihisa Kinoshita, Kyushu Kumamoto Plant, Engineering Division

Masatoshi Kawasaki, Institute for Water Science, Suntory Global Innovation Center Limited

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ADDITIONAL INFO

Summary of Audit Findings: A total of sixteen findings were raised during the certification audit, no major non-conformities, thirteen minor non-conformities, and 3 observations.

The Client is requested to perform a root cause analysis and define corrective actions for each of the non-conformities and to submit these to WSAS within 60 days of receipt of the audit report by 2 February 2023.

Minor non-conformities must be closed out by the time of the next annual audit, however, should the site want to close these out, evidence of implementation of approved corrective actions can be submitted.

The audit team recommends re-certification of Suntory Spirits Limited, Kyushu Kumamoto Plant at Platinum level pending approval of the corrective action plans.

CLOSURE OF FINDINGS AND CORRECTIVE ACTION PLAN:

The Client has successfully submitted the corrective action plan addressing all findings. Proof of implementation has been requested for the Minors and this will be evaluated during the Surveillance Audit.

Scope of Assessment: The scope of services covers the Re-Certification audit for assessing conformity of Suntory Kyushu Kumamoto Plant against the AWS International Water Stewardship Standard Version 2.

The Suntory Kumamoto plant is located at 478 Kita-Amagi, Kashima-cho, Kamimashiki-gun on the outskirts of Kumamoto. The plant became operational in 2003 and the site occupies 400,000 m², with 267 employees. Suntory Kumamoto is a beverage manufacturer, with a wide-ranging portfolio of drinks under the Suntory brand: beer and happoshu (low malt beer) 6 varieties, RTD (ready to drink) 27 varieties and soft drinks (including water) 28 varieties. The annual production from the plant is about 300,000 KL and its supply area is Kyushu, Okinawa and part of the Chugoku region,

The site obtains all of its raw water from 4 off-site wells (Well 5, 8, 9 & 15) and two on-site wells (Well 11 & 14). The incoming water goes through an external water processing facility, through one of three different processing routes, before entering the plant as: Brewery Water (BRW & MW), Pure Water (PW) or Mineral Water (MW). Water is also processed as cleaning water for production (CLW), with any processing water waste being used as WASH water (CTW). All wastewater is treated by the onsite wastewater treatment plant (WWTP) before being discharged into a regulating pond and ultimately into the nearby Tensui River. The Suntory Kumamoto plant sits within the groundwater catchment that has been formed by the Aso Volcano and contains large water reservoirs. Due to the volcano there are strata that allow groundwater to permeate and be stored, such as pyroclastic flow deposits, Togawa lava, gravel layer and new volcanic ash. The area around Mt. Aso is also one of the wettest areas in Japan.

The audit was conducted onsite and remotely via Teams. The audit team fitted an extended 3.5 days into 3 onsite days on the 20-22.09.2022, with the final 0.5 day conducted remotely via Teams on the 30.09.22. The onsite visit included the assessment of Suntory Kumamoto's water-related infrastructure.

SCORE

129.00

FINDINGS

NUMBER OF FINDINGS PER LEVEL

Observation	3
Minor	13

WSAS

2 Quality Street North Berwick, EH39 4HW, UNITED KINGDOM

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FINDING DETAILS

Finding No:	TNR-002270
Checklist Item No:	1.3.5
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.
Findings:	The has not mapped any point sources or non-point sources of pollution. The site should also consider and include potential pollutants which are not chemicals, such as fuels, oils and hazardous waste.
Corrective action:	A map of potential pollution sources and the status of each location is attached as new evidence. In addition, a map of the listed chemicals in the site is also attached as evidence.
Finding No:	TNR-001709
Checklist Item No:	1.3.6
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.
Findings:	The site has not supplied a description of the status of the onsite IWRAs. Please ensure that the status of each IWRA has been assessed and provided to close the finding. E.g Poor, Good or Excellent.
Corrective action:	Activities and results are listed in the IWRA list in 1.3.6. We also provided a map.
Finding No:	TNR-002272
Checklist Item No:	1.3.8
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	Levels of access and adequacy of WASH at the site shall be identified.
Findings:	The site has not benchmarked the onsite WASH facilities against national standards.
Corrective action:	The number of restrooms on site met national standards, so we translated into English how the site met national standards.

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Finding No:	TNR-002396
Checklist Item No:	1.5.5
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.
Findings:	Although the site has identified two IWRAs and has chosen to work to improve these areas there are many more IWRAs which can be identified and mapped by the site. For example a significant IWRA for the site is the Tensui River itself, as the site discharges into this river and therefore has the potential to impact this IWRA. The site is required to revisit the identification of IWRAs.
Corrective action:	We will also add the Tensui River and continue to monitor water quality and conditions.
Finding No:	TNR-002277
Checklist Item No:	1.6.2
Status:	Open
Finding level:	Observation
Checklist item:	Initiatives to address shared water challenges shall be identified.
Findings:	The site is undertaken numerous initiatives to address the shared water challenges and more care should be taken to ensure the correct evidence is uploaded against the indicator.
Evidence of implementation:	I would like to delete the evidence here because I accidentally uploaded evidence for another finding here. Please ignore this evidence.
Finding No:	TNR-002320
Checklist Item No:	2.4.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.
Findings:	The site has not identified the public-sector and infrastructure agencies that they work with.
Corrective action:	We identified the public sectors and infrastructure agencies with which we cooperate (We also included the approaches for the risks)

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Finding No:	TNR-002323
Checklist Item No:	3.4.1
Status:	Open
Finding level:	Observation
Checklist item:	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.
Findings:	The site should set a new water quality target in their water stewardship plan, that reflects a new activity rather is not just maintaining operational practice.
Finding No:	TNR-002325
Checklist Item No:	3.5.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.
Findings:	The evidence supplied for the indicator does not meet the requirements, although suitable evidence is available.
Corrective action:	Activities and results are listed in the IWRA list in 1.3.6. In addition, we provided new evidence of survey. We have also wrote in our Water Stewardship Plan about our efforts on items related to the IWRA.
Finding No:	TNR-002340
Checklist Item No:	3.6.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.
Findings:	The site has not benchmarked the provision of onsite WASH facilities against any national standard.
Corrective action:	As indicated in 1.3.8, the toilet facilities in the plant are already installed in compliance with the standard with separate facilities for men and women. 3.6.1 also included this information in the documentation this time.

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Finding No: TNR-002352
Checklist Item No: 3.7.1
Status: In Progress - CA plan approved
Finding level: Minor
Due date: 2023-Oct-20
Checklist item: Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.
Findings: Suntory has a process in place to interact with their suppliers on their indirect water use. A target should be developed that reflects this activity and included in the Warer Stewardship Plan.
Corrective action: The sustainability policies are explained once a year at supplier meetings, and we will include them in the Water Stewardship Plan starting in 2023.

Finding No: TNR-002374
Checklist Item No: 3.9.5
Status: In Progress - CA plan approved
Finding level: Minor
Due date: 2023-Nov-30
Checklist item: Actions towards achieving best practice related to targets in terms of WASH shall be implemented.
Findings: The site has not supplied any suitable evidence towards this indicator.
Corrective action: As indicated in 1.3.8, the toilet facilities in the plant are already installed in compliance with the standard with separate facilities for men and women. 3.9.5 also included this information in the documentation this time.

Finding No: TNR-002377
Checklist Item No: 4.1.2
Status: Closed
Finding level: Minor
Due date: 2023-Oct-20
Checklist item: Value creation resulting from the water stewardship plan shall be evaluated.
Findings: The site has not completed the process of monetising the water savings achieved
Corrective action: The water conservation benefits of the site have resulted in cost savings in well electricity and wastewater treatment costs. Therefore, we estimated this benefit.

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Finding No:	TNR-002378
Checklist Item No:	4.1.3
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	The shared value benefits in the catchment shall be identified and where applicable, quantified.
Findings:	The site has not supplied any evidence to address this indicator.
Corrective action:	Include 4.1.3 within the Water Stewardship Plan (quantify the benefits of the Natural Water Sanctuary initiatives and winter rice field flooding initiatives). Also, created a new evidence sheet for 4.1.3 (documents related to the Natural Water Sanctuary initiatives and winter rice field flooding initiatives).
Finding No:	TNR-002379
Checklist Item No:	4.2.1
Status:	Open
Finding level:	Observation
Checklist item:	A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.
Findings:	It is recommended that the site produces a statement annually, confirming that there have no major emergency incidents.
Corrective action:	If an incident happens, the situation is appropriately shared with the audit organization every year at the time of the ISO 14001 external audit, and is also reported to the administration. (We intentionally do not post the information on our website in consideration of reputational risk, but the AWS guidance of 5.5.1 states that there is no problem in doing so).
Finding No:	TNR-002380
Checklist Item No:	4.3.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.
Findings:	The site has supplied a single example of a stakeholder consultation effort. No other evidence has been supplied to demonstrate that the site has consulted all of their stakeholders on the site's water stewardship performance.
Corrective action:	Created a new format for the stakeholder list, which includes a summary of communication records

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Finding No:	TNR-002381
Checklist Item No:	5.2.1
Status:	Closed
Finding level:	Minor
Due date:	2023-Oct-20
Checklist item:	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.
Findings:	The site has not supplied sufficient information to demonstrate that the AWS Activity Report or the Water Stewardship Plan has been effectively communicated.
Corrective action:	Created a new format for the stakeholder list, which includes a summary of communication records

Signature WSAS

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Report Details

Report	Value
Report prepared by	Tanya Christensen
Report approved by	Mia Antoni-Naidoo
Report approved on (Date)	2 December 2022

Surveillance

Proposed date for next audit
2023-Sep-18

Stakeholder Announcements

Date of publication	Location
2022-Aug-15	WSAS Website
2022-Aug-15	AWS Website
2022-Aug-19	Suntory website

Catchment Information



Kumamoto catchment map.jpg

Catchment Information

The Suntory Kumamoto plant sits within the groundwater catchment that has been formed by the Aso Volcano and contains large water reservoirs. Due to the volcano there are strata that allow groundwater to permeate and be stored, such as pyroclastic flow deposits, Togawa lava, gravel layer and new volcanic ash. The area around Mt. Aso is also one of the wettest areas in Japan.

The site has set their water catchment boundaries, based on publicly available groundwater level contour maps. In particular the 'Comprehensive Survey on Groundwater in Kumamoto Area in 1994' (Kumamoto Prefecture and Kumamoto City: Kumamoto, Japan, 1995). In any mountainous areas where information is scarce, boundaries are set based on topography and administrative boundaries. A longitudinal section of the geology of Kumamoto is available, outlining the main geological structures in the region

Client Description and Site Details

Client/Site Background

The Suntory Group established their Sustainable Water Philosophy in 2017, which consists of four pillars, the first being understanding the water cycle in each watershed based on a scientific data. Based on that understanding, they promote environmentally conscious water use, conserve local watersheds, and engage with the local community. Suntory have set ambitious water-based environmental targets for 2030, including: reducing the water intensity of production at their owned plants by 35% globally, replenish more than 100% of water used in at least 50% of their owned plants globally, collaborate with suppliers to improve water-use efficiency in the production of water-intensive key ingredients in highly water stressed areas, expand MIZUIKU water education programs and initiatives to provide safe water access for more than 1 million people.

The Suntory Kumamoto brewery plant was constructed in 2002 and started production in 2003, the site occupies 400,000 m2 and currently has 267 employees. Suntory Kumamoto is a beverage manufacturer, with a wide-ranging portfolio of drinks under the Suntory brand: beer and happoshu (low malt beer) 6 varieties, RTD (ready to drink) 27 varieties and soft drinks (including water) 28 varieties. The annual production from the plant is about 300,000 KL and its supply area is Kyushu, Okinawa and part of the Chugoku region. The site also houses a Visitor Centre, which pre-covid had about 80,000 visitors a year (2019). The Kumamoto region was hit by a significant earthquake in 2016, which shut down the plant and led to significant damage throughout the region. The site was actively involved in the reconstruction effort with local stakeholders.

The site obtains all of its raw water from 4 off-site wells (Well 5, 8, 9 & 15) and two on-site wells (Well 11 & 14). The incoming water goes through an external water processing facility, through one of three different processing routes, before entering the plant as: Brewery Water (BRW & MW), Pure Water (PW) or Mineral Water (MW). Water is also processed as cleaning water for production (CLW), with any processing water waste being used as WASH water (CTW). All wastewater is treated by the onsite wastewater treatment plant (WWTP) before being discharged into a regulating pond and ultimately into the nearby Tensui River.

The site obtained their AWS certification in 2019 and made the decision to go for the advanced indicators at this recertification audit. Suntory Kumamoto have developed a 'Kyushu Plant AWS Spreadsheet' that contains all the supporting documentation for their AWS system.

Summary of Shared Water Challenges

Summary of Shared Water Challenges

The main shared water challenges, identified by the site with its stakeholders are:

- Depletion of groundwater and freshwater resources
- Water pollution of the Tensui River due to wastewater

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0.1 General Requirements for Single Sites, Multi-Sites and Groups	
0.1.1	<i>Eligibility Criteria</i>
0.1.1.1	<i>The site(s) occupy one catchment OR an exception has been granted.</i>
Comment	The site is located within a single water catchment
0.1.1.2	<i>The scope of the proposed certification shall be under the control of a single management system.</i>
Comment	The Suntory Kumamoto site operates under a single management system.
0.1.1.3	<i>The scope of the proposed certification shall be homogeneous with respect to primary production system, water management, product or service range, and the main market structures.</i>
Comment	The scope of certification is for a homogenous primary production system, water management, product range and market structure.

1 STEP 1: GATHER AND UNDERSTAND

1.1 *Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.*

1.1.1 *The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:*

- Site boundaries;
- Water-related infrastructure, including piping network, owned or managed by the site or its parent organization;
- Any water sources providing water to the site that are owned or managed by the site or its parent organization;
- Water service provider (if applicable) and its ultimate water source;
- Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies;
- Catchment(s) that the site affect(s) and is reliant upon for water.



Yes

Comment

The site has supplied a Google Map that outlines the location of the site and any water related infrastructure surrounding it. The Kumamoto plant utilise two on-site wells: well 11 & 14 as well as four off-site wells: 5, 8, 9 & 15. The Google map lists four springs as well as the floating island spring pond, but it was initially unclear whether the springs are considered IWRAs. The Kumamoto team subsequently confirmed that they are all off-site (catchment) IWRAs and have been listed as such.




The site only receives water from the two on-site and four off-site wells and receives no municipal water. The audit team had view of a 'Water usage analysis' spreadsheet, which summaries water extraction rates across all 6 wells and each month, this was not supplied by the site in the initial evidence spreadsheet. The evidence in tab 1.1.1.2 in the evidence spreadsheet, now clearly maps the location of all production wells and their pipework back the site as well as the pre-production water treatment. The water treatment schematic is considered confidential and although it will be shared with WSAS, the site doesn't want it disclosed outside of the audit.

In the maps of 1.1.1.3, the red line marks the watershed that feeds the factory, the Institute for Water Science* based on the comment from Kumamoto University Professor Shimada. Kashima, Mashiki, and Mifune are the main cities surrounding the plant and are the Local Authorities. The plant is situated in the crossroad of all three. WSAS asked who the site has to report to from a local. The site has to report water use to Kashima town, and the other two are related local authority stakeholders. Regulatory boundaries have been mapped. The second map is showing the river framework for discharged water, Tensui river -> Yakata river -> Kase river. The Kase river is the final receiving body for the post-production treated wastewater.

*The Institute for Water Science is the basic research division of the Suntory Group.

The map on 1.1.1.4 shows the names and location of effluent discharge points. There are 3 types of effluent network, blue line is untreated wastewater, red network water used for WASH, purple line is post-production wastewater. Light blue area is the WWTP. Green line is network for washing PET bottles and for sterilising the production line between batches, this joins up with red and goes to the WWTP.




1.2 *Understand relevant stakeholders, their water related challenges, and the site's ability to influence beyond its boundaries.*

1.2.1	<p><i>Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall:</i></p> <ul style="list-style-type: none"> - <i>Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;</i> - <i>Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;</i> - <i>Provide evidence of stakeholder consultation on water-related interests and challenges;</i> - <i>Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;</i> - <i>Identify the degree of stakeholder engagement based on their level of interest and influence.</i> 	 Yes
Comment	<p>Stakeholder engagement is mainly the responsibility of the Kumamoto plant team, but the Sustainability Management Division in Tokyo and the Institute for Water Science in Kyoto will also engage with site-specific stakeholders such as Academia and also the farmers for the Winter Paddy Inundation Project.</p> <p>The stakeholders and their water related concerns have been recorded in a spreadsheet, which is included in the indicator tab in the evidence spreadsheet. Stakeholders have been included from the following groups: employees, HQ and parent company, on-premises contractors, local communities, agricultural producers, fisheries, academia, administration (public sector), enterprises and suppliers.</p> <p>Kumamoto Prefecture are responsible for 'water issues' and issue well licenses and monitor the groundwater levels. Suntory report their water use volume to the prefecture. Discharge water data is reported to the Public Health Centre of Kumamoto Prefecture.</p> <p>WSAS noted that the Shrine Caretaker by the floating island pond should be listed as a stakeholder. The shrine is next two off-site wells, a spring and the pond, and the caretaker constructed a new shrine on the Suntory site and is clearly familiar to the site. The stakeholder list records their level of influence and how the site engages with them.</p>	
1.2.2	<p><i>Current and potential degree of influence between site and stakeholder shall be identified, within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater.</i></p>	 Yes
Comment	<p>Table 1.2.1 2 has mapped the stakeholders against the AWS outcomes and their potential degree of influence. The stakeholder list in 1.2.1.1 also records the potential impact to the stakeholders or the site from the stakeholders. The stakeholders represent the site's ultimate water source and the ultimate receiving water body for wastewater.</p>	
1.3	<p><i>Gather water-related data for the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.</i></p>	
1.3.1	<p><i>Existing water-related incident response plans shall be identified.</i></p>	 Yes
Comment	<p>The site has provided a number of screenshots of the procedure 'Emergency procedure for chemical spills' from Effluent Treatment Facility (WWTP) at Kumamoto Plant. The site confirmed that it addresses the following:</p> <ul style="list-style-type: none"> - chemical contamination and chemical spills of effluent and production water. - rainwater contamination - monitor water quality of rainwater, storm drains/runoff water into holding tanks, tested and then discharged. <p>Annual training on how to respond to emergencies are conducted, and this was last held on the 26th of July 2022. Pictures from the event can be found in the site's ISO 14011 evidence booklet.</p>	

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1.3.2	<i>Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped</i>	 Yes
Comment	<p>The site has supplied three maps/schematics on the indicator page in the evidence booklet: a google map containing the pipe run from all the wells (incoming water), a schematic of the water treatment facility outside the plant and how it is distributed to the different production process and water uses and finally a site diagram that includes the WWTP and how the discharged water goes into the holding pond, before being discharged into the river. The evidence page also contains an additional flow diagram, with a simplified water balance covering the well area, water supply area, production process and drainage area. The flow diagram records losses.</p> <p>The site has supplied a google map containing the pipe runs from all the wells, going into the site. Each well has a clearly marked inlet, as observed during the site tour. The raw water is treated outside and is segregated at the incoming point and sent to a production category storage tank and put through the appropriate treatment process for the production category. The production categories are as follows: CLW, WW, PW, BRW, MW and CTW.</p> <p>CLW: Cleaning water in Production WW: Brewery water PW: Pure water BRW: Brewery water, different process MW: Mineral water CTW: WASH water</p> <p>The site has adequately mapped and identified the water balance components.</p>	
1.3.3	<i>Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.</i>	 Yes
Comment	<p>The site has produced a simplified graph that summarises the water balance for the site, an earlier iteration from 2020 data was translated into English and is attached for reference. As a result of the audit, the site produced a simplified water balance diagram for 2021, which is based on monthly data for water use on site. An example of the data spreadsheet from March 2021 is attached, listing all volume extracted from the wells, which production category it is sent to and what is sent to the onsite WWTP before being discharged from site. The monthly data sheets provide data on seasonal variance</p> <p>WSAS notes that the site records a 22% water loss for 2021 (236,857m3) which presents a significant water saving opportunity.</p>	
1.3.4	<i>Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.</i>	 Yes

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Comment	<p>The site has a comprehensive water quality monitoring system in place for all incoming well water, effluent at the WWTP and the receiving water body.</p> <p>The site monitors the chemical and biological quality of incoming water from the 6 active wells. Samples are taken weekly and are tested in-house against chemical and biological parameters. Samples are sent externally annually for third-party testing and verification. The table on tab 1.3.4(2) contains results from the well analysis schedule. For the surrounding spring water, trends in conductivity and turbidity are observed once a month.</p> <p>The site has a sizeable WWTP onsite, with controls in place that constantly monitor (24/7) the physical, chemical and biological state of the site's wastewater. If standard values are exceeded, then an alarm goes off, and the wastewater is stopped from being discharged. The monitoring screenshots supplied were from 2019 and the site supplied the latest screenshot from the day (20.09.2022). The site monitors the water quality of discharge water just before being discharged and after the discharge point, third party tests are conducted every three months and the latest test reports were supplied as screenshots and are in the evidence spreadsheet. More detailed analysis is conducted twice a year and the site shared a results screen during the audit.</p> <p>The map on tab 1.3.4.(1) shows the sampling points (downstream) of the receiving water body; testing is conducted twice a year by a third-party testing body. The page also contains front pages from test reports as well as pictures of the sampling process and sampling locations.</p>	
1.3.5	<i>Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.</i>	 closed
Comment	<p>The site has supplied a Chemicals Inventory in the evidence spreadsheet and have confirmed that they only PRTR Class 1 chemicals onsite, no Class 2 are stored. A Pollutant Release and Transfer Register (PRTR) is a national or regional environmental database or inventory of hazardous chemical substances and pollutants released to air, water and soil, and transferred off-site for treatment or disposal.</p> <p>The table shown excludes the raw materials for flavouring, and it also shows very low volumes of chemicals (kg). The site does not have a chemical store on-site and only and only small quantities are stored on site. The site does that a system in place to check out chemicals before use.</p> <p>The site has not mapped potential sources of pollution on the site map, including the chemicals used in the onsite WWTP.</p>	
	Finding No: TNR-002270	
1.3.6	<i>On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.</i>	 in progress
Comment	<p>The site has mapped the two on-site wells (Well 11 & 14) and identified them as onsite IWRA in the 1.1.1.1 tab in the evidence spreadsheet. The definition of an IWRA from the AWS Guidance was discussed at the audit and the site agreed that springs and water wells fall into this category. The site has also identified the discharge outlet from the site into the Tensui River. The discharge from the site is initially released into a regulating pond, which has environmental value, before it is discharged into the river. The site should consider classifying the regulating ponds as an onsite IWRA. Although the site has mapped the IWRA, it has not supplied any description of their status, in line with the standard.</p>	
	Finding No: TNR-001709	
1.3.7	<i>Annual water-related costs, revenues, and a description or quantification of the social, cultural, environmental, or economic water-related value generated by the site shall be identified and used to inform the evaluation of the plan in 4.1.2.</i>	 Yes

Comment	<p>The site has prepared two tables. Table 1 lists water costs, for their water projects, including a cost breakdown and the actual cost. The water projects are:</p> <ul style="list-style-type: none"> - Winter Paddy Inundation business - Groundwater resource recharge (forest maintenance) - Wells and irrigation water - Drain <p>The site has also quantified 'Shared Value' value table, breaking down the economic, social and environmental value of their projects. The Economic value has been defined as:</p> <ul style="list-style-type: none"> ☑Contributing to the creation of approximately 250 local jobs ☑Contributing to local tourism by attracting customers to factory tours (approximately 80,000 people per year) ☑Annual production of 68,000 bottles of "Aso's natural water", contributing to the promotion of the Kumamoto brand nationwide ☑Participated in the Kumamoto Prefecture Business Promotion Liaison Council, which is supervised by the Kumamoto Prefecture Commerce, Industry, Tourism and Labor Department's Corporate Location Division, and cooperated in attracting companies in Kumamoto Prefecture. ☑In 2019, the "Kumamoto Prefectural Sake Toast Ordinance" was enforced and selected as a target item, promoting the spread of prefectural sake and cooperating with prefectural residents, contributing to the revitalization of the prefectural economy and fostering love for the local area <p>The social value as:</p> <ul style="list-style-type: none"> ☑Concluded an agreement with Kashima Town on cooperation in the supply of drinking water in the event of a disaster ☑Immediately after the 2016 Kumamoto earthquake, our plant was also damaged, but we donated approximately 20,000 bottles of Suntory natural water free of charge to three neighboring towns (* Separately, the Suntory Group provided 210,000 bottles free of charge to Kumamoto Prefecture) ☑After the 2016 Kumamoto Earthquake, temporary housing users were invited to the factory, and all-you-can-drink beer, games, souvenirs, etc. were prepared as part of a mental recovery support activity (*Held seven times from 2017 to 2018, with a total of 540 participants) ☑After the 2016 Kumamoto earthquake, the Suntory Group developed "Suntory Water Country Kumamoto Support Project" as Kumamoto Earthquake Recovery Support Activity and decided an additional contribution of 300 million yen. As of June 2019, Suntory has conducted 57 support activities in direct contact with disaster victims, including 24 times by a factory. As part of this effort, the Suntory Kumamoto Groundwater Mirai Project carried out restoration work on 22 hectares of the paddy field "for Winter Paddy Inundation Business" in the Tsumori district of Mashiki Town, which was severely damaged, contributed to the resumption of farming in the next fiscal year. ☑ Elderly facilities & after-school day services & 1,614 people from 91 groups visiting factories with disabilities (*2018 results). We have been highly evaluated for our barrier-free facilities, safety measures, consideration for requests, etc. <p>The environmental value as:</p> <ul style="list-style-type: none"> ☑Recharge approximately twice the amount of groundwater collected in fiscal 2021 ☑The amount of groundwater taken at the plant is 1,077,894☑ ☑National Water Sanctuary Aso groundwater recharge capacity 2,233,846m3 (Kumamoto prefectural system: recharge amount = 0.2× precipitation × area) ☑Groundwater recharge in winter-flooded rice paddies: 1,320,000☑ (*according to Asia Planning research) ☑Of the 474 people in the priority areas (* 11 municipalities, 60% of the prefectural population) for which notification permission and recharge reporting are required by the Kumamoto Prefecture Groundwater Conservation Ordinance, the ratio of the amount collected at this plant is 1.0% and the ratio of the amount of recharge is 3.7% (*From Kumamoto Prefecture data in fiscal 2017)
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1.3.8	<i>Levels of access and adequacy of WASH at the site shall be identified.</i>		closed
Comment	The nature of drinking water and sanitation facilities on site was established through the site tour as being to a very high standard, with Covid-19 restrictions still being in place and enforced throughout the site. The site was to provide evidence on how the onsite WASH facilities meet national regulatory requirements, but none was supplied in the additional evidence submitted.		
	Finding No: TNR-002272		
1.4	<i>Gather data on the site's indirect water use, including: its primary inputs; the water use embedded in the production of those primary inputs the status of the waters at the origin of the inputs (where they can be identified); and water used in out-sourced water-related services.</i>		
1.4.1	<i>The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.</i>		Yes
Comment	The site has listed their primary inputs by suppliers of packaging material and then a list of all raw material suppliers to Suntory, undertaking a full review of their location in relation to the site and the quantity used in production. These can be located in the following tabs in the evidence spreadsheet: 1.4.1.(1) Supplier (Packaging Material), none of the companies identified are located within the catchment. 1.4.1.(2) List of Business Partners of the Raw Material 1.4.1.(3) One raw material supplier was identified for Suntory within the catchment, which is the processed milk supplier Sanyo Foods Corporation. Comparing the annual production volume of 226,438 KL at the Kyushu Kumamoto Plant, the purchased volume of sterilized milk was 1,040 KL, which was 0.46% of the total volume and falls- under the primary input criteria from the guidance. It is unclear whether the 226,438 KL is the total of products that contain milk. The site has prepared a water risk map of the Kumamoto water catchment.		
1.4.2	<i>The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.</i>		Yes
Comment	The site has identified three outsourced services that consume water or affect water quality: - Irrigation water quality analysis. - Wastewater quality analysis. - Septic tank analysis. These are all technical laboratory services, and even though they are within the catchment, there is no embedded water use associated with their operations. There are no outsourced laundry services, as all staff clean their own uniforms.		
1.4.3	<i>Advanced Indicator The embedded water use of primary inputs in catchment(s) of origin shall be quantified.</i>		Yes
Comment	The site has assessed all the raw materials utilised by the site and undertaken a water footprint analysis, looking at the embedded green and blue water that has gone into the production. They have calculated the amount of Green/BlueWater used in raw materials at the Kyushu Plant in 2021 based on The Food and Agricultural Organisation of the UN (FAO). This has been undertaken by the quantity used in all raw materials of processed products (%). The table contained in the evidence spreadsheet (tab 1.4.3) lists the m3/ton of green and blue water of raw materials, as well as the country of origin, of items such as: strawberries (Argentina), Oolong Tea (China), Uruchi Rice (Japan).		
Score	7		

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1.5	<i>Gather water-related data for the catchment, including water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH</i>	
1.5.1	<i>Water governance initiatives shall be identified, including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.</i>	 Yes
Comment	<p>The site has identified the following water governance initiatives:</p> <ul style="list-style-type: none">- Watershed Planning Strategy: Kumamoto Prefecture Groundwater Conservation Ordinance (Local Regulation). This encourages companies to monitor the volume of water use and monitor water quality, forest management for saving water. <p>Important public sector-led initiatives related to factories:</p> <ul style="list-style-type: none">- Kumamoto Prefectural Environment and Life Department, Environment Bureau, Environmental Establishment Prefectural Promotion Division.- Kumamoto Groundwater Foundation. www.kumamotogwf.org.jp	
1.5.2	<i>Applicable water-related legal and regulatory requirements shall be identified, including legally-defined and/or stakeholder-verified customary water rights.</i>	 Yes
Comment	<p>The site has listed the Water-related Legal Requirements of Suntory Brewery Kyushu Kumamoto Factory in a table. It lists what a regulation covers, the details of the regulation, the actions that the factory have to undertake and how it is recorded. The legal and regulatory requirements have been collated under the following general headings:</p> <ul style="list-style-type: none">- Generation of sewage (production wastewater)- Generation of sewage (domestic wastewater).- Noise generation- Generation of vibrations- Generation of foul odours /Use of ammonia.- Use of (underground) water/Subsidence/Groundwater Contamination <p>There is an agreement between Suntory and Kumamoto Prefecture on groundwater use volume and quality of water.</p> <p>The Engineering Department undertakes all the reporting and is responsible for regulatory oversight.</p>	
1.5.3	<i>The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.</i>	 Yes

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Comment Masatoshi Kawasaki the Deputy principal Researcher for the Institute for Water Science (Suntory employee) was present during the audit and explained the research undertaken to calculate the catchment water balance.

It shows the year-to-year fluctuation of the water balance calculated by the water cycle model constructed for the Kumamoto area. The calculation method is as shown in the figure on the right (Groundwater Society of Japan's presentation material). The amount of groundwater flowing into the Togawa lava (groundwater aquifer) is estimated to be about 280 million tons per year, although there are slight fluctuations depending on changes in precipitation. Compared to the amount of groundwater that Suntory Kumamoto draws, the amount of water is very abundant. The main aquifer in the Kumamoto area Water circulation system centered on Togawa lava

It also shows seasonal fluctuations in the water balance. Reflecting the high amount of rainfall from June to August, the amount of groundwater flowing into the Togawa lava also changes slightly. The amount of water throughout the year is abundant.

Future Supply and Demand Forecasts. According to the 3rd phase of the Movement Plan (2019~2024) based on the Kumamoto Area Comprehensive Groundwater Conservation and Management Plan prepared by Kumamoto Prefecture. The estimated values of groundwater sampling and recharge are as follows. In terms of the amount of extraction, by promoting water-saving activities and advancing efforts to rationalize groundwater use under the Groundwater Conservation Ordinance, Groundwater extraction is expected to decline. In addition, the amount of recharge is expected to decrease with changes in land use, and according to the Groundwater Conservation Ordinance, Measures such as requiring those who are permitted to collect groundwater are required to take recharge measures according to the amount of groundwater extracted.

1.5.4 *Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.*



Yes

Comment The site undertakes catchment water quality monitoring, for the physical, chemical and biological conditions of the sites water source. It has been monitored every year since Heisei 29 (2017), but there is no change in water quality in both rivers and the sea

There are a number of springs located within the immediate catchment of the factory; they monitor three of them which are listed in the 1.1.1 map, Niida, Nigawa and Haze Mountain. A map of catchment locations where the prefecture monitors water quality was supplied and the site has access to that data, a link is provided in the spreadsheet.

The site monitors all the off-site wells and has water quality data available for those locations, sample test data and testing schedule information from Well 8 was supplied in the evidence spreadsheet against indicator 1.3.4. For Well No. 8 Microbiology tests are conducted every Wednesday, Chemistry (pH, hardness, conductivity, turbidity) tests are conducted every Thursday, as well as the elements (Na, Mg, Ca, K). For the surrounding spring water, trends in conductivity and turbidity are observed once a month. Spring water analysis data was supplied in the evidence spreadsheet. (1.3.4)

1.5.5 *Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.*



in progress

Comment The site has made two of their catchment IWRAs 'Priority Management Areas for Water Management':

- Approximately 420 hectares of "Natural Water Sanctuary Aso" in the water source recharge area of the upstream area of the Kyushu Kumamoto Plant
- Approx. 11 hectares of paddy rice field for "Winter Paddy Inundation Business" in the Tsumori district of Mashiki-cho.

The forest in the recharge area of the Kyushu Kumamoto Plant is important for long-term water quality conservation, and the site would like to maintain and preserve as much area as possible. Since this area is judged to be important to the Company and its stakeholders from environmental and economic perspectives, it has been designated as a priority water-related management area.

In addition, the off-site wells, spring ponds and Ukishima Shrine were also designated as IWRA. Please refer to 1.1.1 (1) as well as the factory area map.

The current status of the IWRAs has been defined in terms of how they are being preserved and managed. The site is engaged in forest maintenance activities to improve the function of ground-water recharge. In 2021, in order to improve the ground-water recharge function, thinning of about 17 ha (Mashiki Town Forest of Aso, 3.42 ha of Nishihara Village Forest, and 9.71 ha of Shiroyama National Forest) was carried out in the "Natural Water Sanctuary Aso". In the Tsumori area of Mashiki Town, with the cooperation of local farmers, the "Winter Paddy Inundation" is held every year from November - March after the harvest, aiming to improve biodiversity by conducting organic farming in the paddy field and the groundwater recharge function by winter inundation.

Finding No: TNR-002396

1.5.6 *Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.*


Yes

Comment The site does not rely on any public water-related infrastructure, as it extracts all of its own water and has a significant WWTP on-site. The indicator asks the site to provide a summary of the water infrastructure in the catchment, as it could be a catchment water risk as well as a catchment shared water challenge. There is a 70% sewerage coverage rate within the Kumamoto Prefecture and Municipalities in the prefecture are developing sewage treatment facilities in line with the Kumamoto Domestic Wastewater Treatment Concept 2016.

In the neighbouring Kashima town, each household has their own well, but they are planning to introduce a water supply system as the town is expanding and this should be considered a new infrastructure. The site has provided links to the Kashima Town Public Sewerage Business Management Strategy and the Kashima Town Simple Water Supply Business Management Plan. The information supplied against 1.5.7 in the evidence spreadsheet also covers 1.5.6.

1.5.7 *The adequacy of available WASH services within the catchment shall be identified.*


Yes



Comment The site has reviewed available WASH services within the Kumamoto Prefecture and data has been collated for the towns in the Prefecture. This includes data on access to sewerage and water supply coverage. The tables contained within the 1.5.7 evidence spreadsheet tab, contain data from Japan, Kumamoto Prefecture and individual towns within the Prefecture. Municipalities in the prefecture are developing sewage treatment facilities in line with the Kumamoto Domestic Wastewater Treatment Concept 2016. Compared to the previous fiscal year, the penetration rate of the prefecture as a whole increased by 0.4 percentage points in 2018.

The 'sewerage treatment population penetration rate by prefecture' map is for the whole of Japan, and the sewerage penetration rate for Kumamoto Prefecture is 70.1% and 90.5% for Kumamoto City. In Kashima town the water supply coverage is 0% as they obtain all their water from town wells and their discharge point is in Mifune town.

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1.5.8	<i>Advanced Indicator</i> <i>Efforts by the site to support and undertake catchment level water-related data collection shall be identified.</i>	 Yes
Comment	<p>The site has supplied data to the Kumamoto Groundwater Foundation and a report of water use from wells (April - March) from Suntory was supplied to Kumamoto Prefecture, in line with the requirements of the municipality. The evidence spreadsheet contains 4 tabs to support this indicator:</p> <p>1.5.8.1: Extract from the report on the 'Implementation Status of the Groundwater Use Rationalization Plan' submitted to Kumamoto Prefecture 1.5.8.2 Provision of findings from the Institute of Water Science (Water Balance Calculation Results) to Kumamoto Prefecture (2022/8/22) 1.5.8.4 Email submission of water sampling volume and groundwater rationalisation and recharge volume plan for Kyushu Kumamoto Plant to Kashima Town.</p> <p>There is a complex set of calculations behind the Winter Paddy Inundation Project on measuring the recharge rate from flooded paddy fields, to establish the absorption rate. The site has submitted data from the Winter Paddy Inundation Project to Kashima Town. The site is also collecting data on groundwater recharge rates in the area of Natural Water Sanctuary forests protected by Suntory, this is recorded against 1.3.7. Describing a reference of the formula for groundwater recharge rates in the forest areas, Kumamoto Prefecture.</p> <p>Documents uploaded: Suntory's 'Natural Water Sanctuary Aso' drawings and area and Suntory's Winter -Flooded Paddies' drawings and area</p>	
Score	7	
1.5.9	<i>Advanced Indicator</i> <i>The adequacy of WASH provision within the catchments of origin of primary inputs shall be identified.</i>	 Yes

Comment

The Suntory Group joined Sedex, the ethical trade organisation working with businesses to improve working conditions in global supply chains, in June 2019. And request that their suppliers either join Sedex or complete a self-assessment questionnaire. Suntory uses Sedex on their primary suppliers but not secondary suppliers. The company approach to sustainable procuring can be accessed here:
<https://www.suntory.co.jp/company/csr/activity/service/procurement/>

Suntory are strengthening management with suppliers through Sedex Information to understand risks related to water access and sanitation rights in local communities. They use questions in Sedex to confirm various pollution risks (soil, rivers, etc.), water consumption, wastewater management, management of water quality impacts on local areas, etc. due to supplier operations. As a result of the SAQ, 2% of manufacturing sites did not control wastewater quality.

The amount of main raw materials used was identified (from the list in 1.5.3) with malt being the most commonly used. The main production areas of malt were identified against the "WASH Indicators" in the "White Paper on World Children 2021" published by UNICEF, and the WASH situation in the main malt producing countries was identified as follows:
50% of malt used in the plant is from Canada (99% low end basic drinking water service, 99% minimum basic sanitation service).
20% of malt used in the factory is from the Czech Republic (100% of low-end basic drinking water service, 99% of minimum basic sanitation service).

The major coffee producing areas were mainly origin unknown, except for the following:
Vietnam: 7% of plants use it (low 90% or more for basic drinking water service, 90% or more for minimum basic sanitation service overall).
Brazil: 3% of plants use it (rural minimum basic sanitation service as low as 65%; other than that, over 90%).
Indonesia: 1% of plants use this
Colombia: 1% of plants use them
Malaysia: 1% of plants use them

The Suntory Group has contracted part of the coffee supply with Bau Farm, one of the Brazil's leading specialty coffee farms located in the Cerrado district of Minas Gerais, Brazil. The farm has obtained international certifications such as the Rainforest Alliance and UTZ and has received a very high reputation for its thorough quality control and working environment, as of 2021, coffee from Bau Farm may be used in Kyushu P.

Score

4

1.6

Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.

1.6.1

Shared water challenges shall be identified and prioritized from the information gathered.



Yes

Comment

The site has identified two water challenges:
- Depletion of groundwater and freshwater resources (row 7 & 8) Priority 1
- Water pollution of the Tensui River due to wastewater (row 9) Priority 2

The site has developed a table that covers the requirements of 1.6.1 and 1.6.2, please reference the corresponding tab in the evidence spreadsheet.

1.6.2

Initiatives to address shared water challenges shall be identified.






No

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Comment	<p>The site has supplied information on how they submit information to the relevant authorities, to demonstrate that they are not having a negative operational impact on the shared water challenges.</p> <p>- Depletion of groundwater and freshwater resources: the site submits their pumped water volume (1,042,320 m3/year) to the Kumamoto Prefectural Environment Department, as they monitor groundwater levels.</p> <p>- Water pollution of the Tensui River due to wastewater Measurement of water quality regulations (pH, BOD, SS, E. coli group) through laws and agreements"</p> <p>The site actively undertakes initiatives to address both shared water challenges, but they have not been listed against this indicator. Please refer to indicator 1.5.5 for information on the groundwater recharge projects undertaken by the site. The site has set much stricter limits to the WWTP discharge, ensuring clean wastewater is discharged into the Tensui River.</p> <p style="text-align: right;">Finding No: TNR-002277</p>	
1.6.3	Advanced Indicator <i>Future water issues shall be identified, including anticipated impacts and trends</i>	 Yes
Comment	<p>This advanced indicator is aligned with 1.5.3. According to the 3rd phase of the Movement Plan (2019~2024) based on the Kumamoto Area Comprehensive Groundwater Conservation and Management Plan prepared by Kumamoto Prefecture, it has been reported that there are issues with the groundwater recharge rates. The impact of the 2016 Kumamoto Earthquake is expected to recover more or less. Groundwater levels and spring water levels have also been confirmed to be recovering in recent years.</p> <p>Through communication with the prefecture, the site is aware of new environmental changes that could become future water challenges, The issues are:</p> <p>- Water use rights on the river</p> <p>- Groundwater recharge from the rice paddies were affected by the earthquake, from cracks generated in the geology.</p> <p>The site has also identified the TSMC factory, which is a huge semiconductor business with very high water use rates, and it is setting up business in Kumamoto. The recovering groundwater levels could encourage other big water users to set up shop in the area</p>	
Score	3	
1.6.4	Advanced Indicator <i>Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.</i>	 Yes
Comment	<p>The site has undertaken a social impact assessment, with a focus on water and their impact on groundwater levels. As a result of the impact assessment, based on the water cycle model developed by Suntory, Professor Shimada confirmed that the impact on the water environment such as spring water in the surrounding area is very small. The email from Prof. Shimada. confirming the outcome of the impact study can located in the evidence spreadsheet.</p>	
Score	4	
1.7	Understand the site's water risks and opportunities: Assess and prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues and future risk trends identified in 1.6.	
1.7.1	Water risks faced by the site shall be identified, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.	 Yes

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Comment

The site has identified 6 water risks for the site and scored the likelihood and severity, including business impact. The six water risks are as follows, please reference the evidence spreadsheet for the scores:

Physical Risk - Groundwater, an indispensable resource for product production, will be depleted. Looking at the water balance of the watershed at the moment, we judge that the possibility of groundwater depletion is low, but from the perspective of business continuity (BCP), we believe that the severity of the impact is high.

Physical risk - Groundwater, which is an indispensable resource for the production of products, is contaminated. Although there are no chemical factories operating in the watershed that are a potential cause of groundwater contamination, there is some concern about the impact of pesticides from small-scale farmers, etc., and a system is being established to periodically check information provided by the government. In the event of groundwater contamination, although it will have an impact from the perspective of business continuity (BCP), we believe that it will not affect the supply from all wells.

Regulatory Risk, concerns about groundwater resources cause constraints on pumped water volume. Looking at the water balance of the watershed at the moment, we judge that it is unlikely that a constraint will occur on the amount of pumped water (about 1.5 million tons/year), but from the viewpoint of business continuity (BCP), we believe that the severity of the impact is relatively high.

Regulatory Risk, concerns over water pollution in the Tensui River have led to stricter regulations on wastewater discharge. Although the water pollution of the Tensui River may be influenced by pesticides from small-scale farmers, it is judged that it is unlikely to result in water pollution on a scale that puts a burden on the basin. In addition, even if the description of water quality becomes stricter, we will cooperate with the government and take measures to keep it within the range of that value, so we believe that the severity of the impact is relatively low.

Regulatory Risk, the Kyushu Kumamoto Plant is said to be responsible for the depletion of groundwater resources and water pollution of the Tensui River and will be subject to administrative punishment. Regarding the depletion of groundwater resources and water pollution of the Tensui River, we judge that the possibility of administrative punishment occurring is low because of the thorough discharge within the regulatory values and the fact that emergencies are coordinated with the government. In the event that an administrative action is taken, the severity of the impact is considered to be relatively high from the viewpoint of business continuity (BCP).

Reputation Risk, the Kyushu Kumamoto Plant is said to be the cause of the depletion of groundwater resources and water pollution of the Tensui River, and it is criticized by the local community, which will lead to a deterioration in the reputation and brand recognition of the entire Suntory Group and a negative impact on sales. The local community conveys the efforts of the Kyushu Kumamoto Plant through factory tours and next-generation environmental education "MIZUIKU water education", etc. Although the Company judges that the possibility of criticism occurring is relatively low, if the reputation and brand image of the Suntory Group as a whole deteriorates, the impact of the decrease in sales will be significant.

1.7.2

Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.





Yes

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Comment	<p>The site has identified the following water-related opportunities:</p> <ul style="list-style-type: none">- Improving trust from the government and local communities for the Kyushu Kumamoto Plant, through the forest maintenance activities of the "Natural Water Sanctuary" initiative.- Improving trust and reputation in the Suntory Group, and increasing product sales, through the activities of the Natural Water Sanctuary- Conservation of groundwater resources, through "Natural Water Sanctuary" activities and water-saving activities- Maximizing production within the framework of agreed values, through water-saving activities- Maintaining the water quality of the Tensui River, through wastewater management <p>The opportunities have been scored, with a max score of 10 for a high perceived opportunity. It is difficult to quantify these opportunities, but some business opportunities have been identified, but less so on the potential savings.</p>	
1.8	<i>Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.</i>	
1.8.1	<i>Relevant catchment best practice for water governance shall be identified.</i>	<div> Yes</div>
Comment	<p>The 'AWS Best Practices Survey Table' was presented as evidence against Step 1.8, covering water governance, water balance, water quality, IWRAs, WASH. The spreadsheet can be found on tab 1.8.4 in the evidence spreadsheet.</p> <p>The spreadsheet has identified a number of best practices and column G-K lists the 5 AWS outcomes. the best practice described can then be recorded as being BP against more than one AWS outcome. There are hyperlinks to the websites explaining the best practice activity and additional columns score the best practice on whether it is linked to: water volume, water savings, water quality or stakeholder communication. The table at the very end, assesses whether it is applicable to the site, feasible and should be done, already done, more research needed or not applicable. The table contains hyperlinks to reports and websites, providing a good audit trail for verification.</p> <p>The 'AWS Best Practices Survey Table' is comprehensive and contains numerous examples for all five AWS Outcomes. The following best practice initiatives are listed under Governance:</p> <ul style="list-style-type: none">- Report in accordance with the Basic Act on the Water Cycle, Describes the need for education on water. Public sector best practice.- Governance of Watershed Groundwater Management, Examples of Groundwater Management Initiatives in the Basin Water Cycle Plan. Public sector best practice.- Governance of Watershed Groundwater Management, Watershed Management Guide. Public sector best practice.- Groundwater Management Governance, Introduction and Operation Guide to Groundwater Management. Public sector best practice.- Suntory Manual that summarizes best practices for achieving the maintenance goals of "Natural Water Sanctuary Initiatives"	
1.8.2	<i>Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.</i>	<div> Yes</div>

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Comment	<p>The 'AWS Best Practices Survey Table' is comprehensive, please reference 1.8.1 for further details, it contains numerous examples for all five AWS Outcomes. The following best practice initiatives are a sample of initiatives listed under water balance:</p> <ul style="list-style-type: none">- Beverage Industry Environmental Roundtable (BIER), 2018 Benchmarking Study Trends & Observations. Water conservation (per unit of water)- Science Based Target Network (SBTN) Water Resources Management, Management method for reducing the burden on water resource use for the entire corporate value chain- Nestle, Water conservation, water withdrawal. Extraction of water from raw materials (milk).- Japan Steel, reuse of cooling water and water management practices. Nippon Steel sites, including steelworks and plants, use approximately 5.9 billionm3 of fresh water annually, of which about 90% is reused and recycled.	
1.8.3	<i>Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.</i>	 Yes
Comment	<p>The 'AWS Best Practices Survey Table' is comprehensive, please reference 1.8.1 for further details, it contains numerous examples for all five AWS Outcomes. The following best practice initiatives are a sample of initiatives listed under water quality:</p> <ul style="list-style-type: none">- Kubota, Japanese company developing wastewater treatment technology. MBR membrane in Kirin system, flat film type- Naruko Katayama, water tech company. Automatic water quality management with continuous monitoring- Suntory Oyama WP, Wastewater RO membrane treatment. Voluntary standard values are strict in response to discharge into mountain streams.	
1.8.4	<i>Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.</i>	 Yes
Comment	<p>The 'AWS Best Practices Survey Table' is comprehensive, please reference 1.8.1 for further details, it contains numerous examples for all five AWS Outcomes. The following best practice initiatives are a sample of initiatives listed under IWRA's:</p> <ul style="list-style-type: none">- Examples of Groundwater Management Initiatives in the Basin Water Cycle Plan e.g. Ono City, Hadano City, Saijo City.- Prince HD, Sustainable Forest Resources, 130,000 hectares of forest conservation activities (440,000 hectares excluding production forests) <p>This is one of the AWS outcomes with the least best practice examples and is an area that Suntory can focus on in the coming years.</p>	
1.8.5	<i>Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.</i>	 Yes
Comment	<p>The 'AWS Best Practices Survey Table' is comprehensive, please reference 1.8.1 for further details, it contains numerous examples for all five AWS Outcomes. The following best practice initiatives are a sample of initiatives listed under WASH:</p> <ul style="list-style-type: none">- Suntory Kumamoto, Installation of drainage and decarboxylation processes. Removes bicarbonate ions, which are agglomerate inhibitors.- Hokuto City, Water supply penetration rate: 96.8%, domestic wastewater clean treatment rate: 97.7% <p>This is one of the AWS outcomes with the least best practice examples and is an area that Suntory can focus on in the coming years.</p>	

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2 STEP 2: COMMIT & PLAN - Commit to be a responsible water steward and develop a Water Stewardship Plan	
2.1	Commit to water stewardship by having the senior-most manager in charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.
2.1.1	<p>A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments:</p> <ul style="list-style-type: none"> - That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes - That the site implementation will be aligned to and in support of existing catchment sustainability plans - That the site's stakeholders will be engaged in an open and transparent way - That the site will allocate resources to implement the Standard.
Comment	The site statement meets the requirements set out in the indicator. The statement was authorised by Mr Katsumi Oshita (Plant Manager) on the 1st October 2021 and it is displayed in the factory and included in the 2021 AWS Activity Report. Japan does not formally sign documents but use an official stamp.
2.1.2	<p>Advanced Indicator</p> <p>A statement that explicitly covers all requirements set out in Indicator 2.1.1 and is signed by the organization's senior-most executive or governance body and publicly disclosed shall be identified.</p>
Comment	Please reference 2.1.1, the statement is comprehensive, and also included in the 'AWS Activity Report 2021'.
Score	1
2.2	Develop and document a process to achieve and maintain legal and regulatory compliance.
2.2.1	<p>The system to maintain compliance obligations for water and wastewater management shall be identified, including:</p> <ul style="list-style-type: none"> - Identification of responsible persons/positions within facility organizational structure - Process for submissions to regulatory agencies.
Comment	<p>The Kumamoto site operates a 'FY2021 Register of Environment-related Laws and Regulations and Compliance Evaluation Chart'. For each regulation it breaks down the specific requirements and then identifies the responsible department and person. The table then identifies what needs to be done, when it is planned in the year (12 columns identifying each month) and records when it is done.</p> <p>The site therefore has a process in place to maintain compliance obligations and has identified the persons responsible for each compliance activity.</p>
2.3	Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.
2.3.1	A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.

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Comment

The strategy is contained on the same sheet as the water stewardship plan and consists of three bullet points that set out how the sites mission, vision and targets for water stewardship. The Suntory Group believes in the Sustainable Water Philosophy, achieving this philosophy is done by setting the company environmental targets for 2030 and vision 2050. The vision is achieved through the Water stewardship plan.

- Delicious water cannot be produced without forests that accept snow and rain and store them deep underground. We will promote the creation of forests that nurture water with the aim of preserving forests with an area sufficient to recharge groundwater that exceeds the amount of water collected at the plant.
- The water used in the manufacturing process is separated and collected, and then recycled (reused) as much as possible to reduce the amount of water used as much as possible.
- Water that cannot be reused by any means is released after confirming that the water quality and temperature do not affect the environment, and the surrounding natural environment is conserved. "

2.3.2

A water stewardship plan shall be identified, including for each target:

- *How it will be measured and monitored*
- *Actions to achieve and maintain (or exceed) it*
- *Planned timeframes to achieve it*
- *Financial budgets allocated for actions*
- *Positions of persons responsible for actions and achieving targets*
- *Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.*



Yes

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Comment The WSP has been developed and scored against the 5 AWS outcomes, it currently contains 4 WSP Actions:

1. Increasing the willingness of landowners to participate in Winter Paddy Inundation projects
2. Recharge of groundwater resources
3. Water Conservation Reduce water intensity per unit (m3/KL)
4. Wastewater management Continuously meet the wastewater regulations (standards) values stipulated in the "Kumamoto Prefecture Wastewater Regulations (Wastewater Standards)

The targets are well thought out and ambitious, but some of them are open ended and have an end date of 2030-2035. The targets address shared water challenges, but it was discussed whether the targets are SMART, particularly the time-based element. The site does have annual action plans related to the 4 main WSP targets and these could be incorporated into the existing plan, to demonstrate that it is dynamic with annual SMART targets.

The site subsequently submitted an amended WSP which now contains long-term and short-term targets. tracking the action across the requirements of the standard. The columns record the following: Purpose (G), Objective/Action (H), Index/Metric (I), Activity (J), Start date (K), End date (L). Budget/Cost (M), Responsibility (N), Relevance to risks/opportunities (O), Stakeholders (U). Column U & V now contain the annual smart targets, under 'single year planning' and 'achievement of single year plans'.

The plan now contains the following actions:

- Reduce water intensity (m3/KL) by 35% from 2015 to 2030
- Continuously meet the wastewater regulation (standard) values stipulated in the "Kumamoto Prefecture Wastewater Regulations (Wastewater Standards)".
- Secure the amount of groundwater used in factories 1. Restoration and protection of highly permeable soil through forest maintenance 2. Creation of habitats where birds of prey standing at the top of the ecosystem pyramid can reproduce (confirmation of nesting, etc)
- Promotion of groundwater recharge in rice paddies by winter inundation (commonly known as winter-flooded rice paddies)
- Securing participants in "MIZUIKU Water education" activities and expanding awareness of activities
- The area around Ukishima Shrine, which is located near the factory, is an abundant spring water area (factory wells are also installed). Water resources in the area and the surrounding environment; Pollution prevention; Fostering communication with residents of the area; Maintain and improve employees' environmental awareness.

2.3.3

Advanced Indicator

The site's partnership/water stewardship activities with other sites within the same catchment (which may or may not be under the same organisational ownership) shall be identified and described.



Yes

Comment

The site's undertakes water stewardship activities with a number of key stakeholders, such as Mashiki Town, Mashiki Town Land Improvement District and Kumamoto Groundwater Foundation. The site has developed a table that lists: the partner, form of partnership. water stewardship activities undertaken and the site's role.

For example: Kumamoto Prefectural Forestry Corporation > 'Natural Water Sanctuary Aso' forest development agreement > water resource recharge at Natural Water Sanctuary Aso > Maintenance coordination and subsidy application.

The table contains 17 examples of identified partnerships on water stewardship activities within the catchment and it has described the relations between the site and its partner.





Score

4

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2.3.4	Advanced Indicator <i>The site's partnership/water stewardship activities with other sites in another catchment(s) (either under same corporate structure or with another corporate site) shall be identified.</i>	 Yes
Comment	Suntory's 'Natural Water Sanctuary' initiative' started in 2003 with the 'Natural Water Sanctuaryt Aso' in Kumamoto. The water source protection project has now expanded to cover 12,000 ha, at 21 locations in 15 prefectures in Japan. Suntory Holdings has a contract in place with each land owner, such as the local authorities, of the area in Suntory Natural Water Sanctuary and has included a link to the contract and a screenshot in the evidence booklet.	
Score	4	
2.3.5	Advanced Indicator <i>Stakeholder consensus shall be sought on the site's water stewardship plan. Consensus should be achieved on at least one target. A list of targets that have consensus and in which stakeholders are involved shall be identified.</i>	 Yes
Comment	<p>The site has compiled a table in the evidence spreadsheet, which lists 12 stakeholders that they have sought consensus from (agreement) for the targets in their WSP. The table identifies a list of goals that stakeholders agree on and are involved in. The table headings are as follows: stakeholder, agreed goal, WSP target, consensus, how they are working together (agreement).</p> <p>The site has presented the two external Water Stewardship Plan targets to Mashiki Town and has received positive feedback and thereby consensus for the following targets:</p> <ol style="list-style-type: none">1. Increasing the willingness of landowners to participate in Winter Paddy Inundation projects2. Recharge of groundwater resources <p>A report is attached on the projects and the Suntory collaboration, not only with Mashiki Town, but other key stakeholders in the developing projects to address the targets in the site's WSP.</p>	
Score	7	
2.4	Demonstrate the site's responsiveness and resilience to respond to water risks	
2.4.1	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.	 closed
Comment	The site has expanded the water risk table from indicator 1.7.1 and have added a column (yellow) that outlines initiatives that the site undertakes, in response to those risks. The table is comprehensive as are the initiatives that the site delivers. However, the table does not identify the public-sector and infrastructure agencies that the site works with on those initiatives.	
	Finding No: TNR-002320	
2.4.2	Advanced Indicator <i>A plan to mitigate or adapt to water risks associated with climate change projections developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.</i>	 Yes

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Comment The relevant local climate change adaptation plans, formulated by Kumamoto Prefecture and Kumamoto City, have been identified: 4th Kumamoto Prefecture Basic Environmental Guidelines (FY Reiwa 3~12), Sixth Kumamoto Prefecture Basic Environmental Plan (FY Reiwa 3~7), Kumamoto City Low Carbon City Development Strategic Plan. The site has also extracted the relevant water-related elements of the climate change projections within the plans.

Score 6

Suntory formulated initiatives in collaboration with Kumamoto Prefecture and the Kumamoto Groundwater Foundation (chaired by the mayor of Kumamoto City) and in the presence of Kumamoto Prefecture, regarding the Winter Paddy Inundation Project. This now forms part of the Kumamoto Prefecture and Kumamoto City adaptation measures.

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3 STEP 3: IMPLEMENT - Implement the site's stewardship plan and improve impacts

3.1 *Implement plan to participate positively in catchment governance.*

3.1.1 *Evidence that the site has supported good catchment governance shall be identified.*



Yes

Comment

The site has pulled together a summary tables of events that they have undertaken, although most records stop at the beginning of Covid-19 due to lockdown conditions and covid restrictions were enforced at the time of the audit. The site has proactively engaged with the local community in environmental and social events. In terms of water-related events, there are monthly cleaning events at the floating water pond shrine, this has been done monthly for the last 16 years

The site also delivers a wide range of water-related projects that contribute towards water governance outcomes, these are:

- Winter Paddy Inundation project for groundwater recharge
- Natural Water Sanctuary programme
- Providing MIZUIKU-Education Program for Nature and Water, and Safe Water Access
- Water -related collaboration research undertaken by Professor Shimada at Kumamoto University and the Institute for Water Science in Suntory Group

3.1.2 *Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.*



Yes

Comment

There are no water rights identified of others that would fall under the requirements of this indicator

3.1.3 *Advanced Indicator
Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified.*



Yes

Comment

The site started their baseline date for this indicator on the 01.10.2021 and have recorded a number of activities in the table for this indicator. Their stated improvement record for governance capacity of water resources is:

26/04/2022: AWS Education Web participation in AWS education by SHD Sustainer Detective
28/07/2022: Explanation at the Environmental Conservation Council, providing and AWS Overview and explaining the Five Outcomes at the Environmental Conservation Council.
24/08/2022: General Morning Meeting Announcement of the Grand Prix Award of the Kumamoto Groundwater Foundation's Groundwater Conservation Commendation.
29/08/2022: Explanation in the entire factory meeting about AWS overview and 5 outcomes
20/10/2022: Explanation about "Winter-flooded Rice Paddies" overview and biodiversity improvement effectiveness for owners and farmers at Mashiki Town. Mashiki Town Farmers: 50 cases

The site is dedicating more time to disseminate the standard internally and outside of the factory boundaries. The site should also consider reviewing the AWS Guidance document for this advanced indicator, which states that it could be demonstrated by recording that existing employees have been given greater responsibility and time to engage in water stewardship.

Score

2

3.1.4 *Advanced Indicator
Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the good water governance of the catchment shall be identified.*





Yes

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Comment	<p>The site has submitted the following evidence for this indicator: supportive comments from Prof. Shimada (received on August 23) and from the Kumamoto Prefecture (also received on the 23 August).</p> <p>Prof. Shimada's statement was: It is certain that the site is actively trying to contribute to the governance of appropriate water resources in the basin, such as the fact that the water cycle model acquired by Suntory has begun to contribute to the sustainability of groundwater use in the Kumamoto area. In addition to this, the most objective and accurate evidence is the evaluation of various awards from the region for the site's efforts to improve the water environment. Specifically, the site has received the following water, environmental, and groundwater awards from various local organizations:</p> <p>H17 (2005) Higo Water and Greenery Patronage Award H25 (2013) Kumamoto Groundwater Foundation Groundwater Conservation Award Gold Award Certified Company H27 (2015) Kumamoto Prefecture Kumamoto Environmental Award (Water Country Award) H29 (2017) Same as above, Environmental Grand Prize R4 (2022) Kumamoto Groundwater Foundation Groundwater Conservation Awards 3rd Best Grand Prix</p> <p>Based on these findings, we believe that the site is actively contributing to the governance of appropriate water resources in the basin.</p> <p>The email from the Kumamoto Prefecture is regarding their reporting on Suntory Kumamoto's groundwater conservation efforts and consists of minutes from a meeting between the two parties. The prefecture state that: Suntory are actively working to contribute to the governance of water resources in the Kumamoto area. We are aware of individual initiatives such as the Kumamoto Earthquake Recovery Project and agree with the overall picture of Suntory's efforts to ensure water sustainability. We believe that such efforts contribute to the governance of water resources. In the future, we would like to set up a place for communication to share mutual activities and water issues. Suntory has developed and owns the latest version of the important water cycle model and Suntory's model is becoming increasingly important to find out what is possible. With TSMC setting up a factory in the region and the increase in groundwater use, major changes are taking place in the environment and what kind of impact will it have on the spring water and groundwater of Lake Ezu and Kashima in the Kumamoto area.</p>		
Score	2		
3.2	<i>Implement system to comply with water-related legal and regulatory requirements and respect water rights.</i>		
3.2.1	<i>A process to verify full legal and regulatory compliance shall be implemented.</i>		Yes
Comment	<p>Please reference the spreadsheet embedded in indicator 2.2.1 this is a comprehensive record, demonstrating the process Suntory undertakes in verifying full legal and regulatory compliance. Please reference the regulatory submission to Kumamoto Prefecture that is recorded against indicator 1.5.8, for the volume of water extracted from the wells (April 2021/March 2022) 1,402,320m3 extracted in total.</p>		
3.2.2	<i>Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.</i>		Yes
Comment	<p>The site has stated that there are no water rights of others identified for the site and catchment.</p>		
3.3	<i>Implement plan to achieve site water balance targets.</i>		

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3.3.1	<i>Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.</i>	 Yes
Comment	<p>The third target in the WSP states that the site will implement water conservation measures and reduce water intensity per unit (m3/KL) by 35% from 2015 to 2030. The site has reduced water intensity per unit by about 22% between 2015 and 2021 and a further 2% improvement in basic unit is expected in 2022.</p> <p>Table 1 provides a good summary of progress towards improving the water ratio. and the site will translate Table 2 as it outlines more detailed information on the water reduction and efficiency activities undertaken by the various departments. All departments have an annual action plan, which lists the water efficiency activities that they will introduce that year. There has been less transparency on the activities that underpin this, but the information is available. There might be good practice hidden in the information and the site will work on making it more transparent.</p>	
3.3.2	<i>Where water scarcity is a shared water challenge, annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented.</i>	 Yes
Comment	<p>Water scarcity is not currently a shared water challenge, but it has been identified as a potential future water risk. Regardless, the site has set targets for improving the site's water use efficiency and this is recorded in the tables submitted against indicator 3.3.1.</p>	
3.3.3	<i>Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.</i>	 Yes
Comment	<p>The site does not reallocate any water to social, cultural or environmental needs, and no legally binding documentation is therefore required.</p>	
3.3.4	<i>Advanced Indicator The total volume of water voluntarily re-allocated (from site water savings) for social, cultural and environmental needs shall be quantified.</i>	 Yes
Comment	<p>The site does not reallocate any water, as the site is not located in a water stressed area. After the 2016 earthquake the site donate 210K bottles of water and 400 million Yen to Kumamoto Prefecture. The site has also made an agreement with Kashima Town to provide water and shelter in the case of a disaster. This agreement was signed in January 2021 and can be found included in the evidence under indicator 3.6.3.</p>	
Score	6	
3.4	<i>Implement plan to achieve site water quality targets</i>	
3.4.1	<i>Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.</i>	 No

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Comment The water quality target in the WSP is that 'wastewater management continuously meets the wastewater regulations (standards) values stipulated in the Kumamoto Prefecture Wastewater Regulations (Wastewater Standards)'. The site sends wastewater samples for third-party testing every quarter and there are example test reports embedded in the evidence spreadsheet.

The site has set more stringent targets for water quality levels than what the national regulatory requirements are, and these have been in place since the plant opened. As such, the current target is just operational practice, rather than a target set to improve water practices towards. The site is demonstrably committed to discharging 'clean' wastewater back into the local river and the site will review its existing targets and see if there is any scope in making some of the parameters even stricter, the audit team stated that maintaining an operational practice is not really a target and the site will consider this. The post-audit evidence did not contain an amended water quality target, but they have progressed and met the target that is currently in the WSP.

Finding No: TNR-002323

3.4.2 *Where water quality is a shared water challenge, continual improvement to achieve best practice for the site's effluent shall be identified and where applicable, quantified.*



Yes

Comment Water quality is not currently identified as a shared water challenge, although contamination of groundwater and pollution of the Tensui River has been identified as a water risk, rooted in the practice of small-scale farmers, in indicator 1.7.1. The risk has been deemed low, which is why it is not considered a shared water challenge. The site is already working with small-scale rice farmers on shared water challenges, through the ground-water recharge project on the winter-flooded rice paddies.

3.5 *Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.*

3.5.1 *Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.*



closed

Comment Target 2 in the WSP is the most aligned with IWRAs and listed as the practice of 'recharge of groundwater resources'. Suntory has stated that they have achieved the goal of recharging groundwater but have referenced the outcomes of a third-party research project to demonstrate that it has achieved its WSP target. The project referenced was conducted by Kumamoto Prefecture, who monitored a number of wells across the Kumamoto prefecture and established that groundwater levels have increased from 16.46 to 16.52 meters above sea level. The study does not directly demonstrate how the site has implemented practices to maintain and enhance the site's IWRAs.

Target 2 is the only IWRA target and a discussion was had whether it is strictly an IWRA target, even though it complements the purpose of the Natural Water Sanctuary Forests and the Winter Paddy Inundations project. The site understands that it needs to review its definitions of IWRAs and have now also included the on & off-site wells, the three water springs and the floating island spring pond by the local shrine. This will likely result in the creation of a new target in the WSP which is more explicitly linked to maintaining the existing IWRAs. The site has not supplied any evidence against this indicator on how they maintain IWRAs, although there is significant evidence available and uploaded against other indicators in the standard.

Finding No: TNR-002325

3.5.2 *Advanced Indicator
Evidence of completed restoration of non-functioning or severely degraded Important Water-Related Areas including where appropriate cultural values from a site-selected baseline date shall be identified. Restored areas may be outside of the site, but within the catchment.*







Yes

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Comment	The winter-flooded rice paddies is a key groundwater recharge project for the site, and they are working closely with local rice farmers to implement it. As a result of the 2016 Kumamoto earthquake, a number of rice paddy fields were destroyed as the earth cracked. The picture evidence shows a rice paddy field destroyed after the 2016 earthquake; reconstruction work took place in 2017 on 22ha of former rice paddy fields. In May 2017 the restoration was completed, and farmers could start growing rice again in June 2017.	
Score	6	
3.5.3	Advanced Indicator <i>Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the healthy status of Important Water-Related Areas in the catchment shall be identified.</i>	 No
Comment	An article from a Kumamoto Daily News (local newspaper) issue, the Town Mayor Nishimura (Mashiki Town) stated that the town appreciated the reconstruction work done by Suntory after the earthquake, the article includes a testimony from a local farmer praising the reconstruction efforts. Although the article supplied is a testimony to the work undertaken by Suntory, it does not meet the requirements of the standard or the advice provided in the AWS Guidance. The Guidance states suggests that Suntory should be able to demonstrate that it has informed relevant stakeholders on its work on IWRA's and requested feedback from them, which ideally confirms their support.	
3.6	Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.	
3.6.1	<i>Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.</i>	 closed
Comment	The site supplies safe drinking water in accordance with the Waterworks Act, this is verified annually through an external analysis by a third-party organization. The site also promotes hygiene management, through norovirus and food poisoning prevention awareness-raising and on-site hygiene education and the site conducts Intestinal bacteria test (stool) once a year. For preventive hygiene, hand washing is posted at hand washing stations all year round. The site did not benchmark the provision of WASH facilities onsite against any national standards under indicator 1.3.8 and is therefore unable to list any additional measures above that. This does not detract from the measure that were listed in the table in the evidence spreadsheet.	
Finding No: TNR-002340		
3.6.2	<i>Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.</i>	 Yes
Comment	The site is not impinging on the human rights to safe water and sanitation of communities through their operations.	
3.6.3	Advanced Indicator <i>A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.</i>	 Yes
Comment	The location of the factory is within a country and region where stakeholders and communities have access to safe drinking water, adequate sanitation and hygiene awareness. After the 2016 earthquake in Kumamoto the Suntory plant supplied 210K bottles of drinking water and 400m Yen towards reconstruction efforts. The site also has a contract in place with Kashima town to supply drinking water and shelter if another earthquake hits (signed 2021), which is present in the evidence spreadsheet under this indicator.	
Score	5	

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3.6.4	<i>Advanced Indicator:</i> <i>In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.</i>	 Yes
Comment	The local communities have good access to WASH and it is not considered a shared water challenge. The site has an agreement in place with the nearest town (Kashima) if another earthquake, or similar disaster, strikes.	
Score	4	
3.7	<i>Implement plan to maintain or improve indirect water use within the catchment:</i>	
3.7.1	<i>Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.</i>	 in progress
Comment	<p>The Suntory WSP does not contain an indirect water use target, the reason being that this has not been identified as a water risk by the company or any of its stakeholders. Nonetheless, the site has conducted an evaluation of their factory supplies. The site differentiates between raw material and packaging manufacturers, and the response rates were:</p> <ul style="list-style-type: none">- Raw material manufacturers: 44 companies, 43 companies replied, 98%- Packaging material manufacturers: 19 companies, 19 companies replied, 100% <p>The status of each company's activities, evaluations, and reviews of activities are carried out, and the PDCA cycle is conducted. Details are described in the action items implemented in 3.7.2</p> <p>The 'Suntory Group Supplier Guidelines' contains a section on water management requirements: Suppliers are expected to control the use of water in all its activities, reduce its use as much as possible and ensure that there is no release of wastewater directly into nature. Engagement on the conservation of water resources in order to achieve a sustainable use of water is encouraged.</p> <p style="text-align: right;">Finding No: TNR-002352</p>	
3.7.2	<i>Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified.</i>	 Yes

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Comment

The site has put a table together that lists the factory suppliers, the engagements conducted, and the actions taken by suppliers to reduce water use as a result of engagement by Suntory Kumamoto. There are 63 suppliers listed in the table, with engagements and actions taken as a result of it. This is a new engagement process for the site, and they are currently collecting and evaluating answers from the self-assessment questionnaire undertaken by their suppliers. An example supplier:

Supplier: Mitsui & Co.

Engagement: Since it is said that the amount of water used in raw agricultural products is large, the Suntory Basic Environmental Policy, which focuses on water sustainability, has been widely known since 2016. The Suntory Group Supplier Guidelines, formulated in July 2017, have been gradually disseminated, sharing the same ethical values. At the annual raw material supplier policy briefing, they disseminate the Suntory Group Supplier Guidelines, including the operation of the environmental management system, water management, and prevention of environmental pollution (this year, the briefing session was cancelled as a measure to prevent coronavirus). In order to strengthen ESG management, including water sustainability, the Suntory Group joined Sedex this year and is encouraging suppliers Sedex to participate in conducting evaluations on Sedex.

Actions taken: Suntory are collecting and evaluating answers to Sedex's SAQ water sustainability questions. The questions consist of "how to use and consume water," "wastewater management," "management of water use and the impact of our business on local water quality," "average water use," and "water reduction targets," and we are checking whether PDCA management is being implemented.

This new supplier engagement process will be monitored closely in future audits.

3.7.3

Advanced Indicator

Actions taken to address water related risks and challenges related to indirect water use outside the catchment shall be documented and evaluated.



Yes

Comment

The site explained that they are working with a UK based malt supplier Muntons. They are working with the supplier to improve the quality of the soil and its ability to retain water. Muntons are based in East Anglia (England) and are looking at cover crops (green compost) to improve soil conditions and lessen the dependence on fertilisers. This is a pilot project starting in 2022 and Suntory Group are supporting financially to the tune of 5m Yen per annum. They are looking at working with 15 growers in East Anglia, to deliver the pilot project. Depending on the outcome of the pilot project, Muntons could become a malt supplier for the Kumamoto site, and it was noted that the project could be added to the WSP as an indirect water use target and initiative.

No additional evidence was supplied on this project and the audit team only received a verbal explanation. Supporting project documentation must be supplied in order for the advanced indicator credits to be awarded.

Score

5

3.8

Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.

3.8.1

Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.







Yes

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Comment	<p>The site does not interact with any owners of shared water-related infrastructure, as they extract all their water from off-site and on-site wells and they own the land that the wells are located on. The site also operates a significant WWTP and undertake significant treatment activities before good quality wastewater is discharged back into the 'receiving pond' (also an IWRA) that sits on land owned by the site and then discharged back into the river. The site is entirely self-sufficient in its water cycle.</p> <p>The site interacts with Kumamoto Prefecture on water related issues, including new developments in the area, as references in 3.1.4.</p>	
3.9	<i>Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.</i>	
3.9.1	<i>Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.</i>	 Yes
Comment	<p>The site is undertaking a number of initiatives that demonstrate that their actions could be considered best practice:</p> <ul style="list-style-type: none">- Natural Water Sanctuary initiative, building up a network forests across Japan. There are currently 21 Suntory Natural Water Sanctuary Forests in Japan, covering 12,000 hectares. This is a water recharge project, which is being undertaken alongside the winter paddy inundation initiative; both are working towards increasing groundwater levels to ensure the availability of water within the catchment.- Establishing the Institute for Water Science, ensuring that Suntory can extract and analyze data from their water stewardship projects, and produce academic literature to disseminate the outcomes of their initiatives. The Institute has produced a number of reports relating to water issues.- MIZUIKU, the water education programme was developed in 2004 and aimed at elementary school children. MIZUIKU began its expansion in Vietnam in 2015 and has now spread to Indonesia, Thailand, China, and Spain; 370,000 people have participated in the program worldwide.	
3.9.2	<i>Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.</i>	 Yes
Comment	<p>The site has worked towards improving the water balance of the site by setting ambitious targets for improving the water ratio of the site. The long-term target for this AWS outcome is to reduce the water ratio (m3/KL) by 35% from 2015 to 2030. The site has reduced the water ratio by about 22% in between 2015 and 2021. A further 2% improvement in basic unit is expected in 2022.</p>	
3.9.3	<i>Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.</i>	 Yes
Comment	<p>The site has set more stringent water quality targets, compared to national regulations, for the wastewater that is discharged by the Wastewater Treatment Plant. (WWTP). The site is a responsible WWTP operator, with an on-site testing laboratory continuously monitoring COD before any water is discharged to the holding pond and then into the river Tensui. Test data is regularly verified by third-party test labs.</p>	
3.9.4	<i>Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.</i>	 Yes

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Comment	<p>The site is doing significant groundwater recharging work in the Kumamoto area with the Winter Paddy Inundation project, as well as the Natural Water Sanctuary. However, both of which have been identified as IWRAs in 1.5.5. Suntory's forest maintenance manual is positioned as a "best practice" and maintenance is carried out in accordance with it.</p> <p>The Floating Island Shrine has also been identified as an IWRA and Suntory conducts monthly clean-up session of the water course and have been doing so for numerous years.</p>	
3.9.5	<p><i>Actions towards achieving best practice related to targets in terms of WASH shall be implemented.</i></p>	 in progress
Comment	<p>It was established that there are good levels of WASH in Japan, although Kashima Town is an anomaly as each household have their own well and there is no provision of municipal water services. The site has not supplied any evidence in the 'Kyushu Plant AWS spreadsheet' for this indicator and it can therefore not be marked as compliant.</p> <p>Finding No: TNR-002374</p>	
3.9.6	<p><i>Advanced Indicator</i> <i>Achievement of identified best practice related to targets in terms of good water governance shall be quantified.</i></p>	 Yes
Comment	<p>The 'Cabinet Secretariat Water Cycle Policy' 4th edition of the White Paper on the Water Cycle, based on the Basic Act on the Water Cycle (enacted in July 2014). Out of the 61 "Watershed Water Cycle Plans" formulated nationwide, 4 examples of groundwater management promotion are introduced. One of them is the Kumamoto area's initiatives, in which the Kumamoto Groundwater Foundation and Suntory plays a central role.</p> <p>Based on the experiences of the Kumamoto project, another similar project the "Shirakawa Middle Basin Winter Paddy Inundation Project" is changing its project management. The involvement of farmers process in the Kumamoto project was also identified as "best practices for enhancing collaboration and participation with stakeholders" with regard to goals related to appropriate water resource governance.</p>	
Score	8	
3.9.7	<p><i>Advanced Indicator</i> <i>Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.</i></p>	 Yes
Comment	<p>The progress of activities to reduce basic unit of production at the site (actual and achievement rate) is shown in the table in the evidence spreadsheet. In the spreadsheet there is a column of tables for each month of 2021, that lists the target water use and actual use, across a number of production processes: preparation and fermentation, sake storage and filtration, mixing, cans, PET, cask and engineering. The second column of tables is a monthly cumulative table. In each table there are three water-related columns: planned (m3), actual (m3) and complete (%). By the end of the year, the planned water use was 34,618m3 and actual use was 29,184m3.</p> <p>The second table collates information on the sites KMI and KPIs and water intensity (water ratio) is recorded. The year is split up into 4 quarters, with a column for each month. The water intensity data is presented for each month as: last year (blue), target (green), result (red) and evaluation (black). The table is for 2022 data and the site has continuously achieved a lower water intensity result than the target.</p>	
Score	8	
3.9.8	<p><i>Advanced Indicator</i> <i>Achievement of identified best practices related to targets in terms of water quality shall be quantified</i></p>	 Yes

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Comment	The site has supplied a table, which sets out the national and local requirements for water quality data and the actual results have been recorded in the final three columns: average, max and minimum value. Column H are the voluntary standard values that the site has set themselves and they continuously meet them. Although it is unclear what time period the data in table covers. The site has also supplied a couple of example third-party test reports to support the indicator. In terms of the water quality voluntary standards that the site have set themselves, they have achieved this best practice.	
Score	8	
3.9.9	Advanced Indicator <i>Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented.</i>	 Yes
Comment	The site has identified the Natural Water Sanctuary Forests and the 11ha of rice paddy fields in the Winter Inundation project as IWRAs. Suntory's forest maintenance manual is positioned as a "best practice" and maintenance is carried out in accordance with it. The manual is based on 20 years of maintenance experience, and Suntory have developed important ideas and work points that are different from forestry management. It is defined as a "Suntory point" and is positioned as "best practice. The "Natural Water Sanctuary Aso" complies with thinning method in the manual, as does the "Winter Paddy Inundation" project. Based on Suntory flow points, the thinned area in 2021 (2021) is 17.01ha, and the winter-flooded rice paddies area is 11ha.	
Score	The site has supplied screenshots from the Suntory Forest Maintenance Manual. 8	
3.9.10	Advanced Indicator <i>Achievement of identified best practice related to targets in terms of WASH shall be quantified.</i>	 No
Comment	The site has stated that although there is no obligation to inspect and clean tanks under the Simple Water Supply Law, it is water that enters people's mouths. It has recorded in the evidence spreadsheet that there are no best practices for WASH	
3.9.11	Advanced Indicator <i>A list of efforts to spread best practices shall be identified.</i>	 No
Comment	The site has prepared their 'AWS Activity Report 2021' which is available on the Suntory website and supplied this as evidence against this indicator. The AWS Guidance suggests that sites should document their efforts in promoting best practice uptake by other beyond the site. The AWS Activity Report is does not sufficiently demonstrate this.	
3.9.12	Advanced Indicator <i>A list of collective action efforts, including the organizations involved, positions of responsible persons of other entities involved, and a description of the role played by the site shall be identified.</i>	 Yes
Comment	The site has supplied a list of "Natural Water Sanctuary" and "Winter Paddy Inundation Project" Contracts, which constitutes their list of collective actions undertaken by the site. Example contracts have been provided for all of their collective actions, laying out the relationship between Suntory and their project partner.	
Score	8	
3.9.13	Advanced Indicator <i>Evidence of the quantified improvement that has resulted from the collective action relative to a site-selected baseline date shall be identified and evidence from an appropriate range of stakeholders linked to the collective action (including both those implementing the action and those affected by the action) that the site is materially and positively contributing to the achievement of the collective action shall be identified.</i>	 Yes

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Comment	<p>The impact of Natural Water Sanctuary, as a collective action has been identified and quantified by the site. The public value of the forest is calculated by converting the monetary value of the "water source recharge benefit" in the "corporate forest (national forest)" (about 102 ha). The Flood prevention benefits were 5,288,000 yen, the Watershed water storage benefits were 1,612,000 yen, and Water purification benefits were 5,858,000 yen (calculation basis: Forestry Agency).</p> <p>Suntory was Involved in the repair of ground cracks caused by earthquakes in rice fields in Mashiki Town. As a result, the amount of groundwater recharge by Winter Paddy Inundation Project in Mashiki Town was restored.</p> <p>The site has supplied a link in the evidence spreadsheet to the video 'Suntory's Corporate Activities Suntory Kumamoto Groundwater Mirai Project'. As proof of the role played by the site, Suntory have also supplied their entry to the Kumamoto Groundwater Foundation 2022 Grand Prix winner.</p>
Score	5

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4 STEP 4: EVALUATE - Evaluate the site's performance.	
4.1	<i>Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achieving water stewardship outcomes.</i>
4.1.1	<i>Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.</i>
Comment	<p>The site has evaluated their performance against the four long-term targets listed in the WSP. The audit team sought clarification on the evaluation process, as the results of the evaluation was not readily available. The person responsible for evaluating the target is listed in column N and the WSP now contains an evaluation column 4.1.1 in column S. For example.</p> <p>Target: Reduce water intensity (m3/KL) by 35% from 2015 to 2030. Evaluation: We have been able to reduce the water intensity by about 22% compared to 2015 and 2021. In 2022, a further 2% improvement in intensity is expected. In order to achieve the 35% reduction target by 2030, we will promote continuous improvement activities.</p> <p>Target: Promotion of groundwater recharge by Winter Paddy Inundation Project (commonly known as winter-flooded paddies) Evaluation: Reducing the amount used at the Kyushu Kumamoto Plant Amount of water impeachment due to winter waterlogging: 1.32 million m3/year (more than the pumping volume of the plant: 1.08 million m3/year)</p>
4.1.2	<i>Value creation resulting from the water stewardship plan shall be evaluated.</i>
Comment	<p>The site has created an additional column in the WSP to cover indicator 4.1.2 on value creation. The targets sampled in 4.1.1. will be used to demonstrate the approach by the site.</p> <p>Target: Reduce water intensity (m3/KL) by 35% from 2015 to 2030. Evaluation: We have been able to reduce the water intensity by about 22% compared to 2015 and 2021. In 2022, a further 2% improvement in intensity is expected. In order to achieve the 35% reduction target by 2030, we will promote continuous improvement activities. Value creation: Difficult to evaluate</p> <p>Target: Promotion of groundwater recharge by Winter Paddy Inundation Project (commonly known as winter-flooded paddies) Evaluation: Reducing the amount used at the Kyushu Kumamoto Plant Amount of water impeachment due to winter waterlogging: 1.32 million m3/year (more than the pumping volume of the plant: 1.08 million m3/year) Value creation: If waterlogging activities stop, there is a risk that groundwater, which is an indispensable resource for product production, will decrease, but it is difficult to calculate the degree of contribution in monetary terms.</p> <p>The site should be able to monetise the impact of both targets, as they have identified volume of water saved, and there will be a standardised value for each m3 or KL of water.</p> <p>Finding No: TNR-002377</p>
4.1.3	<i>The shared value benefits in the catchment shall be identified and where applicable, quantified.</i>
Comment	<p>The potential shared value benefits from the water-related projects that the site undertakes in the catchment were discussed at the audit and potential financial benefits, improved natural capital and ecosystem services. The site has not supplied any evidence post-audit to support the assessment of this indicator.</p> <p>Finding No: TNR-002378</p>

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4.1.4	<i>Advanced Indicator</i> <i>A governance or executive-level review, including discussion of shared water challenges, water risks, and opportunities, and any water-related cost savings or benefits realized, and any relevant incidents shall be identified.</i>	 No
Comment	<p>The water stewardship plan implementation has been subject to a management review, this was undertaken by the Environmental Conservation Committee. They meet quarterly and the AWS system was discussed at the meeting on the 28.07.22, with the meeting minutes are available in the evidence spreadsheet. The AWS was a topic at the meeting and the factory manager commented that the WSP targets should be made clearer and easier to understand for everyone.</p> <p>The material supplied to the committee is in the spreadsheet as well, this was the first time that the AWS system was brought before the committee. This was before the site was going for the advanced indicators and as such the required topics under this indicator were not covered. The site must develop a reporting method to ensure that the mandatory topics are covered. The AWS Guidance document states that an annual written document that addressed all the items should be produced</p>	
4.2	<i>Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.</i>	
4.2.1	<i>A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.</i>	 No
Comment	<p>There were no major emergency incidents at the plant over the last year, it is recommended that the site produces a simple statement letter that states that there have been no major emergency incidents over the year. Or an extract from the ISO 14001 report where the emergency incidents are reviewed.</p> <p style="text-align: right;">Finding No: TNR-002379</p>	
4.3	<i>Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.</i>	
4.3.1	<i>Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.</i>	 closed
Comment	<p>The site has supplied one example of how the site communicated their water stewardship performance with the Kumamoto Prefecture. The prefecture appreciated the opportunity to learn more about Suntory's AWS journey and would like to maintain communications on the issue. The impact of the TMSC semiconductor factory was discussed and the Suntory approach of better understanding and addressing groundwater issues was highlighted as good practice and they want to use the factory as a model on water approach.</p> <p>This is a good example of a stakeholder consultation effort, including the presentation that the site prepared for the meeting, but evidence of additional consultations should be supplied by the site. The AWS Guidance document is a useful reference for this indicator, it states that: the site should engage stakeholders at least once every year to review its water stewardship performance.</p> <p style="text-align: right;">Finding No: TNR-002380</p>	
4.3.2	<i>Advanced Indicator</i> <i>The site's efforts to address shared water challenges shall be evaluated by stakeholders. This shall include stakeholder reviewing of the site's efforts across all five outcome areas, and their suggestions for continual improvement.</i>	 Yes

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Comment

The site conducted a water evaluation process with three key stakeholders: Kashima Town, Kumamoto Prefecture & Professor Shimada of Kumamoto University. They were all provided with a Suntory presentation of the site's water-related activities, as well as a copy of the AWS Activity report, including the shared water challenges, AWS outcomes and WSP targets.

The table on the indicator page in the evidence spreadsheet includes feedback and comments from the three stakeholders. The feedback recorded was:

Kashima Town - We are grateful to the Kumamoto Plant for submitting the pumping volume. Kashima Town is also engaged in water conservation activities under Professor Ichikawa of Tokai University. In recent years, water supply systems have been developed, and your company feels the importance of "valuing water" that is communicated in commercials. The condition of the wells deteriorated after the earthquake, and there is a sense of crisis that they cannot stand comfortably because of the abundance of groundwater resources. In this context, you can develop a sense of security that a large company like yours is making such efforts. I feel that I would like to be able to promote my activities more.

Kumamoto Prefecture - Suntory are actively working to contribute to the governance of water resources in the Kumamoto region. I am very pleased to have this opportunity to exchange opinions. We are aware of individual initiatives such as the Kumamoto Earthquake Recovery Project. From today's explanation (Suntory's efforts for groundwater conservation in Kumamoto), I was able to get to know and agree with the overall picture of Suntory's efforts to ensure water sustainability. We believe that such efforts contribute to the governance of water resources. In the future, we would like to set up a place for communication to share mutual activities and water issues.

Professor Shimada of Kumamoto University - Until now, the site has been actively engaged in groundwater conservation activities from the standpoint of sustainable use of groundwater resources for its own use, but it has begun to explore activities from the perspective of sustainable use of groundwater resources in areas that share enormous groundwater resources over a wide area, such as the Kumamoto area. Specifically, we have started joint research with the Kumamoto Groundwater Foundation, an organization that aims to conserve local groundwater resources over a wide area and are working on sharing the groundwater flow model already developed with the aim of utilizing it in a wide area. We believe that the direction of these activities corresponds precisely to addressing water issues shared by the region.

Score

6

4.4

Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.

4.4.1

The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified.



Yes

Comment

The site has made significant modifications to their water stewardship plan (2.3.1/2.3.2) both as a result of their recertification audit, including more short-term SMART targets, and from feedback from their stakeholders.

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5 STEP 5: COMMUNICATE & DISCLOSE - Communicate about water stewardship and disclose the site's stewardship efforts	
5.1	Disclose water-related internal governance of the site's management, including the positions of those accountable for legal compliance with water-related local laws and regulations.
5.1.1	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed. ✓ Yes
Comment	<p>The 'AWS Activity Report 2021' contains organisational charts for their water-related internal governance, this can be accessed in both Japanese and English on the Suntory Kumamoto website. Water-related governance is delivered through the following structures:</p> <ul style="list-style-type: none"> - Environmental Conservation Council - Environmental Conservation Committee <p>The position responsible for all water-related compliance is the Plant Manager.</p>
5.2	Communicate the water stewardship plan with relevant stakeholders.
5.2.1	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders. ✓ closed
Comment	<p>The site has provided an example of how the WSP was communicated in their discussions with the Kumamoto Prefecture. The site has developed good dissemination material, particularly the 'AWS Activity Report 2021' which is available in their website. However, the site has not supplied any evidence of a communication plan, or a breakdown of which stakeholders the site has communicate the AWS Activity Report to.</p> <p>Finding No: TNR-002381</p>
5.3	Disclose annual site water stewardship summary, including: the relevant information about the site's annual water stewardship performance and results against the site's targets.
5.3.1	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum. ✓ Yes
Comment	<p>Top item is water conservation, targets displayed and how they are being met by the site.</p> <ol style="list-style-type: none"> 2: water emission control/discharge control Mihune public health officials come onsite to do external monitoring 3. Natural Water Sanctuary Aso, groundwater recharging in the forests 4. Winter Paddy Inundation Project 5. MIZUIKU - the water education Programme <p>This is communicated annually to all employees.</p> <p>For the water recharging projects, the site also reports annually to the Kumamoto Prefecture, through a written report.</p> <p>This information is also disclosed on the Suntory website.</p>
5.3.2	Advanced Indicator The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report. ✓ Yes
Comment	<p>The site has prepared an 'AWS Activity Report 2021' which forms part of the annual report. It's a digital report and disclosed on the website. The Kumamoto Prefecture is issued with a printed report annually. The 'Environmental Conservation Council' meets annually, and the Plant Manager reports on progress, to the management board. The Suntory company website contains a section on the AWS standard. and the site-specific reports are communicated on the global website.</p>

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Score 1

5.3.3 *Advanced Indicator*
Benefits to the site and stakeholders from implementation of the AWS Standard shall be quantified in the organization's annual report.  No

Comment The site has stated that the requirements for this indicator are contained in the AWS Activity Report, under the 'stakeholder engagement' column in the last page 'collaborative efforts to address shared challenges related to water'. The statements suggested by the site do not quantify the benefits to the site or stakeholders from implementing the AWS Standard. Nor is the information contained within the annual report, although the annual report could achieve this by referencing the Activity Report.


5.4 *Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.*

5.4.1 *The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.*  Yes

Comment The site has supplied a table in the evidence spreadsheet, that reports against the two shared water challenges and information has been gathered on:


- Actions to address shared water challenges
- Stakeholder engagement for shared water challenges
- Means of communication

The communication means only consists of communicating with the Government or a local health centre. There site has included this in the AWS Activity Report.


5.4.2 *Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.*  Yes

Comment The 'AWS Activity Report 2021' is readily available on the website and communicated in the annual sustainability report. The site also communicates an AWS presentation to stakeholders, this is recorded against 4.3.2 Kashima Town, Kumamoto Prefecture and Kumamoto University, all had a meeting with the site where the AWS presentation was shown. The site approached them all and requested a meeting, and same with the other stakeholders, so the site is being proactive in approaching their stakeholders.

5.5 *Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.*

5.5.1 *Any site water-related compliance violations and associated corrections shall be disclosed.*  Yes

Comment The site has had no water-related compliance violations. A table is presented in the evidence spreadsheet, which records the number of violations of water-related laws and regulations, it has been zero since 2003. This is reported in the management review report and it records that there have been no NCs related to water related issues, one related to waste management but this is not related to the AWS process. please note 4.1.4, link to indicator 2.3.2.


5.5.2 *Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.*  Yes

Comment There have been no water-related incidents (ever) and the site has therefore not been required to disclose corrective actions.

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5.5.3	<i>Any site water-related violation that may pose significant risk and threat to human or ecosystem health shall be immediately communicated to relevant public agencies and disclosed.</i>	 Yes
Comment	<p>There have been no site related violations and no communication or disclosure has therefore been necessary. The site explained the process that they would have to follow if there was a violation</p> <p>An example they could think is if water quality of effluent was above the limits, then they would have to immediately contact the public health. In terms of extraction, the site has a reporting obligation to the Kumamoto Prefecture, but there is no upper limit for extraction.</p>	

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Photographic Evidence from Audit



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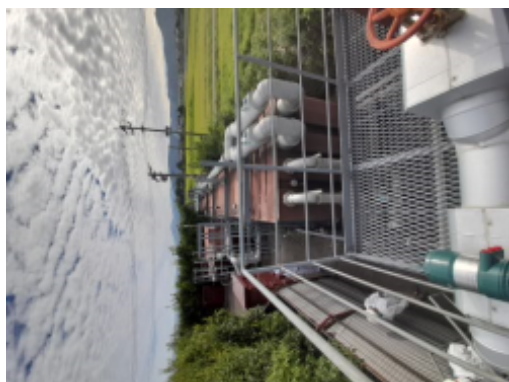
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2 Quality Street North Berwick, EH39 4HW, UNITED KINGDOM

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Yes

Previous Findings

All non-conformities raised in the previous audit have been satisfactorily closed.



Yes

Comment

Previous surveillance report was conducted by TUV Rheinland.