WATER STEWARDSHIP
AND SUSTAINABLE NATURAL
RUBBER PRODUCTION

A comparison of the International Water Stewardship Standard
(AWS Standard) and the Global Platform for Sustainable Natural
Rubber (GPSNR) Policy Framework
June 2022
INTRODUCTION

This report includes a comparison of the International Water Stewardship Standard (AWS Standard) and the Global Platform for Sustainable Natural Rubber (GPSNR) Policy Framework, with recommendations to improve water stewardship in the natural rubber sector.

Part of a set of reports from the ‘Boosting sustainability practice and performance at landscape level through good water stewardship 2020–2022’ project. This project was possible thanks to a grant from the ISEAL Innovations Fund, which is supported by the Swiss State Secretariat for Economic Affairs SECO.

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CONTEXT

Natural rubber is used in countless products, from tyres to shoe soles, from medical gloves to seals and gaskets. It is produced in countries close to the equator, with Thailand and Indonesia being the largest producers. This is a water reliant commodity in terms of production and rubber trees are highly sensitive to water table fluctuations. As demand for natural rubber has grown steadily, so has awareness of the need to reduce the product’s environmental, social and economic impact. Improved water stewardship by the natural rubber sector would support sustainable production, increase the sector’s resilience to water-related risks, and have wider benefits at catchment or landscape level.

In collaboration with the Global Platform for Sustainable Natural Rubber (GPSNR), we set out to provide:

- Insights into overlaps and gaps between the International Water Stewardship Standard (AWS Standard) V2.0 and the GPSNR Policy Framework to make it easier for GPSNR members to pursue AWS Standard certification.
- Practical recommendations to strengthen water stewardship performance as part of the GPSNR Policy Framework and its Implementation Guidance.

This overview aims to support GPSNR company members to better understand their own water use and management, identify site and catchment risks and opportunities, and engage in meaningful individual and collective actions to contribute to water stewardship performance. The crosswalk and recommendations would also be useful for GPSNR members interested in fully implementing the AWS Standard and pursuing certification to enable making credible claims on water stewardship at international level.

This voluntary document is designed to inform the development of GPSNR’s Implementation Guidance. To fully understand water stewardship, the AWS Standard and the intention and requirements of its indicators, this document must be used together with the AWS Standard V2.0, the AWS Standard Guidance and the AWS Supplemental Guidelines, as it builds on and does not replace the content of these. This is not one of the AWS Normative Documents.

INTRODUCING AWS AND GPSNR

The International Water Stewardship Standard (AWS Standard)\(^1\) is a globally applicable framework for major water users to understand and improve their own water use. It is built on a five-step process that guides water users to consider the most critical water impacts in their local context and driven by five outcomes: good water governance; sustainable water balance; good water quality status; important water-related areas (IWRAs), and water, sanitation and hygiene for all (WASH). The AWS Standard is managed by the members of the Alliance for Water Stewardship (AWS), and informed by a Technical Committee. AWS has been independently evaluated against ISEAL’s\(^3\) Codes of Good Practice - a globally recognised framework for effective, credible sustainability systems.

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1. For a full understanding of good water stewardship and the AWS Standard, download the AWS Standard V2.0 and the AWS Standard guidance at a4ws.org. These are available in multiple languages, including Bahasa Indonesia.
2. Defined as: the use of water that is socially and culturally equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process that involves site and catchment-based actions.
3. isealliance.org
The **Global Platform for Sustainable Natural Rubber (GPSNR)** is an international multi-stakeholder initiative formed to lead improvements in the socio-economic and environmental performance of the natural rubber value chain. Members of the platform represent the vast and complex global supply chain, from natural rubber smallholders, producers, processors and traders to tyre manufacturers, car makers and civil society.

The GPSNR Policy Framework is a set of concrete commitments translated from the 12 GPSNR Principles for Sustainable Natural Rubber Production and Sourcing. GPSNR ordinary member companies are required to develop, publish and implement a policy or other documents aligned with the GPSNR Policy Framework and adapted to the context and supply chain position of the company. Members are required to align their policies within six months of joining the platform, with the possibility of receiving two three-month extensions. This Framework applies to ordinary member companies and does not yet include smallholders or non-governmental organisation (NGO) members. GPSNR is developing its Implementation Guidance documents to inform members how they are expected to implement the Policy Framework in their supply chain.

The GPSNR Policy Framework and AWS Standard are two different mechanisms with a shared objective of achieving responsible and sustainable business operations. The GPSNR Policy Framework is a set of commitments that must be upheld by GPSNR members at company level and implemented in their supply chain activities. At this stage of development, the GPSNR Policy Components in the Policy Framework may be achieved through certification against other sustainability standard schemes, such as ISO 14001, ISO 45001, OHSAS 18001, RSPO and FSC. When implemented by GPSNR company members, the AWS Standard, provides the opportunity to strengthen performance on water. Certification enables members to make credible claim on their good water stewardship practices, which could contribute to them achieving the commitments related to water in the GPSNR Policy Framework. Figure 2 presents the position of the AWS Standard in relation to the GPSNR Policy Framework.

**Figure 2: The GPSNR Policy Framework and AWS Standard V2.0**

**Some key findings:**
- The AWS Standard is process based. Its five steps are structured around the Plan-Do-Check-Action-Disclosure approach and the Standard strives to increase site-level performance intended to drive the five water stewardship outcomes.
- Both GPSNR and AWS promote continuous improvement towards achieving the intended outcomes. The AWS Standard does this by differentiating its indicators into Core (mandatory for certification) and Advanced (room for improvement to achieve higher certification level). GPSNR has not yet developed its mechanism to drive and reward continual improvement member performance.
- One of the most important distinctions between the GPSNR Policy Framework and the AWS Standard is the **physical scope** for action. As stated in the AWS Standard V2.0, the physical scope is a geographical zone including the site and its local water catchment. The physical scope is the starting point of AWS good water stewardship as it defines the area for the site’s actions and engagements related to water. This is beyond a single site boundary, as water as a shared natural resource will include risks, challenges and opportunities within the area of influence and dependence of a specific site.

4. [www.sustainablenaturalrubber.org](http://www.sustainablenaturalrubber.org)
COMPARING THE AWS STANDARD V2.0 AND THE GPSNR POLICY FRAMEWORK

The crosswalk focused on the GPSNR Policy Framework and its 37 Policy Components against the AWS Standard V2.0 and its 68 core indicators and 30 advanced indicators. The main findings of the crosswalk are presented in this section.

OVERLAPS BETWEEN THE AWS STANDARD V2.0 AND THE GPSNR POLICY FRAMEWORK

Twenty six out of 37 GPSNR Policy Components are partially overlapping with 38 (33 core and 5 advanced) out of 98 AWS Standard V2.0 indicators. This amounts to a 39% partial overlap with all AWS Standard V2.0 indicators, as shown in Figure 3. As the partial overlap represents almost half of all the core indicators, it could be stated that the GPSNR Policy Framework already takes into account a considerable amount of AWS good water stewardship guidance. This is clearly reflected in the identification of water as a main environmental risk and priority theme in any GPSNR documentation currently under development.

To provide further insights into these overlaps, the distribution over the five steps and five outcomes of AWS Standard V2.0 was assessed. The results are presented in Figures 4 and 5. The percentages refer to the number of partial overlaps relative to the total number of indicators in that specific step and/or outcome. For example, 50% partial overlaps under Step 2: Commit & Plan refers to the partial overlaps identified with five out of 10 indicators of Step 2, while 63% overlaps under the outcome of Good Water Quality Status refers to partial overlaps identified with six out of 11 indicators in the outcome of Good Water Quality Status.

Figure 3: Overview of total overlaps and gaps between the and GPSNR Policy Framework and AWS Standard

Figure 4: Overview of partial overlaps within the five steps of the AWS Standard

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>STEP 2</th>
<th>STEP 3</th>
<th>STEP 4</th>
<th>STEP 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gather &amp; understand</td>
<td>Commit &amp; plan</td>
<td>Implement</td>
<td>Evaluate</td>
<td>Communicate &amp; disclose</td>
</tr>
<tr>
<td>41%</td>
<td>50%</td>
<td>36%</td>
<td>38%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Based on the distribution per step, the following findings can be made:

- **Step 2: Commit and Plan** shows the highest (partial) overlap, which is 50%. The indicators of Step 2 focus on commitments towards responsible water management and use, as well as the development of a management system to support the delivery of the commitments. This corresponds with the GPSNR Policy Framework which sets the requirements for commitments to a desired state of sustainable natural rubber.

- The second highest is **Step 1: Gather and Understand** (41%). The indicators of Step 1 focus on data collection related to water, both at site and catchment level, which would feed into the understanding of water-related risks and challenges for the site.

- The third highest are **Step 3 (36%)** and **Step 4: Evaluate (38%)**, out of which Step 3 shows the second highest in the absolute number (13 indicators out of 36).

- Last is **Step 5: Communicate and Disclose (30%)**. It is expected that the GPSNR Reporting Requirements would be more related to Step 5 of AWS Standard V2.0.

When looking at the distribution over the five AWS outcomes, the following findings apply:

- **Good Water Quality Status** shows the highest overlap (63%). This relates to requirements in GSPNR’s Policy Framework to monitor and manage water quality and prevent contamination.

- The second highest is **Important Water-Related Areas (IWRAs) (55%)**. Protection of forests and other ecosystems is an important component of GPSNR’s Policy Framework, which therefore overlaps with indicators related to IWRAs.

- The third highest percentage is **Safe WASH for All (40%)** and **Good Water Governance (38%)**. This is reflected in GSPNR’s emphasis on labour rights, access to WASH and stakeholder engagement.

- Last is **Sustainable Water Balance (15%)**.

**ROOM FOR IMPROVEMENT: GAPS BETWEEN THE AWS STANDARD V2.0 AND THE GPSNR POLICY FRAMEWORK**

In total, 60 gaps were found against the AWS Standard indicators, of which 27% are related to best practices towards contributing to the AWS outcomes, 30% are related to catchment-related indicators, 15% are related to the public disclosure of performance, and 10% are related to the evaluation of the plan and performance. Best practices could be included as part of the Implementation Guidance of GPSNR, while the indicators related to catchment would require an extension of the current scope of the GPSNR Policy Framework and broader assurance approach to encompass the wider landscape or catchment.

While rubber (and particularly growing and processing) is both highly dependent on and influential towards water balance (availability), this is not sufficiently reflected in the GPSNR Policy Framework.
RECOMMENDATIONS

To make recommendations for improved water stewardship, the water relevance of GPSNR Policy Components was assessed. This was done firstly in relation to the five AWS outcomes and indicators through the crosswalk exercise, and secondly by assessing the value the AWS Standard Guidance can add to GPSNR’s Implementation Guidance.

To strengthen good water stewardship performance as part of the GPSNR Policy Framework and its Implementation Guidance, five priority topics were identified, which are directly related to six GPSNR Policy Components. For each of priority topic, a recommendation was developed based on the identified overlapping AWS Standard indicators and the available guidance from the AWS Standard Guidance. These recommendations must be used in conjunction with the AWS Standard V2.0 and the AWS Standard Guidance as it builds on and does not replace the Standard.

1. LEGAL COMPLIANCE ON WATER

Policy Component 1.1: Complying with applicable local, national and international laws on human rights, labour, land use and the environment.

GPSNR company members are required to observe all applicable local, national and international laws on human rights, labour, land use and the environment, including on water as part of ‘the environment’.

Legal compliance on water is a minimum requirement in AWS Standard V2.0 and the foundation in achieving Good Water Governance both at site and catchment level. GPSNR company members are recommended to look at AWS Standard indicators 1.5.2, 2.2.1, 3.2.1 and 3.2.2 and the accompanying sections in the AWS Standard Guidance, to better understand how to meet these requirements.

Indicator 1.5.2 (core): Applicable water-related legal and regulatory requirements shall be identified, including legally defined and/or stakeholder-verified customary water rights.

Guidance: Water-related legal and regulatory requirements applicable to the site should be understood and complied with. These will typically include, but are not limited to, standards for water quality, water pricing, water volume limits, WASH requirements, wastewater discharge standards and environmental regulations to protect water bodies and conservation areas from pollution. It is important to be fully aware of any licenses or permits with regulatory conditions for the site (such as permitted water abstraction rates and wastewater discharge quality).
Indicator 2.2.1 (core): The system to maintain compliance obligations for water and wastewater management shall be identified, including:

1) Identification of responsible persons/positions within facility organisational structure; and 2) Process for submissions to regulatory agencies.

Guidance: The site should demonstrate its processes and procedures for itemising relevant regulations, summarising the compliance requirements and obligations, details of how to comply, responsible persons (position within organisational structure), a record of submissions to the relevant agencies, a record of any non-compliance warnings or events, including fines, and report on corrective actions for each non-compliance. In the case of unclear metrics for compliance by regulators, the organisation should reference appropriate standards, such as the WHO Drinking Water Guidelines.

Indicator 3.2.1 (core): A process to verify full legal and regulatory compliance shall be implemented.

Guidance: The organisation should provide, or reference, the documentation demonstrating legal compliance and provide documentation of any violations or corrective actions taken to address violations. Documentation may be in the form of authorisations, auditor records, compliance submissions or documentation already gathered by regulatory bodies, where appropriate.

Indicator 3.2.2 (core): 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.

Guidance: Where stakeholders have rights to the water resource, such as some local communities and indigenous peoples with traditional rights that are captured in the legal and regulatory requirements, their informed consent should be given in order to use the resource which should be part of Free and Prior Informed Consent processes. Engaging with such communities requires a long-term commitment to achieve meaningful dialogue and build trust between parties. Additional guidance on the respect of human rights is given in the UN Guidance Principles on Business and Human Rights (2011), however it is important to note that the scope of the AWS Standard is focused on water-related rights.

2. PROTECTION OF NATURAL FOREST AND OTHER ECOSYSTEMS

Policy Component 2.2: Supporting the long-term protection of natural forests and other ecosystems and their conservation values and restoring or supporting restoration of deforested and degraded rubber landscapes.

Restoring and maintaining natural forests and other ecosystems are required to ensure long-term availability and quality of water resources. This component is related to the AWS outcome on achieving the healthy status of Important Water-Related Areas as there are often overlaps between forests and other ecosystems with IWRAs.

The definition of IWRAs as stated in the AWS Standard V2.0:

The specific water-related areas of a catchment that, if impaired or lost, would adversely impact the environmental, social, cultural or economic benefits derived from the catchment in a significant or disproportionate manner. Important Water-Related Areas are deemed “important” either by local stakeholders or by key stakeholders at regional or international levels. Important Water-Related Areas include areas that are legally protected or under a conservation agreement; areas that have been identified by local or indigenous communities as having significance for cultural, spiritual, religious or recreational values; and areas that are recognised as providing important ecosystem services, such as riparian areas, vernal pools critical for breeding of important aquatic species, aquifer recharge zones, wetlands that provide purification services, etc.

A water stewardship plan as defined by the AWS Standard would be the recommended approach for a site to ensure water risks, shared water challenges and opportunities (including those related to IWRAs) are integrated in one comprehensive plan that sets SMART targets. Although this is highly recommended for those that aim to embed good water stewardship within their operations, the recommendation will now focus only upon the component of IWRAs. GPSNR company members are recommended to look at AWS Standard indicators 2.3.2 and 3.5.1 and the accompanying sections in the AWS Standard Guidance, to better understand how to develop a water stewardship plan and monitor performance related to the IWRAs target. Box 1 provides a simplified version of a water stewardship plan as outlined in the AWS Standard Guidance.

To be able to plan efforts for maintaining and protecting IWRAs and to implement these, company members are first required to identify the IWRAs in the physical scope of their site(s), map their locations and understand their status. To support the identification and mapping of IWRAs, GPSNR company members can adopt the guidance of AWS Standard V2.0 indicator 1.3.6 for on-site IWRAs and 1.5.5 for catchment IWRAs. This information can be used to feed into the plan to determine the targets, type of actions and budget that would be implemented and tracked.
**BOX 1: THE WATER STEWARDSHIP PLAN ACCORDING TO AWS STANDARD V2.0**

The water stewardship plan should detail the targets associated with goals (defined in the strategy), and specifics as defined in the Standard. AWS recommends that the plan be structured around the five AWS outcomes. Actions in the water stewardship plan should align with the following principles:

- Be prioritised according to the urgency and level of risk, through consultation with selected stakeholders, taking into account their interests and concerns.
- Be linked to targets or objectives that are SMART: Specific, Measurable, Achievable, Realistic and Time-based.
- The scope and cost should be appropriate and proportionate to the urgency and level of risk.
- Define who is accountable for what. A useful approach is to identify who is: Accountable, Responsible, Consulted and Informed (the ARCI approach). Positions rather than names are usually most appropriate, given that individuals may change.

Two principal categories of action:

- Immediate action to address an urgent problem, a high-risk issue or to capitalise on an opportunity.
- Long-term action to provide ongoing protection against risk or to achieve an improvement of status via opportunities over time.

It is highly recommended for GPSNR members to develop one comprehensive water stewardship plan which refers to the five AWS outcomes. However, adopting specific components from the water stewardship plan based on the local water context of the GPSNR members’ sites can also be an option.

A way to summarise the water stewardship plan is to use a tabular form with supporting documentation as appropriate. The plan should cover target, measurement and monitoring methods, actions, timeframe, budget and responsible persons. Where possible, the links between a target and achievement of best practice should be shown.

Below is an example of a simplified version of the water stewardship plan for components related to AWS outcome - IWRAs.

More information can be found in the AWS Standard Guidance document and through subscription to the AWS Tools Hub.

<table>
<thead>
<tr>
<th>OBJECTIVE (SMART)</th>
<th>ACTIONS</th>
<th>LINKAGE TO AWS OUTCOMES</th>
<th>LINKAGE TO CATCHMENT / SHARED WATER CHALLENGES</th>
<th>LINKAGE TO SITE RISKS</th>
<th>TIMELINE (SHORT-, MEDIUM- OR LONG-TERM)</th>
<th>NOTES / COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.g. Support the catchment preparedness to forest fire risks</td>
<td>E.g. Development of 1 joint plan for fire risk mitigation and response with the regional disaster agency</td>
<td>Important Water Related Areas, Good Water Governance</td>
<td>High risk of forest fire outbreak in prolonged dry periods</td>
<td>Loss of asset due to forest fire</td>
<td>E.g. Medium-term</td>
<td>N/A</td>
</tr>
<tr>
<td>E.g. Support and respect the indigenous community rights to water and access to IWRAs</td>
<td>E.g. Rehabilitation of X Ha of degraded forest and X groundwater springs in the joint management area with community X</td>
<td>Important Water Related Areas, Safe WASH for All, Good Water Governance</td>
<td>Insufficient access to safe WASH for indigenous communities</td>
<td>Loss of social licence to operate</td>
<td>E.g. Long-term</td>
<td>N/A</td>
</tr>
</tbody>
</table>
3. PROTECTION OF WATER QUANTITY AND QUALITY

Policy Component 2.5: Protecting water quantity and quality, preventing water contamination from agricultural and industrial chemicals, and preventing erosion and sedimentation.

Maintaining long-term water availability and good water quality status is important for company operations and community livelihoods. Protection of water quantity and quality is a significant part of AWS Standard V2.0 and directly related to AWS outcomes Sustainable Water Balance and Good Water Quality Status.

A water stewardship plan would be the most comprehensive approach to set targets for water quantity and quality. To do this, GPSNR company members are recommended to look at AWS Standard indicators 2.3.2, 3.3.1 and 3.4.1 and the accompanying sections in the AWS Standard Guidance to better understand how to develop a water stewardship plan and monitor performance related to the water quantity and quality target. GPSNR members can refer to Box 1 in developing a water stewardship plan on protection of water quantity and quality. In this context, the third column ‘Linkage to AWS outcomes’ in the table must include Sustainable Water Balance for quantity and Good Water Quality Status for quality. Boxes 2 and 3 provide additional information on water quality monitoring and water balance in an agricultural context.

To be able to plan efforts for protecting water quantity and quality, the site is first required to gather and understand water-related data for the site and the catchment, and second to use the information to identify and prioritise water quantity and quality-related risks. To support the gathering and understanding of water quantity and quality-related data, GPSNR company members can adopt the guidance of the following AWS Standard V2.0 indicators:

- 1.3.1 on identifying existing water related incident response plan.
- 1.3.2 and 1.3.3 on mapping and quantifying the site water balance.
- 1.3.4 on quantifying the site water quality.
- 1.3.5 on identification and mapping of potential sources of pollution.

BOX 2: QUANTIFYING WATER QUALITY AND IDENTIFYING POTENTIAL SOURCES OF POLLUTION IN AGRICULTURAL SITES

Good water quality status is one of the five AWS outcomes and defined as the condition where water quality meets the requirements of native flora and fauna, and for human needs where applicable. To be a good water steward, an organisation is responsible for avoiding causing pollution of the natural environment, including water bodies. To identify and understand the water quality risks to and from the organisation, water quality information and identification of potential sources of pollution are required.

The site should maintain long-term records of the quality of all incoming water supplies, outgoing effluent (or runoff) and of water bodies that receive the effluent (or runoff). For its own water sources and wastewater discharges, the organisation will usually collect its own samples on a regular basis for laboratory analyses. External service providers can usually provide water quality data. Water and wastewater quality data should be used to verify compliance.

It is recommended to use an expert to identify actual and potential pollution sources, and the risks they present. It is especially important to identify pollution sources that present a risk to water bodies and water abstraction points, such as pollution that comes from the site drainage channels, runoff from the use of agricultural chemicals on land (e.g. fertilisers, pesticides), and stormwater runoff. Examples of water bodies at risk are water table aquifers with no natural protective cover and surface water bodies that receive agricultural runoff. It is recommended to tabulate and map pollution sources, their nature and their risk, along with vulnerable water bodies.
BOX 3: WATER BALANCE IN RAINFED AGRICULTURAL SITES

Sustainable water balance is one of the five AWS outcomes and defined as the condition whereby ongoing water use in the catchment has no long-term negative impact on the natural and legitimate water users. In a sustainable water balance, total net water abstractions do not exceed natural replenishment of water bodies, while also ensuring water bodies maintain viable flows and water levels to sustain themselves. As a rainfed system, a rubber growing site is not a major water user. However, identifying and understanding the site’s (ground)water balance could inform the level of water-risks that the site is facing, such as prolonged inundation during flood events and higher vulnerability to longer forest fire-outbreaks.

The key components for a water balance of rainfed agriculture sites such as rubber growing areas are rainfall, consumptive water use through plant and soil evapotranspiration. Rainfall, as the primary input, needs to be monitored and reported. It is necessary for the rain gauge location and number deployed to be representative of the agricultural site and landscape. If this is not possible, an expertly informed estimate of the rainfall at the farm site/s should be made. Evapotranspiration can be estimated in various ways with which farmers or their agricultural advisors are familiar.

Seepage below the root zone and into groundwater (shallow or deep), or into rivers as interflow, is a factor to be considered in the water balance on agricultural sites. This is particularly important when leaching of crop inputs to shallow groundwater systems is a water quality issue or where return flows to the stream network carry problematic constituents, such as salts, sediments, nutrients, or other crop inputs like pesticides. Surface runoff from high intensity rains is also a component of the water balance that needs to be estimated and modelled in the water balance. Excess surface runoff generally carries soil particles (erosion) and crop inputs (fertilisers, pesticides, fungicides, herbicides) which need to be factored into water quality impacts on downstream stakeholders.

4. LABOUR RIGHTS/WASH FOR WORKERS AND LOCAL COMMUNITIES

Policy Component 3.6: Upholding applicable labour rights and labour laws in the jurisdictions where operating, the UN Guiding Principles on Business and Human Rights, and the intent of the International Labour Organization’s eight core conventions.

Safe and Healthy Workplaces is one of eight core conventions on labour rights and the provision of clean water and sanitation facilities is a building block for healthy workplaces. This is directly related to the AWS outcome Safe WASH for All.

A water stewardship plan would be the most comprehensive approach to plan and set targets for access to WASH for on-site workers. To do this, GPSNR company members are recommended to look at AWS Standard indicators 2.3.2 and 3.6.1 and the accompanying sections in the AWS Standard Guidance to better understand how to develop a water stewardship plan and monitor performance related to WASH for workers. GPSNR members can refer to Box 1 in developing a water stewardship plan on the provision of access to on-site WASH. In the context of safe on-site WASH, the third column ‘Linkage to AWS outcomes’ in the table must include Safe WASH for All. Box 4 provides additional information on Safe WASH for All in the agricultural sector.

To plan efforts, and ensure the effectiveness of these, on safe access to WASH for all on-site workers, GPSNR company members are first required to gather and understand the state of on-site WASH provision and secondly to identify the results achieved by the implementation. GPSNR company members can adopt the guidance for AWS Standard V2.0 indicator 1.3.8 for identifying the level of adequacy of on-site WASH facilities.

BOX 4: SAFE WASH FOR ALL IN THE AGRICULTURAL SECTOR

WASH provision includes, but is not limited to, water points and fountains, toilets, washing facilities, hygienic areas for food and drink consumption, and potentially showers. The appropriate ‘level of access’ or ‘adequacy’ may depend on ground conditions, climate, local context, and cultural and behavioural traditions. The site should understand its own access to safe on-site WASH (relative to the number of workers it employs), and to what extent these comply with local laws and international guidelines for safe WASH, such as from the World Health Organization (WHO). Where provision does not comply with law or international guidelines, correction efforts should be included into the water stewardship plan.

Small-scale farmers in particular can benefit from the economies of scale, critical mass and sharing that present themselves around WASH when they act collectively. Large-scale agricultural site leaders can learn good practices from one another and also make significant gains in terms of bulk purchases and sharing collective infrastructure and services if they work collectively. Farmers work together in many challenging areas and adding the water realm, in which substantial mutual benefits are also possible, is wise.

It is important to leverage action through other standards or initiatives. Engage with global initiatives, such as WASH4Work, WASH pledge, Global Agribusiness Alliance, or others working on agriculture or WASH issues to learn from the experience of others.
**Policy Component 4.1: Supporting decent living conditions of local communities (e.g. drinking water, adequate housing, sanitation).**

Access to safe WASH facilities is important in defining decent living conditions for local communities and is included in SDG 6. Clean water and sanitation are directly related to AWS outcome Safe WASH for All.

A water stewardship plan would be the most comprehensive approach to plan and set targets for access to WASH. To do this, GPSNR company members to look at AWS Standard indicators 2.3.2, 3.6.2 and 3.6.3 (advanced) and the accompanying sections in the AWS Standard Guidance to better understand how to develop a water stewardship plan and monitor performance related to respecting the rights of others to access clean water and sanitation. GPSNR members can refer to Box 1 in developing a water stewardship plan for this purpose and can put Safe WASH for All. in the column ‘Linkage to AWS Outcomes’ in the table.

To plan efforts to provide safe access to WASH, company members are first required to gather and understand the state of WASH provision for local communities. GPSNR member companies can adopt the guidance for AWS Standard V2.0 indicator 1.5.6 to identify the adequacy of available WASH services in the catchment.

### 5. SUPPLY CHAIN WATER RISKS

**Policy Component 7.1: Conducting supply chain mapping and assessing suppliers for social and environmental risk to prioritise risk mitigation actions.**

Identification of supply chain water risks enables a company to gain insights into high-risk suppliers and provides the opportunity to work towards risk reduction and increasing water stewardship performance in its supply chain. This requirement is related to the broader goal of the AWS Standard to include indirect water use in the supply chain and the associated water risks into its scope of implementation. This will support the company to understand associated water risks to its own business or activities and provide the opportunity to influence the water stewardship approach of its more important suppliers.

To support their efforts in assessing suppliers’ water-related risk and prioritising risk mitigation, GPSNR company members can adopt the requirements and guidance of **AWS Standard indicator 1.4.1** and the accompanying sections in the AWS Standard Guidance. It is recommended that sites create and regularly update a database containing the information outlined in the bullets above. A simplified version of such a database is shown in Table 1.

<table>
<thead>
<tr>
<th>NAME OF SUPPLIERS</th>
<th>KEY PRIMARY INPUT</th>
<th>ESTIMATED ORIGIN</th>
<th>ANNUAL WATER CONSUMPTION</th>
<th>CATCHMENT WATER RISKS AND CONCERNS</th>
<th>PRIORITY FOR MITIGATION ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>raw natural rubber or latex</td>
<td>(country / region / catchment)</td>
<td>(kg, t, L, ML, or unit as appropriate)</td>
<td>E.g. Flooding, scarcity, regulatory, pollution</td>
<td>High, medium, low</td>
</tr>
<tr>
<td>B</td>
<td>raw natural rubber or latex</td>
<td>(country / region / catchment)</td>
<td>(kg, t, L, ML, or unit as appropriate)</td>
<td>E.g. Flooding, scarcity, regulatory, pollution</td>
<td>High, medium, low</td>
</tr>
</tbody>
</table>

Table 1: Primary inputs for natural rubber processing facility

Key primary inputs are the materially important product(s) or service(s) that a site consumes to generate the product(s) or service(s) it provides as its primary function. Generally, primary inputs should include any externally procured goods or services that account for over 5% of the total weight of the goods generated, or 5% of the costs of a site. In the context of a natural rubber supply chain, the primary inputs would differ based on the site’s position in the chain.

Where data do not exist to measure annual water use consumption, the site is at least expected to note the country, region or catchment of origin and whether the area experiences water risks. The preference is to link the primary input to a catchment and note (and understand) that catchment’s water stress. It should be noted that several well-recognised methodologies have emerged in recent years to measure indirect water use, most notably ISO 14046 Water Footprint Life Cycle Analysis methodology. Box 5 provides additional information on the use of catchment risk rating tools by WWF and WRI. For details on the methodology to calculate a site’s indirect water use and to identify the associated indirect water risk, GPSNR member companies are recommended to refer to page 13 to 16 of the AWS Standard Guidance document.

For company sites with suppliers in the same catchment, it is recommended to identify the shared water challenges of these suppliers and existing catchment initiatives that can be used to address the challenges. GPSNR member companies can adopt the guidance for AWS Standard indicators 1.6.1 and 1.6.2. Once the water concern or risks of the primary input suppliers, and shared water challenges (if applicable), are identified, it is recommended to assess the extent of the impact these suppliers’ water risks and challenges have on the site’s operation and to identify appropriate mitigation actions. To do this, GPSNR member companies can adopt the guidance for AWS Standard indicator 1.7.1 for the site’s water risks identification.
Both WWF Water Risk Filter (https://waterriskfilter.org/) and WRI Aqueduct Water Risk Atlas (https://www.wri.org/aqueduct) are useful tools for rapid water risk assessment across larger supply chains as they provide scores for specific water risks and an overall water risk score. However, it is highly recommended to combine the use of either of these tools with verification at site level using more detailed data, as often neither tool can provide the level of spatial detail required. For example, the WRI Aqueduct Water Risk Atlas gave an overall water risk score of medium for Jambi, one of the top natural rubber producing and processing regions in Indonesia.

Despite this overall medium water risk score, the region is known for its yearly recurring floods during the rainy season as well as forest and peatland fires during the dry season. These are both significantly impacting productivity and the quality of rubber, and also the living conditions of rubber farmers in the region. When looking at the specific ‘riverine flood risk’ and the ‘drought risk’ scores of WRI Aqueduct Water Risk Atlas in Jambi, these are extremely high and high. As floods and droughts impact natural rubber production, it would be recommended to use the specific flood and drought risk scores instead of the overall water risk score.

Local knowledge and more detailed data, for example from local government agencies or rubber sites themselves, can support further refinement of these tools and support informed decision making on water risks. An overlooked water risk can pose serious threats not only to natural rubber production and processing, but also to communities and the environment. A comprehensive approach to water risk assessment is required to support companies in becoming more responsible water users and good water stewards.
FROM SITE TO CATCHMENT: INFLUENCE AND DEPENDENCE ON WATER BEYOND THE SITE

PHYSICAL SCOPE: A BROADER LENS FOR SUSTAINABLE NATURAL RUBBER PRODUCTION

In the GPSNR Policy Framework, the scope is defined as the areas under company (member) management. This would be mostly confined to the operational boundary but the GPSNR Policy Framework also includes components that encourage members to act beyond their company’s boundaries, particularly in the commitment to support community livelihoods and supply chain assessment, traceability and management.

The physical scope as defined by AWS Standard is the land area relevant to the site’s water stewardship actions and engagement. The physical scope extends beyond the area under company or site management, which often falls under the responsibility of the jurisdiction or the catchment authority. Good water stewardship is not only reflected in the actions within the site’s operational boundaries, but in the responsibility a site takes for both water use and management at the site and in the larger catchment, inclusive of other water users and key stakeholders. Being able to assess and respond to water risks can create financial benefits, support more resilience to climate change, create access to finance, ensure improved stakeholder relations, and enable organisations to plan responsibly for operations in water-risk areas. Conversely, the exclusion of risks and opportunities beyond the site can lead to an incomplete overview and investment losses.

Defining the physical scope is the first indicator in Step 1 of AWS Standard V2.0. AWS defines physical scope as ‘The identification of the site’s physical scope is an iterative process which considers various components, including the site’s catchment(s) of relevance. The site’s catchment is the physical zone around the site which provides its water supply (upstream) and where its run-off and wastewater goes (downstream). The site’s water supply – quantity and/or quality – may be impacted by what happens upstream, and its actions may have an impact downstream, including on other water users and the natural environment.’

The physical scope of a site should be mapped, considering the regulatory landscape and zones of stakeholder interest, including:
- Site boundaries, which are the boundaries of land owned or leased by the organisation, which may or may not be contiguous.
- Water-related infrastructure, including piping network, owned or managed by the site or its parent organisation.
- Any water sources providing water to the site that are owned or managed by the site or its parent organisation – typically surface water intakes, or boreholes for groundwater.
- The water service provider (if applicable) and its ultimate water source. Identify who they are and the main water bodies from which they abstract water (for example, a named river or aquifer), if available or provided to the site.
- Discharge points and wastewater service provider (if applicable) and ultimate receiving water body or bodies. The discharge points should be identified and mapped. For wastewater service providers, identify who they are, the ultimate destination of their discharges (e.g. a receiving water body), and level of treatment (none, primary, secondary or tertiary).
- Catchment(s) that the site affect(s) and is reliant upon for water, which may be surface water-based, groundwater-based or a combination of both.

The guidance on delineating a catchment is as follows: it is the smallest catchment that contains the upstream land area or aquifer body contributing to its source(s) and that contains the downstream areas affected by the site’s water withdrawals or effluent. When a site is sourcing water from multiple sources – either surface or groundwater or both – different catchments for each source will need to be identified.
INSIGHTS INTO THE COSTS AND BENEFITS OF GOOD WATER STEWARDSHIP IN THE NATURAL RUBBER SECTOR

This section below has been prepared in collaboration with PT PIPA and PT Kirana Megatara Tbk, a founding member of GPSNR.

THE POTENTIAL DRIVERS FOR GOOD WATER STEWARDSHIP IN THE NATURAL RUBBER SECTOR IN INDONESIA

To build a compelling business case for performance improvement on water, looking only at water savings may not be sufficient, due to the generally low cost of water. A comprehensive look at how the site is dependent on and impacting other water users is required to identify the material water risks and value creation once these risks are mitigated.

Identifying and addressing the site and catchment water-related challenges and risks provides insight into opportunities associated with good water stewardship and supports a business to act as a responsible water steward. Cost-efficiency is expected to be created via increasing water re-use, reducing wastewater treatment costs (especially through energy efficiency) and increasing sludge re-use. Other areas with high potential for cost efficiency, but which will take longer to return on the investment, are building supply chain resilience against extreme climatic events and adopting alternative water supply sources, for example, rainwater. There are further opportunities through building and expanding stakeholder relations to work towards more joint investment in catchment or landscape initiatives, aiming to create co-benefit for the site and its suppliers, for example, smallholder rubber farmers.

Based on desk study and the pilot with PT Kirana Megatara Tbk, there are six potential drivers for good water stewardship in the natural rubber sector:

1. LONG-TERM WATER SUPPLY SECURITY AND ADDRESSING DECLINING WATER QUALITY DUE TO HEIGHTENED SEASONAL VARIABILITY AS AN IMPACT OF CLIMATE CHANGE

Most processing facilities use surface water as their primary source of water, due to its economic value and yearlong availability. However, studies have identified more occurrences of dropping river water levels due to prolonged dry seasons. As a result, sites often must move their intake infrastructure to a more secure abstraction point (e.g. from a smaller tributary to the main river body) or to purchase water from third party supplier, which both lead to higher operational costs. Water is also required to be at a specific quality for rubber processing. Any changes to water quality, due to higher sediment loads, more solid waste, pollution from upstream industries or other sources, can affect the processing and compromise the quality of the end products.

This situation requires natural rubber processing facilities to anticipate further degradation and mitigation measures. Addressing the risk related to future water supply security requires improved ‘production/process’ water use optimisation, improved general water consumption control, and some substitution to existing water sources, through recycling or rainwater harvesting solutions. Through reducing water/energy consumption in production, organisations can reduce costs as well as their environmental impact.

2. SUPPLIER RESILIENCY TOWARDS MORE FREQUENT HYDROMETEOROLOGICAL EXTREMES

For many rubber processing companies, sustainable farming and resiliency towards climate change are integrated into the purchasing strategy to ensure supply security and contribute to better livelihoods for suppliers.

Sumatra and Kalimantan, the regions where natural rubber farmers are mainly concentrated are often hit heavily by forest and peat land fires during the dry season. This leads to a loss of assets, as well as respiratory and other severe health problems, which may hinder the productivity of rubber farmers. The risk is even higher for suppliers that are located on or close to peat land and forest areas due to slash and burn practices to open agricultural land during the dry season.

Climate change worsens the risk of fires as the drier dry seasons and more variable precipitation threaten the survival of plantations. Without proper adaptation, future natural rubber production is at risk. Climate change will make some traditional areas less favourable because of drought or excessive precipitation. These changes could heighten competition for land with other strategic agriculture commodities, such as oil palm.
3. REPUTATIONAL RISK ATTACHED TO SUPPLIERS’ AND LOCAL COMMUNITIES’ ACCESS TO WASH

SDG 6 seeks universal access to water and sanitation by 2030, in all settings including households, schools, healthcare facilities, workplaces and other public spaces. Communities often rely on river water or boreholes for their daily water needs, and often without proper treatment before use. Contamination to these shared water resources due to untreated domestic sewage and industrial effluent could put the public health at risk. For companies, poor WASH management could lead to non-compliance towards government regulation on public health, sanctions, closure, or relocation of business operations.

The private sector, including the natural rubber sector, has a critical role to play in addressing this shared water challenge through its ability to improve access to WASH as part of core business operations. Ensuring access to on-site WASH facilities can improve a company’s reputation and positively impact the environment. The contribution of the private sector can be in the form of:

- Delivery of services directly to employees.
- Influencing stakeholders to provide access to WASH for workers in supply chains and communities.
- Managing the consumption and discharge of water as a cornerstone of water stewardship through on-site and catchment-based action.

4. GOVERNMENT INCENTIVES ATTACHED TO GREEN GROWTH AND SDG 6 PERFORMANCE:
GREEN INDUSTRY CERTIFICATION IN INDONESIA

To boost the competitiveness of Indonesian products in the international market, the Ministry of Industry has developed and rolled out the ‘Green Industry Certification’ which aims to guide companies towards improved efficiency in the use of energy, water and other natural resources and materials. It also includes indicators related to wastewater and solid waste management, as well as the overall environmental management system.

The Ministry of Industry is now exploring making the Green Industry Certification mandatory for select commodities. This strategy would include the type and mechanism of fiscal and non-fiscal incentives for the certified companies. To remain competitive in the domestic and international market, the rubber-producing companies operating in Indonesia need to provide reliable and globally consistent evidence to their Green Industry commitment. Implementing the AWS Standard would enable these companies to do so.

5. MORE STRINGENT DUE DILIGENCE AND REPORTING ON WATER BY THE FINANCIAL SECTOR

With environmental, social and governance (ESG) matters receiving increasing levels of attention from investors, companies and governments, it is essential for companies to assess ESG risks in all corporate transactions, including financing. ESG risks can have a direct financial impact on a company, and investors are considering them when making credit and investment decisions. Water, integral to ESG, used to be under-represented but now has received more of a spotlight as private sector contributions towards SDG 6 have become the norm. More progressive financing institutions have established their own policies and are evaluating their portfolios and engagements to ensure these are aligned. This has created opportunities for companies to finance their water and other ESG related activities through a so-called sustainable debt.

In addition, ESG disclosure requirements are rapidly evolving. As such, companies should be prepared for thorough ESG diligence as part of the legal and business review in their financing transactions.

6. COMPLIANCE AND IMPROVING PERFORMANCE TO MEET INTERNATIONAL CLIENTS’ SUSTAINABILITY COMMITMENT AND PURCHASING POLICIES

Water productivity and sustainability should be considered critical to the reputation and reliability of Indonesian rubber producers. Addressing and mitigating climate change impacts are now in the interest of international tyre makers like Pirelli and Michelin. It would be wise for rubber processing facilities linked to international tyre and automotive brands’ supply chains to anticipate the remedial measures the international market is enforcing to secure their own business security.

There is a need to build the capacity of Indonesian natural rubber producers and processors, not only to maintain legal compliance but to drive continuous improvements and meet international market demands for sustainable production. Business as usual would not be sufficient.
VALUE CREATION AND CO-BENEFITS

Measurement of the costs and benefits of water stewardship can be made based on risk (physical, regulatory and reputational) and the potential creation of (shared) value on water. This should consider context-dependent indicators, the limited amount of data and, most importantly, the different perspectives on environmental and social avoided costs.

Figure 8: Measuring the costs and benefits of water stewardship

UNDERSTAND YOUR PHYSICAL SCOPE

The physical scope defines where the target will be focused and where engagements will take place. It covers the site and areas or features beyond the site’s boundaries (see Section 4).

MEASURE YOUR WATER: RISK AND VALUE CREATION

The quantified benefits and costs related to performance on water provide insight into the economic feasibility of investments to reduce risks and/or achieve shared value creation. However, often, the quantification of water-related components in an operating facility is incomplete due to the lack of accurate measurement of:

- The current state of water-related challenges within the site’s physical scope.
- The degree to which the site may be sensitive to changes in the current state of a water-related challenge.
- The degree to which the site could, through its actions, contribute to a change in the current state of a water-related challenge.

ADOPT A CONTEXTUAL CORPORATE STRATEGY AND SITE TARGETS FOR WATER STEWARDSHIP

A water strategy without context at its core will likely impair an organisation’s ability to create a robust business case to invest in localised context-driven actions, responses or targets. Targets are a key element in driving the delivery of business strategies. Water is local and setting contextual water targets ensures the site and the corporate actions are aligned to both risk reduction and shared water challenges as well as value creation. A contextual water target is defined as a target that is informed by the surrounding catchment context and helps to focus resources on the right water-related challenges in the right places and strategically relevant to both the target-setting water user and others in the catchment.

The AWS Standard outlines five steps and a set of criteria that define good water stewardship. The standard requires the implementing site to gather relevant contextual data (Step 1) and integrate these into the site strategy and plan (Step 2 - Criteria 2.3) and water stewardship activities to achieve the targets (Step 3). The Standard requires the site’s target, strategy and plan to be contextual as it considers not only the area within the site’s boundary but also the catchment the site is relying upon.
