

CERTIFICATION REPORT

Alliance for Water Stewardship (AWS)

Audit Number: AO-000352

SITE DETAILS

Site: **Ecolab Suzano Plant**

Address: Rodovia Índio Tibiriçá, R. Giovani Baptista Raffo, 3201, Suzano, São Paulo, BRAZIL

Contact Person: Anna Wertheim

AWS Reference Number: AWS-000469

Site Structure: Single Site

CERTIFICATION DETAILS

Certification status: Certified Core

Date of certification decision: 2023-Feb-10

Validity of certificate: 2026-Feb-10

AUDIT DETAILS

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

Audit Type(s): Initial Audit

Audit Start Date: 2022-Sep-22

Lead Auditor: Carla Oberdiek

Audit team participants:

Claudia M. Jaime

Site Participants:

Murilo Abbondanza, Client representative

Luana Molina Franco, Sr. EHS Specialist

Cristiane de Matos Francisco, Other

Andreia Celestino, Other

Edson Freitas, Quality Controller

Rogério Tenório de Lima, Employee

Jessica Almeida, Other

Carla Napoli, Other

Anna Wertheim, Other

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ADDITIONAL INFO

Summary of Audit Findings: A total of 7 major non-conformities, 8 minor non-conformities and 5 observations were raised during the certification audit. The major non-conformities were of sufficient concern to warrant the categorisation of the non-conformity as major and related to Gather & Understand, Commit & Plan, Implement, Evaluate and Communicate & Disclose.

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 08/02/2023.

The major non-conformities must be sufficiently addressed and evidence submitted to WSAS within 90 days of receipt of the report 08/03/2023.

Minor non-conformities must be closed out by the time of the next annual audit.

The audit team recommends certification of Ecolab Suzano at Core level pending approval of the corrective actions plan and closure of the major non-conformities.

Scope of Assessment: The scope of services covers the Initial certification audit for assessing conformity of Ecolab Suzano Plant against the AWS International Water Stewardship Standard Version 2.

Ecolab Suzano was established in 1974, the site size is 78.000 m2, locate at Rodovia Índio Tibiriçá, 3201 – Suzano/SP/Brazil, the nearest town is Suzano (4 miles from Suzano), and it is 50 miles far from São Paulo capital. Total employees in the site is 141. The site is a reaction plant that primarily produces water treatment chemical blends and polymers (7 manufactures).

The facility is located in the Alto-Tiete Cachment. The site gets its water for operations from onsite wells (about 95% of water). This well takes water from Aquifero Cristalino (Pre Cambrian Aquifer). The site also uses about 5% of water from municipal water from SABESP; this water comes from the Alto Tiete production system. The water for drinking water for employees come from purchased spring water, who's water is sourced from Aquifero Guarani.

The audit was conducted onsite on 22 and 23 september 2022.

The onsite site visit included the assessment of Water supply inlet point, rainwater containment box, domestic effluent outlet point, production water treatment plant and reservoirs, Warehouse 1, 2, 3 and 6 (Armazém 1, 2, 3 e 6), wells 3, 4 and 5, expedition area (expedição), cooling tower, cooling water treatment, industrial sewage treatment, fire fighting system, factory A and F, quality control laboratory, water laboratory, raw material and finished product tanks, storage of sanitizers, all visited onsite as part of the audit.

FINDINGS

NUMBER OF FINDINGS PER LEVEL

Observation	5
Minor	8
Major	7

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FINDING DETAILS

Finding No:	TNR-001663
Checklist Item No:	1.2.1
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Sep-21
Checklist item:	Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall: <ul style="list-style-type: none">- Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;- Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;- Provide evidence of stakeholder consultation on water-related interests and challenges;- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;- Identify the degree of stakeholder engagement based on their level of interest and influence.
Findings:	The site has not finished evaluating all stakeholders; neighbors such as farmers are not included.
Corrective action:	1 - Finalized the Socioeconomic (Environmental) Diagnosis considering the surrounding community (neighborhood, agriculture, local commerce...); 2 - Update the Matrix of power, interest and stakeholder engagement (Deadline 09/21/2023).
Evidence of implementation:	Socio-economic (Environmental) Diagnosis finalized and results presented (Slide 13 to 42) at Ecolab's Sustainability Committee meeting.
Finding No:	TNR-001597
Checklist Item No:	1.2.2
Status:	In Progress - CA plan approved
Finding level:	Minor
Due date:	2023-Sep-21
Checklist item:	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.
Findings:	The site did not consider neighbors, such as farmers and local commerce.
Corrective action:	1 - Finalized the Socioeconomic (Environmental) Diagnosis considering the surrounding community (neighborhood, agriculture, local commerce...); 2 - Update the Matrix of influence and involvement of stakeholders (Deadline 09/21/2023).
Evidence of implementation:	Socio-economic (Environmental) Diagnosis finalized and results presented (Slide 13 to 42) at Ecolab's Sustainability Committee meeting.

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Audit Number: AO-000352

Finding No:	TNR-001626
Checklist Item No:	1.3.2
Status:	Open
Finding level:	Observation
Checklist item:	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped
Findings:	Rainwater is not included in the water balance
Finding No:	TNR-001627
Checklist Item No:	1.3.3
Status:	Open
Finding level:	Observation
Checklist item:	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.
Findings:	rainwater is not included in the water balance.
Finding No:	TNR-001599
Checklist Item No:	1.3.6
Status:	Closed
Finding level:	Major
Due date:	2023-Mar-08
Checklist item:	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.
Findings:	On-site Important Water-Related Areas were not identified (or mapped, and their status was not described).
Corrective action:	<ol style="list-style-type: none">1 - Survey of locally important water-related areas (IWRAs);2 - Defined risks and conditions (good, bad, receding or progressing);3 - Evidenced relevant concerns (EX: "Polluted" or "Drying out")4 - Entered plan to maintain and/or improve important water-related areas on site (IWRAs);5 - Compiled reports (past and current) of its initial condition, current condition, and changes in condition over the period.
Evidence of implementation:	Inclusion of the screens where the IWRAs and the monitoring spreadsheet are being managed.

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Audit Number: AO-000352

Finding No: TNR-001600
Checklist Item No: 1.3.7
Status: In Progress - CA plan approved
Finding level: Minor
Due date: 2023-Sep-21
Checklist item: 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.
Findings: The site didn't identify payments to specialists, payment for expert projects, payment for projects related to water, water related monitoring costs, internal water treatment costs, stakeholder engagement and associated activities costs, certification costs, costs with hours worked by employees in water-related actions.
Corrective action: 1 - A survey of the pertinent items and the costs involved with each activity/process is carried out.
Evidence of implementation: Updated spreadsheet with costs related to 2022.

Finding No: TNR-001601
Checklist Item No: 1.4.1
Status: In Progress - CA plan approved
Finding level: Minor
Due date: 2023-Sep-21
Checklist item: The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.
Findings: Identification of suppliers in the same catchment is not completed: The site has not identified all raw materials that are produced in the same basin as the site, in order to identify the embedded water in it.
Corrective action: 1 - Conducted a new survey of primary inputs and materials (2023);
2 - Linked the survey with current suppliers;
3 - Evaluated if suppliers are in the same area of interest;
4 - Initiate communication between stakeholders in order to obtain the corresponding data (Deadline (09/21/2023)).
Evidence of implementation: Spreadsheet with the survey of new suppliers and presentation with the area of interest.

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Audit Number: AO-000352

Finding No: TNR-001629
Checklist Item No: 1.6.1
Status: Closed
Finding level: Major
Due date: 2023-Mar-08
Checklist item: Shared water challenges shall be identified and prioritized from the information gathered.
Findings: Shared water challenges missing the stakeholders connection.
Corrective action: 1 - New communication (e-mail) was carried out with the stakeholders initially raised to validate the common challenges;
2 - Revised the Risk Assessment spreadsheet to Risk Mapping with the data obtained duly identified and prioritized.
Evidence of implementation: E-mail with the validation of the challenges shared with the stakeholders (Sampling) and revised Risk Assessment spreadsheet under Risk Mapping.

Note: Disregard the file NC Major 1.6.1 as it was erroneously released but we could not delete it.

Finding No: TNR-001631
Checklist Item No: 1.6.2
Status: Open
Finding level: Observation
Checklist item: Initiatives to address shared water challenges shall be identified.
Findings: Include the initiatives identified in the document "stakeholder and outreach".

Finding No: TNR-001812
Checklist Item No: 1.7.1
Status: Open
Finding level: Observation
Checklist item: 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.
Findings: It would be good if the site deep further in the analysis as continuous improvement (in the future).

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Finding No: TNR-001632
Checklist Item No: 1.7.2
Status: Closed
Finding level: Major
Due date: 2023-Mar-08
Checklist item: Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.
Findings: The site didn't identify the water-related opportunities.
Corrective action: Reviewed and identified water-related opportunities.
Evidence of implementation: Water Stewardship Plan spreadsheet updated with opportunities.

Disregard the file: Water Stewardship Plan (Suzano) Revised.xlsx

Finding No: TNR-001633
Checklist Item No: 2.3.1
Status: In Progress - CA plan approved
Finding level: Minor
Due date: 2023-Sep-21
Checklist item: 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.
Findings: The water steward strategy has not be defined with the misson and vision.
Corrective action: 1 - Validated the mission and vision with the site management
2 - Dissemination to the Internal Public (Deadline 09/21/2023)
3 - Dissemination to External Public (Deadline 09/21/2023)
Evidence of implementation: Inclusion of the Mission and Vision.

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Finding No: TNR-001602
Checklist Item No: 2.3.2
Status: Closed
Finding level: Major
Due date: 2023-Mar-08
Checklist item: 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.
Findings: The water stewardship plan require a monitoring approach and financial budget for each target.
Corrective action: The pending costs for each goal were surveyed, and for those that were not possible (such as social actions) hours dedicated to the activities were considered.
Evidence of implementation: Water Stewardship Plan (Suzano).

Note: disregard the 04 additional attachments, they were included erroneously and we could not delete them

Finding No: TNR-001603
Checklist Item No: 3.2.2
Status: Closed
Finding level: Minor
Due date: 2023-Sep-21
Checklist item: 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.
Findings: The site must adjust the catchment size to identify the indigenous people.
Corrective action: The watershed was adjusted and it was identified that there are no indigenous people in the region.
Evidence of implementation: 3.2.2 NA (Brazil_indigenous_11_2021) (1) Source: FUNAI Monitoring Center <https://cmr.funai.gov.br/app/#/mapa>
Suzano Catchment

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Finding No:	TNR-001604
Checklist Item No:	3.7.1
Status:	Closed
Finding level:	Major
Due date:	2023-Mar-08
Checklist item:	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.
Findings:	The site didn't include indirect water use targets in their Water Stewardship Plan.
Corrective action:	<p>1 - The initial goal is to maintain the procurement approval process to ensure that the Raw Material and Packaging supplier (Critical Stakeholders) are meeting Ecolab's minimum criteria including environmental issues and ethical behavior. Suppliers are selected based on the value of the outcome ensuring that choices about switching suppliers are based on measurable data where we have ISO 14001 Certification as a premise.</p> <p>2 - Continue with the plan to meet the minor NC of item 1.4.1, expand item 1.4.2 and consequently this major NC 2.3.2, within the deadlines stipulated for meeting minor NCs.</p>
Evidence of implementation:	Purchasing Procedures and Customer Questionnaire.

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Finding No: TNR-001649
 Checklist Item No: 4.1.1
 Status: Closed
 Finding level: Major
 Due date: 2023-Mar-08
 Checklist item: Performance against targets in the site’s water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated.
 Findings: Information of performance against targets is missing in the Water Stewardship Plan.
 Corrective action: 1 - Information regarding performance against targets in the compiled Water Management Plan;
 2 - The targets set by Ecolab are identified in the attached files, being:
 2.1 - Annual target of reduction in water consumption (5%) x Production = WI (Water Balance);
 2.2 - 100% compliance with legal, corporate, audit and certification requirements related to water (Good Water Governance);
 2.3 - Potability (Good water quality status);
 2.4 - Industrial Effluent Quality (Healthy status of Important Water-related Areas)
 2.5 - WASH Self Assessment Tool (WASH)
 Evidence of implementation: Water Stewardship Plan and screenshots of performance management in relation to targets
 Note: Please disregard worksheets 2.3.2 and 2.3.2 and 4.1.1 Water Stewardship Plan (Suzano) as they were entered incorrectly and we were unable to delete them.

Finding No: TNR-001651
 Checklist Item No: 4.3.1
 Status: Closed
 Finding level: Minor
 Due date: 2023-Sep-21
 Checklist item: Consultation efforts with stakeholders on the site’s water stewardship performance shall be identified.
 Findings: The site must adjust the catchment size to define the stakeholders to engage.
 Corrective action: Revalidation of the area of interest considered, as Standard during the audit "... aquifers, it can be assumed that the area of influence extends to a radius of 50 km from the point of extraction or discharge of wastewater.
 Evidence of implementation: Suzano Catchment

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Finding No: TNR-001652
Checklist Item No: 5.1.1
Status: In Progress - CA plan approved
Finding level: Minor
Due date: 2023-Sep-21
Checklist item: The site’s water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.
Findings: The governance disclose effort needs to be publicly accessible, in the Ecolab site lacks an organizational chart describing the positions and functions.
Corrective action: 1 - Created the organizational chart
2 - Dissemination to the Internal Public (Deadline 09/21/2023)
3 - Disclosure to External Public (Deadline 09/21/2023)
Evidence of implementation: Organizational chart

Finding No: TNR-001653
Checklist Item No: 5.4.1
Status: Closed
Finding level: Major
Due date: 2023-Mar-08
Checklist item: The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.
Findings: This 5.4.1 indicator depends on whether 1.6.1 indicator is met. The site identified and prioritized the water challenges in the document called "1.6&1.7 Risk Assessment Suzano", but in the shared water challenges identified is missing the stakeholders connection.
Corrective action: Stakeholder liaison performed (Fulfillment of items 1.6 (As per corresponding corrective action)).
Evidence of implementation: Risk Assessment Worksheet.

Finding No: TNR-001654
Checklist Item No: 5.4.2
Status: Open
Finding level: Observation
Checklist item: Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.
Findings: Observation: The site must adjust the catchment size to define all the stakeholders to engage.

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Report Details

Report	Value
Report prepared by	Carla Oberdiek
Report approved by	Lurdes Brandão Guerra
Report approved on (Date)	3/11/2022

Surveillance

Proposed date for next audit
2023-Sep-20

Stakeholder Announcements

Date of publication	Location
2022-Aug-15	AWS webpage
2022-Aug-15	WSAS webpage
2022-Aug-19	www.ecolab.com

Catchment Information

Catchment Information

The site is in the Alto Tiete basin (BAT), which is a subdivision of Tiete Basin. The Tiete Basin is in the larger watershed called Parana (URGH), with the main water source is from rain. The Alto Tiete basin (BAT) covers an area of 5,775.12 km², with 40 municipalities. The basin corresponds to the Water Management UGHRI 6. This takes up about 70% of the territory of the Metropolitan Region of Sao Paulo and representing 99.5% of its population. The basin covers the eastern part of the river. There are springs beginning in the Parque Ecologico Nascentes Do Tiete, then following east-west until the Rasgão Dam in Pirapora do Bom Jesus. The BAT has a maximum extension of 148.26 km in the east-west direction.

The Suzano facility obtains groundwater from the Pre-Cambrian Aquifer and municipal water from the Alto Tietê Production System, a series of reservoirs along the Tietê River in the Alto Tietê basin. Drinking water is obtained from the Guarani Aquifer. The effluents are sent to municipal and industrial lines for treatment before being discharged into the Tietê River.

Client Description and Site Details

Client/Site Background

Brief description of the site's operations/processes: Reaction plant that primarily produces water treatment chemical blends and polymers.
Number of employees: 141.

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Summary of Shared Water Challenges

Summary of Shared Water Challenges

Water Quality is a huge issue especially in the Tiete River in the catchment. There are initiatives to expand infrastructure around domestic sewage treatment as well as initiatives from the organization SOS Mata Atlantica to clean up the river. One initiative is called the Novo Rio Pinheiros Project which is coordinated by SIMA (Secretariat of Infrastructure and Environment) to unite the efforts from the work of SABESP, EMAE, CETESB, DAEE, secretaries of governments, private initiatives and the Sao Paulo city hall. This will unite and divide the projects going on into sanitation, maintenance, solid waste treatment, and revitalization/communication/education on environment.

SEMAE declared that between 2018 and December 2020 the concessionaire intends to invest around R\$ 5.8 million in the execution of projects and works for sewage collection, transport, and treatment systems in isolated areas. Similar efforts and updates of drinking water and sewage collection supervision is being done by ARSESP.

Water scarcity is also an issue for this region. The natural surface water availability is analyzed in comparison to the population of the watershed, and it is considered Critical (under 1500 m³/inhab.year).

The site has identified shared challenges in the catchment:

- Water Scarcity (Ecolab Suzano has restrictions on how much water the site can take from well and his allowance might change).
- Water Quality (Alto Tiete/nearby river on site Una river, goes to Goibera river, including runoff issues from polluted rain runoff into river).
- Flooding.
- WASH; access to safe water Water Reciever Clean up (sometimes it is not in spec, i.e. water micro bio or water is opaque; water standing so risk of microbio).
- Water Quality (Well/Aquifer) --> would be related to equipment not water.

0.1 General Requirements for Single Sites, Multi-Sites and Groups

0.1.1 Eligibility Criteria

0.1.1.1 *The site(s) occupy one catchment OR an exception has been granted.*

✔
Yes

Comment The Ecolab Suzano site sits within a single water catchment area.

0.1.1.2 *The scope of the proposed certification shall be under the control of a single management system.*

✔
Yes

Comment The site is managed under a single-based management system.

0.1.1.3 *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.*

✔
Yes

Comment The site's production system and water management are homogeous.

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 Water Service Provider: The site gets its water for operations from an onsite well (about 95% of water). This well takes water from Aquifero Cristalino (Pre Cambrian Aquifer). The site also uses about 5% of water from municipal water from SABESP; this water comes from the Alto Tiete production system. The water for drinking water for employees come from purchased spring water from Aqua Fonte who’s water is sourced from Aquifero Guarani

Ultimate Water Source: Aquifero Cristalino (Pre Cambrian), Aquifero Guarani and Alto Tiete System
 Wastewater service provider: The water both industrial process water and other water is discharged to SABESP for treatment. The stormwater runoff goes into the Goiabeira River.

Ultimate Receiving Water Body: Tiete River and Goiabeira River

Evidences:

- Map: Google_Maps_view_Suzano - shows the site boudaries.
- map: MAPS_WITH_PIPELINES_(SUZANO)_-_SABESP_&_amp;_WELLS - shows water-related infrastructure, including piping network.
- Map: FIREFIGHTING_SYSTEM_Suzano - shows the piping of firefighting system.
- Map: EMERGENCY_CONTROL - shows water-related infrastruture for emergency control.
- Map: Discharge points Suzano - shows the discharge points, wells (water source providing water to the site that are owned and managed by the site), inlet point from water from Sabesp (Sabesp is the water service provider).
- Map: Plant_Suzano - shows the plant of Suzano, the river into the site and the green areas.
- Map: Suzano Catchment - Shows Groundwater catchment (slides 3, 4 and 6),Ultimate Water Source (slide 5), Alto Tiete Basin (slide 9), the ETA (water treatment) and the ultimate water source (slide 11), and ETE (sewage treatment) from Sabesp (slide 11), Ecolab Suzano Catchment Map - Alto Tiete-Cabeceiras (slide 12).

Conclusion: The requirements have been addressed.

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

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1.2.1 *Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall:* 🚩 in progress

- Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;
- Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;
- Provide evidence of stakeholder consultation on water-related interests and challenges;
- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;
- Identify the degree of stakeholder engagement based on their level of interest and influence.

Comment Evidence: Stakeholders_and_Outreach_(Suzano) - shows the process used to make the Ranking Level of Interest and Influence, identified stakeholders and contact with them. The assessment of stakeholders is in a list and prioritization.
Stakeholder-mappig - identified the degree of stakeholder engagement based on their level of interest and influence.
Stakeholders (from Sabesp), representative of the site's ultimate water source and ultimate receiving water body are identified.

The site did not consider neighbors, such as farmers and local commerce.

Finding No: TNR-001663

1.2.2 *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.* 🚩 in progress

Comment NC minor, see 1.2.1
Evidence: Stakeholders_and_Outreach_(Suzano) - shows the process used to make the Ranking Level of Interest and Influence. The site considered the Stakeholders (from Sabesp), representative of the site's ultimate water source and ultimate receiving water body are identified.
Stakeholder-mappig - identified the degree of stakeholder engagement based on their level of interest and influence.
But

The site did not consider neighbors, such as farmers and local commerce.

Finding No: TNR-001597

1.3 *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.*

1.3.1 *Existing water-related incident response plans shall be identified.* ✅ Yes

Comment Evidences: POL 01391 PAE ECOLAB - 2021 - shows the Procedures for emergencies: chapter 7 (includes 11 procedures), chapter 8. Leakage Chemicals, chapter 11.3 Floods.
PRO-03443 - Shows teh procedures for emergencies in transportation.






Conclusion: This indicator requires the site to identify any existing emergency-response plan it has that addresses waterrelated risks and events. The site has a general incident response plan and it mentions waterrelated events.

1.3.2 *Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped* 🔍 Obs.

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Comment	<p>Evidences: site Water Balances Hydric Maps</p> <p>The site identified and mapped the water balance, inflows, outflows, losses and storage. Obs. rainwater is not included in the water balance, since it is not used. The water from washing facilities goes to the sewage treatment.</p> <p>The site also identifies opportunities to reduce water use and early warning of leak detection (evidences of Projects: projeto aguas interno, projeto conceitual de reuso de efluentes).</p>	
1.3.3	<p><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></p>	<p> Obs.</p>
Comment	<p>The annual variances in water usage rates are evidenced in the files DATA BASE, hydric Map, Controle de SH&E and Water balance. OBS. rainwater is not included in the water balance</p>	
1.3.4	<p><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></p>	<p> Yes</p>
Comment	<p>Outgoing water quality testing is performed on a monthly basis with annual analysis sent to as compliance permits. There is no significant seasonal variance with the outgoing water quality. With incoming water there are some excursions and there are some oscillations with turbidity and pH but none significant and evident of definite seasonal variation.</p> <p>As evidence the site presented monitoring worksheets, physicochemical and bacteriological analysis of well water and annual effluent report.</p>	
1.3.5	<p><i>Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.</i></p>	<p> Yes</p>
Comment	<p>The site listed all the raw materials and products kept on site and their general location. These are the most likely to be pollutants. The site also presented them mapped.</p> <p>Evidences: Inventory list - Suzano; RM, intermediates and FG - Suzano; Localization raw material and products; site map raw material and products.</p>	
1.3.6	<p><i>On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.</i></p>	<p> No</p>
Comment	<p>On-site Important Water-Related Areas were not identified (or mapped, and their status was not described).</p> <p style="text-align: right;">Finding No: TNR-001599</p>	
1.3.7	<p><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></p>	<p> in progress</p>

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Comment The site presented:

- Incoming water cost for municipal water.
- The cost related to operation of the well (year license fee to the government). The site declared there are little to no maintenance costs associated with operation and maintenance of the well.
- The cost of effluent treatment to the municipality.
- The cost of drinking water bottles.

The site didn't identify payments to specialists, payment for expert projects, payment for projects related to water, water related monitoring costs, internal water treatment costs, stakeholder engagement and associated activities costs, certification costs, costs with hours worked by employees in water-related actions.

Finding No: TNR-001600

1.3.8 *Levels of access and adequacy of WASH at the site shall be identified.* ✔
Yes

Comment Evidences: map of WASH facilities and the WASH self assessmet.

The site has 135 people and 6 WC facilities on site and 7 potable drinking water stations onsite. This is in legal compliance with National law (Norma regulamentadora 24) of access to WC for men and women and access to potable water.

The site has completed the WBCDS WASH Self Assessment .

1.4 *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.*

1.4.1 *The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.* ➔
in progress

Comment The site identified the water embebed of their top 5 purchased raw materials, and only one of this is sourced from within site catchment, the rest are not.
Evidences: worksheet with the amount of embedded water in IBC Container (Vasetex). E-mails requesting the information from IBC provider.

Identification of suppliers in the same catchment is not completed. The site has not identified all raw materials that are produced in the same basin as the site.

Finding No: TNR-001601

1.4.2 *The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.* ✔
Yes

Comment The site has outsourced laundry service for the uniforms which uses about 12.5L water/kg of laundry. The site send about 1000kg of laundry a year equating to about 12.5m3 a year of outsourced water services. Evidences: e-mail from Ecolab about water use in the Ecolab laundry machine used by the service provider Nipolav and whatsapp communication with the service provider Nipolav about the quantity of uniforms washed.

The site also has outsourced IBC washouts service (to reuse those vessels). Evidences: calculation of water use to washout the vessels, quantity of vessels used in 2021, information of Reverse Logistics of Used Industrial Packaging from Vasitex.


Conclusion: The site quantified the embedded water use of outsourced services.

1.5 *Gather water-related data for the catchment, including water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH*

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- 1.5.1** *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.* 
Yes

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Comment

In Brazil there are several different bodies who oversee aspects of water resources. There is a federal law (No. 9,433/97) instituted that created the National System of Water Resources Management (SINGREH). This brings together the different government bodies and committees that work on the national water resources policy. The role of this collective is to promote the democratic and participatory management of water uses. Within this collective is the Water Resources National Council (CNRH), the Water Security Secretariat of the Ministry of Regional Development (SSH/ MDR), the National Waters Agency (ANA), the State Water Resources Council (CERH), the State Water Resources Management Bodies, River Basin Committees and Water Agencies.

This same law also created 5 different water resource management tools to help organize the integrated management at different levels of government (i.e. state and federal) through planning, supervision, disclosure of information and regulation.

The creation of ANA in 2000 helped drive the implementation of these water resource management tools throughout the country. The results have been captured in the Brazilian Water Resources Report since 2009. In 2006 the first National Water Resource Plan was made and there was significant analysis to it for improvements in 2017-2020. New guidelines are followed in 2021. States individually are also making their State Water Resource plans.

River Basin committees (CBHs) in Brazil have existed since 1988. They are composed of committees that represent different sectors of society that are interested in basin management and have decision making ability. CBHs are also a part of SINGREH. The current CBH do not represent all basins in Brazil but rather ones that had quantitative or qualitative conflict for water usage.

Water consumption permits are issued on a state and federal level. Withdrawal without permits continues to be a problem or over withdrawal above permit allowance also continues to be a problem.

In addition more work to have better groundwater management plans especially when between different regions is another gap the management plan has. (Source: SDG Report)

In the state of Sao Paulo and on our municipality level water is controlled by SABESP.

There have been several public initiatives over the years to address the planning, management and efficiency of water and energy usage in Brazil. The COM+AGUA project was started in 2005 to address this especially where there is high water losses and low energy efficiency across the supply network. From 2014-2017 another program as a part of the Program for the Development of the Water Sector (INTERÁGUAS) was launched to strengthen institutions and methodologies around integrated water management to reduce losses and promote efficient use of electricity. The looked at varying sizes of service providers with water restrictions and had external and internal stakeholders participate in the training actions, technical work and management instruments.

There has been efforts to expand the amount of aquifers the Integrated Groundwater Monitoring Network (RIMAS) is monitoring. RIMAS formed in 2009 and this expansion initiative came about in 2015. In 2020 the total monitoring was up to 409 aquifers. (Conjecturas Report)

In regards to initiatives around sanitation and reuse, in 2018 the National Sanitation Secretariat of the Ministry of Regional Development (SNS/MDR) created guidelines for an Action plan to institute a Treated Sanitary Effluent Reuse Policy in Brazil. This proposed policy discusses quality standards, financial models, tariff subsidies, available technologies, and legal framework. The plan in 2016 identified reuse projects that could potentially produce up to 13 m³/s. The opportunity shows the great potential for expanding these efforts for industrial reuse in the Southeast region which encompasses our catchment in Sao Paulo.









In an effort of transparency, every year ANA published the Conjecturas report which talks about the state of water in Brazil. In the report they highlighted their projections that there will be an increase of 42% water removed over the next 20 years. This they highlighted as motivation to develop planning actions around water security and consideration of the effects of climate change on the water cycle. Most relevant to our site is the projections around the increased use of water in industry and plans around that.

SABESP notes in their 2020 Sustainability Report that they have a goal to execute 984 thousand new water connections and 1.2 million new sewage connections from 2021 to 2025. Another stride being made is the mandatory connection of house to the water and sewage networks

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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	The site uses an application of legal compliance for the site called "amlegis". Evidence:1.5.2 Suzano (Requisitos Legais Relacionados a Água). Conclusion - Water-related legal and regulatory requirements are identified and documented in a Legal Register, dates of expiry are tracked, and all requirements were met at the time of the audit.	
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
Comment	The site presented a study that shows the catchment water balance. Evidence: file with the study called " 1.5.3 Suzano- catchment water-balance".	
1.5.4	<i>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.</i>	 Yes
Comment	The site has compiled information about the water quality of the catchment in the document called "1.5.4-1.5.5-1.5.6-1.5.7 Suzano" pages 1 to 16.	
1.5.5	<i>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.</i>	 Yes
Comment	The IWRA have been mapped and the status in the document called "1.5.4-1.5.5-1.5.6-1.5.7 Suzano" pages 16 to 23.	
1.5.6	<i>Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.</i>	 Yes
Comment	The site has compiled information about the water realted infraestructure of the catchment in the document called "1.5.4-1.5.5-1.5.6-1.5.7 Suzano" pages 23 to 50.	
1.5.7	<i>The adequacy of available WASH services within the catchment shall be identified.</i>	 Yes
Comment	The site has compiled information about the available WASH services within the catchment in the document called "1.5.4-1.5.5-1.5.6-1.5.7 Suzano" pages 50 to 62.	
1.6	<i>Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.</i>	
1.6.1	<i>Shared water challenges shall be identified and prioritized from the information gathered.</i>	 No
Comment	The site identified and prioritized the water challenges in the document called "1.6&1.7 Risk Assessment Suzano". Shared water challenges missing the steakholders connection.	Finding No: TNR-001629
1.6.2	<i>Initiatives to address shared water challenges shall be identified.</i>	 Obs.


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Comment The site identified the Associated Initiatives for public initiatives and associated initiatives in the document "stakeholder and outreach", in the tag "Associated Stakeh Initiatives". The initiatives identified in this document is related to SABESP and ONG SOS Mata Atlântica. The site present also others iniciativas, but didn't mention in this document, such the iniciative with TNC - The Nature Conservancy, and the Mogi das Cruzes water scarcity contingency plan.

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.* 
Obs.


Comment The site identified, and prioritized the Water risks faced by the site, including likelihood and severity of impact, the evidence is in the document "1.6&_1.7_Risk_Assessment_Suzano". In the spreadsheet "1.6&_1.7_Risk_Assessment_Suzano", in the H Column, Ecolab classify the impact on the site (for example, Business continuity, reputational risk, financial Impact, Infrastructure risk, safety).

1.7.2 *Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.* 
No

Comment The site didn't identify the water-related opportunities.

Finding No: TNR-001632


1.8 *Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.*

1.8.1 *Relevant catchment best practice for water governance shall be identified.* 
Yes

Comment Ecolab participate in the ABIQUIM Committee for the Sustainable development. ABIQUIM is the Brazilian Chemical Industry Association. Evidences: Ata Reuniao da Comissao de Meio Ambiente 06 07 2022 rev01 (Minutes Meeting of the Environment Commission); Nalco Water - Ecolab (best practices in the sector) - comparative document between the Performance Indicator f the Responsible Action Program - 2022 (base year 2021) of the Ecolab-Nalco in relation to the result of the general average of all ABIQUIM member companies that responded to the survey.

Ecolab has implemented a water management tool implemented by the site that gives best practices and scores for water governance, water balance and quality. Evidence: GSC_Water_Management_Tool_(Suzano)_updated63022.

The justification for identifying these examples will be assessed at the certification audit.

1.8.2 *Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.* 
Yes

Comment Ecolab participate in the ABIQUIM Committee for the Sustainable development. ABIQUIM is the Brazilian Chemical Industry Association. Evidences: Nalco Water - Ecolab (best practices in the sector) - comparative document between the Performance Indicator f the Responsible Action Program - 2022 (base year 2021) of the Ecolab-Nalco in relation to the result of the general average of all ABIQUIM member companies that responded to the survey.

Ecolab has implemented a water management tool implemented by the site that gives best practices and scores for water governance, water balance and quality. Evidence: GSC_Water_Management_Tool_(Suzano)_updated63022.

The justification for identifying these examples will be assessed at the certification audit.

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1.8.3 *Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.* ✔
Yes

Comment Ecolab participate in the ABIQUIM Committee for the Sustainable development. ABIQUIM is the Brazilian Chemical Industry Association. Evidences: Nalco Water - Ecolab (best practices in the sector) - comparative document between the Performance Indicator f the Responsible Action Program - 2022 (base year 2021) of the Ecolab-Nalco in relation to the result of the general average of all ABIQUIM member companies that responded to the survey.

Ecolab Suzano ISO 14001 certification shows a best practice for water quality.

Ecolab has implemented a water management tool implemented by the site that gives best practices and scores for water governance, water balance and quality. Evidence: GSC_Water_Management_Tool_(Suzano)_updated63022

Evidence of proper land management practices to protect water bodies from pollution: document called "1.8.3-avaliacao_ambiental_preliminar.", which shows the company soli investigation to prevent water contamination.

The Ecolab process does not require drinking water quality water. Using a lower quality water can reserve higher quality water for essential purposes, and can result in saving on water treatment costs, and associated chemicals and energy requirements. Evidences: documents called "1.8.3_Suzano" and "Análises_Julho".

The justification for identifying these examples will be assessed at the certification audit.

1.8.4 *Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.* ✔
Yes

Comment Relevant best practices for IWRA would be engagement with local stewards and community around the IWRA within the catchment and caring for any onsite IWRA. Evidence: TNC PCJ Ecolab proposal and details on the source water project from last year TNC.

The justification for identifying these examples will be assessed at the certification audit.

1.8.5 *Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.* ✔
Yes

Comment It's recognized as best practices offer more bathrooms than the law required (NR 24). The site has 170 people and 38 bathrooms on site and 7 potable drinking water stations onsite.

The site has been working toward a better score on the WBCSD WASH assessment and is adopting to follow these best practices. Evidence: WBCSD_Revised_WASH_Self_Assessment_Tool-final_PTBR

The company has invested in preventing floods and also in avoiding health problems. During the visit to the site, the structures implemented to contain the floods were verified.

The justification for identifying these examples will be assessed at the certification audit.

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	Updated, received and correct signed document. Evidence: a signed AWS commitment from the plant management. ECOLAB has published their signed commitment in their website and social media.
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	The site identified the responsible persons/positions within facility organizational structure. Evidence: responsibility matrix. The Site has system called "amblegis", where all legal and environmental regulations are controlled and updated. The site has a documentation system to record the compliance of requirements and obligations. Evidence: 1.5.2 Suzano (Requisitos Legais Relacionados a Água).
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.
Comment	Evidence: Water_Stewardship_Strategy_Suzano_2022. This document shows the goals, but does not have a formal mission and vision.
	Finding No: TNR-001633
2.3.2	<p>A water stewardship plan shall be identified, including for each target:</p> <ul style="list-style-type: none"> - 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.

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- Comment
- The site developed a water stewardship plan. This plan has:
- How it will be measured, but does not describe the monitoring.
 - action to achieve and maintain it.
 - Planned timeframes to achieve it
 - some Financial budgets allocated for actions, but not for each target.
 - Positions of persons responsible for actions and achieving targets.

The water stewardship plan require a monitoring approach and financial budget for each target.

Finding No: TNR-001602

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.*



Yes

Comment

The site identified a plan to mitigate identified risks. Evidence: tab “Public Sector Plan 2.4.1” in Risk Assessment file.

The site participates in a mutual assistance group for emergencies in the region, with public sector, companies and others actors. This group has plan called PAM – ALTO TIETÊ. In the website of PAM (pamaltotiete.com.br) are the names of the participating entities. Evidence: Ata 330º - Agosto Reunião Híbrida.

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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

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Comment The site has worked on a variety of stakeholder outreach showing good catchment governance. The site connected with suppliers, public agencies (SABESP, the water provider), other local companies, and NGOs to discuss shared water challenges and discuss collective action. Evidence: Stakeholder and outreach log.

Ecolab Brazil is also an active member of the The Brazilian Business Council for Sustainable Development (CEBDS), Pam (Mutual Assistance Plan) and the Brazilian Chemical Industries Association (Abiquim). Evidence: –www.cebds.org/empresas/; e-mail from CEBDS. CEBDS is a non-profit civil association that promotes sustainable development through articulation with governments and civil society, in addition to disseminating the most current concepts and practices on the subject.

PAM is a working group with the objective of establishing basic guidelines for coordination, as well as joining efforts of industries, firefighters, civil defense commission and official bodies in the planning and development of PAM, aiming to supplement necessary resources and materials, in order to ensure greater efficiency in dealing with emergency situations, such as fires, leaks of toxic substances or any other event that may cause damage to people, property and the environment. Abiquim, on the other hand, carries out statistical monitoring of the sector, promotes specific studies on the activities and products of the chemical industry, monitors changes in legislation and advises member companies on economic, technical and foreign trade matters. Evidence: Minute of a PAM meeting.

To meet the demands of the sector, Abiquim also relies on the work of sectoral and thematic committees, formed by representatives of associated companies and professionals from the entity itself, who support and carry out the activities. Abiquim is responsible for coordinating, at a national level, the Responsible Care® Program, in addition to managing the CB 10 - Brazilian Technical Standards Committee, from ABNT, for the chemical area. AWS to include and discuss with our site employees. We also had additional sessions to raise awareness of environmental stewardship in the community and on site. Evidence: Commission meeting minutes (environment week session)

The site also contributed to a project with The Nature Conservancy Sao Paulo Water Fund to address shared water challenges near the headwaters of the Alto Tiete River basin. This project will protect at least 220 hectares of forest land within the municipalities of Mogi das Cruzes and Salesópolis, allowing for water replenishment in the watershed. Project partners will begin by engaging with rural landowners, mapping existing forests that need to be conserved and restored, and identifying improvements to be made to rural sanitation. They will then negotiate voluntary conservation agreements with landowners, which align with Municipal Water Conservation Policies that already exist in the municipalities. Once signed, these agreements will pay these rural landowners to conserve their forested lands. Evidence: project of TNC.

From a broader perspective, Ecolab (parent company) has created a water coalition that will set science based local water targets for all members of the alliance (targeting other multinationals). So far, the company has spoken with a number of public organizations (i.e. P&G, TruCost) and NGOs (WRI, UN CEO Water Mandate) to get involved and have 25 organizations signed on. Together the site is working on evaluating projects as well as looking into basin evaluations to best address the shared water challenges in the basin through collective action. Ecolab is a big supporter of water stewardship and aims to be the best practice in all 5 outcomes of AWS. Ecolab is also committed to implementing and seeking certification at all of our top 15 high water risk sites by 2030.

Through the company’s involvement in the UN CEO Water Mandate Water Action Hub the site has also been able to contact other companies within the catchment for collaboration and alignment on shared water challenges, however the site has not heard back from any. Ecolab has registered their work with AWS on the Water Action Hub so others seeking collaboration opportunities or knowledge sharing can contact them through that platform.

The site is a part of Ecolab’s Global Supply Chain Horizontal Process Network which is a collaboration between all global supply chain sites with a focus on high risk and high-water using sites to share best practices, knowledge, tools and align on long term goals.

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

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Comment Evidence

- Water is readily available to all citizens, including WASH facilities (e.g., at restaurants, neighborhood etc.).

The site is in a region that is supplied by potable water treated by SABESP. The surface water source for the site is only from Sabesp, not consuming water from the streams in the region. The amount of water withdrawn from the wells is granted by the body responsible for determining the distribution of rights to use groundwater without conflicts of use.

- The site provides best practice WASH facilities for its employees and visitors.
- No rights of external parties that need to be considered beyond internal site WASH requirements were identified by the site or audit team.

Conclusion:
The site is not restricting access to water for others.

3.2 *Implement system to comply with water-related legal and regulatory requirements and respect water rights.*

3.2.1 *A process to verify full legal and regulatory compliance shall be implemented.* ✔
Yes

Comment The site has a process to verify legal and regulatory compliance. Its is called Amblegis. Evidence: 3.2.1 Suzano (Requisitos Legais Relacionados a Água).

Attached are the licenses and grands of Ecolab Suzano, and the periodical reports.

3.2.2 *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.* ✘
No

Comment The Guarani aquifer is important for indigenous people, However, the use of that aquifer from the site is limited, by the grant, and has a sustainable approach. The Ecolab Suzano plant withdraws and discharges after use. The water is treated before its discharge into the Tiete River. The Cristalino Aquifer provides 67,014,000 m3 per year to the area, making the Suzano plant .0012% of the total water withdrawal in the basin.

The site must adjust the catchment size to identify the indigenous people. NC minor.

Finding No: TNR-001603

3.3 *Implement plan to achieve site water balance targets.*

3.3.1 *Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.* ✔
Yes

Comment The main key performance indicators the site tracks are water intensity, production, water and effluent. In 2021 Suzano reduced their water usage intensity by 11% and an absolute reduction of 5%. This means the site has surpassed the water targets set forth in the water stewardship plan. Production increased and effluent increased. Evidence: DATABASE 2120 - SH&E_2021; DATABASE 2120 - SH&E_2022.






3.3.2 *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.* ✔
Yes

Comment In 2021 Suzano reduced their water usage intensity by 11% and an absolute reduction of 5%. This means the site has surpassed the water targets set forth in the water stewardship plan. Production increased and effluent increased. Evidence: DATABASE 2120 - SH&E_2021; DATABASE 2120 - SH&E_2022.

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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	Investment project with TNC: The site shows his commitment to financially support the Upper Tiete River fund from the Nature Conservancy which will replenish water to the basin in which Ecolab Suzano exists in.	
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>	 Yes
Comment	Ecolab Suzano plant is working toward improving water quality targets. The site is currently in compliance with wastewater permits. The site is also in compliance with the Ecolab Global Supply Chain Environmental policy. The site shows the analytical results of Water quality (2017-2021), the evidences are attached.	
3.4.2	<i>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.</i>	 Yes
Comment	Ecolab Suzano plant is working toward improving water quality targets. The site is currently in compliance with wastewater permits. The site is also in compliance with the Ecolab Global Supply Chain Environmental policy. The site shows the analytical results of Water quality (2017-2021), the evidences are attached. The Site is talking with ONG SOS Mata Atlantica about a project regarding water quality as a shared water challenge.	
3.5	<i>Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.</i>	
3.5.1	<i>Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.</i>	 Yes
Comment	Investment project with TNC: The site shows his commitment to financially support the Upper Tiete River fund from the Nature Conservancy which will replenish water to the basin where Ecolab Suzano is. The project site is located within the Piracicaba, Capivari, Jundiai - PCJ and Upper Tietê watersheds, part of the Atlantic Forest biome. São Paulo's most important watersheds, the Piracicaba, Capivari, Jundiai (PCJ) and Alto Tietê (Upper Tietê), have experienced severe deforestation, worsening water pollution, sedimentation of reservoirs, and increasing severity of floods and droughts. In recent years, the city of São Paulo has faced a severe water shortage. Investments in both green and grey infrastructure are needed to meet the water security objectives for this region. Project activities: Conservation on the Ground, Identification of key areas for conservation, Payment for Environmental Services, WASH, Ecological Restoration for Economic Purposes.	
3.6	<i>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.</i>	
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>	 Yes

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Comment	<p>The site has 135 people and 6 WC facilities on site and 7 potable drinking water stations onsite. This is in legal compliance with National law (Norma regulamentadora 24) of access to WC for men and women and access to potable water. Evidence: WASH Map.</p> <p>The site has completed the WBCDS WASH Self Assessment. Evidence: map of WASH facilities and the WASH self assessmet_</p> <p>the site donated alcohol gel to its employees in 2021. Evidence: donation receipt list (BEST PRACTICES WASH_3.6.1).</p>	
3.6.2	<p><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></p>	 Yes
Comment	<p>There are no fines for contaminating discharges or exceeding the permitted limit of water extracted from the wells is evidence of not abusing it. The company regularly receives inspections from the agency that issues the operating license. Evidence: report of the last inspection carried out.</p> <p>The plant withdraws water as allowed by their legal permit and discharges treated water to a secondary treatment center and maintains the legal compliance with the effluent. The Suzano plant withdraws annually and discharges after use. The water is treated before its discharge into the Tiete River. The Cristalino Aquifer provides 67,014,000 m3 per year to the area, making the Suzano plant .0012% of the total water withdrawal in the basin. The impact the site has on the main water source is minimal.</p>	
3.7	<p><i>Implement plan to maintain or improve indirect water use within the catchment:</i></p>	
3.7.1	<p><i>Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.</i></p>	 No
Comment	<p>The site didn't include indirect water use targets in their Water Stewardship Plan.</p> <p style="text-align: right;">Finding No: TNR-001604</p>	
3.7.2	<p><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></p>	 Yes
Comment	<p>The site has dialogues with its service and product providers, and potentially actions. The site has minimal indirect water usage (see indicator 1.4.2) however through his stakeholder engagement the site is engaged with his supplier and has been learning about their sustainability programs. Evidence: stakeholders and outreach.</p> <p>The site engaged with his service providers to quantify the indirect water used. Evidences: whatsapp communication with the service provider Nipolav about the quantity of uniforms washed, communication from Schütz-Vasitex.</p>	
3.8	<p><i>Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have.</i></p>	
3.8.1	<p><i>Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.</i></p>	 Yes

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Comment	<p>In the site visit the auditors verified the evidence of commitment to maintain the shared infrastructure under good maintenance schemes. This indicator links back to the review outcome for indicator 2.4.1 and 1.7.</p> <p>See stakeholder engagement for evidence of attempted contact as well as successful contact (email SABESP - Ecolab), and a text from SABESP about their sustainability initiatives and shared water challenges. The site has then been able to share those initiatives and talk about his process of AWS.</p>	
3.9	<p><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></p>	
3.9.1	<p><i>Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.</i></p>	 Yes
Comment	<p>Ecolab participate in the ABIQUIM Committee for the Sustainable development. ABIQUIM is the Brazilian Chemical Industry Association. Evidences: Ata Reuniao da Comissao de Meio Ambiente 06 07 2022 rev01 (Minutes Meeting of the Environment Commission); Nalco Water - Ecolab (best practices in the sector) - comparative document between the Performance Indicator f the Responsible Action Program - 2022 (base year 2021) of the Ecolab-Nalco in relation to the result of the general average of all ABIQUIM member companies that responded to the survey.</p> <p>Ecolab has implemented a water management tool implemented by the site that gives best practices and scores for water governance, water balance and quality. Evidence: GSC_Water_Management_Tool_(Suzano)_updated63022.</p>	
3.9.2	<p><i>Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.</i></p>	 Yes
Comment	<p>Ecolab participate in the ABIQUIM Committee for the Sustainable development. ABIQUIM is the Brazilian Chemical Industry Association. Evidences: Nalco Water - Ecolab (best practices in the sector) - comparative document between the Performance Indicator f the Responsible Action Program - 2022 (base year 2021) of the Ecolab-Nalco in relation to the result of the general average of all ABIQUIM member companies that responded to the survey.</p> <p>Ecolab has implemented a water management tool implemented by the site that gives best practices and scores for water governance, water balance and quality. Evidence: GSC_Water_Management_Tool_(Suzano)_updated63022.</p>	
3.9.3	<p><i>Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.</i></p>	 Yes

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Comment Ecolab participate in the ABIQUIM Committee for the Sustainable development. ABIQUIM is the Brazilian Chemical Industry Association. Evidences: Nalco Water - Ecolab (best practices in the sector) - comparative document between the Performance Indicator of the Responsible Action Program - 2022 (base year 2021) of the Ecolab-Nalco in relation to the result of the general average of all ABIQUIM member companies that responded to the survey.

Ecolab Suzano ISO 14001 certification shows a best practice for water quality.


Ecolab has implemented a water management tool implemented by the site that gives best practices and scores for water governance, water balance and quality. Evidence: GSC_Water_Management_Tool_(Suzano)_updated63022

Evidence of proper land management practices to protect water bodies from pollution: document called "1.8.3-avaliacao_ambiental_preliminar.", which shows the company soil investigation to prevent water contamination.

The Ecolab process does not require drinking water quality water. Using a lower quality water can reserve higher quality water for essential purposes, and can result in saving on water treatment costs, and associated chemicals and energy requirements. Evidences: documents called "1.8.3_Suzano" and "Análises_Julho".

3.9.4 *Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.* 
Yes

Comment Relevant best practices for IWRA would be engagement with local stewards and community around the IWRA within the catchment and caring for any onsite IWRA. Evidence: TNC PCJ Ecolab proposal and details on the source water project from last year TNC.

3.9.5 *Actions towards achieving best practice related to targets in terms of WASH shall be implemented.* 
Yes

Comment It's recognized as best practices offer more bathrooms than the law required (NR 24). The site has 170 people and 38 bathrooms on site and 7 potable drinking water stations onsite.






The site has been working toward a better score on the WBCSD WASH assessment and is adopting to follow these best practices. Evidence: WBCSD_Revised_WASH_Self_Assessment_Tool-final_PTBR

The company has invested in preventing floods and also in avoiding health problems. During the visit to the site, the structures implemented to contain the floods were verified.

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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>	 No
Comment	Information of performance against targets is missing in the Water Stewardship Plan. Finding No: TNR-001649	
4.1.2	<i>Value creation resulting from the water stewardship plan shall be evaluated.</i>	 Yes
Comment	Reducing the site water withdrawal and staying within his permit is directly financially beneficial to the site. An average annual water reduction of 2 million gallons, equivalent to \$550,000 in risk-adjusted cost savings, was achieved from 2018 to 2021. Evidence: Suzano Water Risk Monetizer.	
4.1.3	<i>The shared value benefits in the catchment shall be identified and where applicable, quantified.</i>	 Yes
Comment	As water scarcity is one of site's shared water challenges any water reduction, alternative water collection and water replenishment the site has is value for the catchment. Through site's partnership with The Nature Conservancy 29.4 million gallons per year over 10 years (2023-2032) will be replenished to the catchment. The same is true for water quality, as it is a shared water challenge, anything the site is doing to maintain best practices or improve upon best practices is valuable for the catchment. Evidence: project with TNC on the details of water replenishment (29.4 million gallons per year over 10 years).	
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>	 Yes
Comment	Attached is a review of all the emergency incidents that occurred from 2019 to now including the root cause analysis done. Evidences: IncidentSearch; IncidentCorrectiveActionSummary. Examples of root cause analysis of last year (3 examples). Evidence: Suzano - Vazamento R-7618; Suzano - Queda paleta ac cloridrico; Suzano - Transbordo R-7618. File Incident related with flooding in the past. Evidence: Projeto Piscinão (Project Flood Control Ecolab Suzano Brazil) During the side-walk the auditors team has seen barriers (bulided) and a swimming pool, that had been created to prevent flooding.	
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>	 No

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Comment Consultation efforts are adequate. Evidence: Stakeholders and outreach.
The site produced a flowchart with stakeholder engagement activities. Evidence: Stakeholders flowchart - Suzano

The site must adjust the catchment size to define the stakeholders to engage.
Finding No: TNR-001651

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's water stewardship plan is a living document that they continue to amend as they complete projects, engage in new projects and set new goals and evaluate feasibility of existing projects.

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5 STEP 5: COMMUNICATE & DISCLOSE - Communicate about water stewardship and disclose the site's stewardship efforts	
5.1	<i>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.</i>
5.1.1	<i>The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.</i>
Comment	<p>Narrative of governance is in the website. Evidence: https://pt-br.ecolab.com/stories/ecolabs-suzano-brazil-plant-certifying-as-water-stewardship-leader Positions of those accountable for compliance with water-related laws and regulations is defined. Evidence: Suzano RACI AWS Certification.</p> <p>The governance disclose effort needs to be publicly accessible, in the Ecolab site lacks an organizational chart describing the positions and functions.</p> <p style="text-align: right;">Finding No: TNR-001652</p>
5.2	<i>Communicate the water stewardship plan with relevant stakeholders.</i>
5.2.1	<i>The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.</i>
Comment	<p>The site communicated the water stewardship plan through a presentation to the stakeholders. Evidence: AWS Stakeholder Engagement Template_Brazil (1). Also in the Ecolab website are information about how the water stewardship plan contributes to AWS Standard outcomes. Evidence: https://www.ecolab.com/stories/ecolabs-suzano-brazil-plant-certifying-as-water-stewardship-leader</p>
5.3	<i>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.</i>
5.3.1	<i>A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.</i>
Comment	<p>A summary of the site's water stewardship performance is disclosed in his Responsibility Report. Evidence: Ecolab 2021 Corporate Responsibility Report (7).</p> <p>At this time it is included on the site you are going to obtain your certification. Evidence: https://www.ecolab.com/stories/ecolabs-suzano-brazil-plant-certifying-as-water-stewardship-leader</p>
5.4	<i>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.</i>
5.4.1	<i>The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.</i>
Comment	<p>This 5.4.1 indicator depends on whether 1.6.1 indicator is met. The site identified and prioritized the water challenges in the document called "1.6&1.7 Risk Assessment Suzano", but in the shared water challenges identified is missing the stakeholders connection.</p> <p style="text-align: right;">Finding No: TNR-001653</p>
5.4.2	<i>Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.</i>

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Comment Consultation efforts are adequate. Evidence: Stakeholders and outreach.
The site produced a flowchart with stakeholder engagement activities. Evidence: Stakeholders flowchart - Suzano

Observation: The site must adjust the catchment size to define all the stakeholders to engage.

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 no water-related compliance violations. Periodically the site receives inspection visits from the licensing body - CETESB. After this inspection, the licensing body issues a document called "auto de inspeção" that certifies that there are no violations on the site. Evidence: auto de inspeção.

In the past the site suffered from flooding and to resolve it built walls and reservoirs to contain the rainwater that entered the site. Evidence: Projeto Piscinaão.

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

Comment Evidence
- No corrective actions have been required by the site regarding water-related compliance violations.
Conclusion
- Necessary corrective actions by the site to prevent future occurrences have not been applicable and have therefore not been disclosed.

5.5.3 *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.* ✔
Yes

Comment Evidence
- The site advised that there have never been any violations or need for corrective actions.

The site has a Communication Procedure. Evidence: 5.5.3 Procedimento de Comunicação.
The purpose of this procedure is to establish as categories and communication methodologies that are used in the plant of Ecolab Química Ltda. in order to ensure that messages delivered are received effectively and transparently. This instruction applies to all employees of the Ecolab Química Ltda plant. when they need to communicate in groups, individually or with interested parties. Ecolab Química Ltda. decided to hire, via the Corporate Communications department, a press office and public relations agency (Imagem Corporativa) responsible for communicating with the market information on social responsibility, and financial aspects, managing the public image of the company that touches the business market.

Conclusion
- There have not been any site water-related compliance violations that have required communication to relevant public agencies and disclosure.

Photographic Evidence from Audit

✔
Yes