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Core Water Metrics for Automotive Operations

SP Guidance Document, V1.0
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Version 1.0, Approved July 2025

Introduction

Committing to water stewardship is not enough. Stakeholders expect external, credible reporting on water-related actions and outcomes.

In recent years, Suppliers Partnership for the Environment (SP) has collaborated with the international non-profit water stewardship organization, The Water Council (TWC), to build out a voluntary water stewardship program for its members and the automotive sector more broadly. This collaboration has produced resources such as the [SP Water Stewardship Strategy Framework](#) and the [SP Water Stewardship Action Matrix](#) to support automotive companies in advancing water stewardship best practices.

However, many companies in the automotive value chain may lack the resources to sufficiently analyze and report through the web of voluntary and required water-related reporting frameworks. In 2024 The Water Council, through input from the SP Water Stewardship Work Group, identified and mapped key water metrics across fifteen commonly used reporting frameworks to identify and recommend common metrics which organizations within the industry may wish to prioritize and incorporate into their own tracking and voluntary reporting schemes.

The four themes covered by the recommended core water metrics are common and aligned across the key reporting frameworks reviewed. Improving tracking and voluntary disclosure of such metrics within the value chain can help to increase the sector's awareness of its impact on water resources and build more credibility and transparency through strategic external reporting.

These core water metrics are organized to reflect best practices for improving water stewardship performance: gathering and understanding (data collection and risk assessments), assessing risk, defining actions and goals (policies and targets), and implementing and expanding sphere of influence and stakeholder engagement (supply chain/value chain engagement).

It is important for organizations to engage their supply chains on water-related issues. When possible, organizations are encouraged to prioritize engagement with individual suppliers on specific water-related issues, guided by an understanding of their dependencies and/or impact on water resources. It is not necessarily recommended that organizations request all suppliers track and report on all water metrics. See the included supplier engagement matrix ([Appendix A](#)) for one example of such a prioritization method.

While the following core metrics do not necessarily tell the whole “story” of any single organization's water stewardship efforts, they do provide a good indication of whether an organization has the key aspects in place to understand water uses, impacts and risks.

Introduction: Core Water Metrics for Automotive Operations

Consider tracking and reporting the following core metrics related to water-related risks and outcomes of a reporting organization within the automotive industry and/or supply chain.

This core set of quantitative and qualitative metrics is intended to provide a foundation to support water-related considerations within various sustainability reporting frameworks relevant to the automotive industry, as well as to align with common automotive supplier sustainability reporting requests. Several of the listed water-related metrics are currently included within the voluntary [SP Automotive Climate Action Questionnaire Framework](#), which is used by several industry leaders in engaging their own suppliers.

Additional information on terms, definitions and methods related to each metric is covered in the following pages. See [Appendix B](#) for a glossary of key terms used throughout this document. Please note this guidance document incorporates and summarizes definitions and methodologies adapted from various publicly available water reporting frameworks as noted in the references.

The reporting practices referenced in this guidance document were developed in alignment with the recommended practices of the CDP Water Security Questionnaire where possible.

I. [Water Usage & Management](#)

- i. Total water withdrawn
- ii. Total water discharged
- iii. Total water consumed
- iv. Average water intensity
- v. Water pollutant tracking

II. [Water-Related Risk Assessment](#)

- i. Water-related risk assessment
- ii. Identification and mitigation of high water risks
- iii. Identification of key activities in high-risk / high-stress watersheds

III. [Water Related Policies & Targets](#)

- i. Water-related policies and commitments
- ii. Water-related goals and targets

IV. [Water-Related Supply Chain / Value Chain Engagement](#)

- i. Supply chain / value chain engagement process

Disclaimer

This document sets forth various findings based on information available to working group members at the time of issuance. These findings are not intended to set forth any industry rule, requirement or standard. Each Member should independently determine its own processes and practices, including, without limitation, levels, measurements, vendors, materials, equipment, energy sources, energy use, emissions, and recyclability. It is the responsibility of each individual company to be aware of national and local regulations that may require reporting of water-related information using specific methods and formats. This document should not be considered to contain legal advice. SP and its member companies make no warranty, expressed or implied, regarding the accuracy or completeness of the information contained in this document, and they will not be liable for any errors or omissions in this information nor for the availability of this information. The authors of this document reserve the right to change it at any time, as they deem appropriate within their sole discretion. SP and its member companies will not be liable for any losses, injuries or damages that may result from the use of the information contained in this document.

I. Water Usage & Management

That which gets measured, gets improved. A baseline understanding of how a company is using water should be established to build a credible, strategic approach to water stewardship.

The basic components of understanding water usage include water withdrawal, water consumption, and water discharge. Average water intensity and water pollutant tracking are two additional metrics that can help in understanding onsite water usage and impacts. Certainly, there are other onsite water uses and impacts worth tracking (like stormwater management or water reuse), but those outlined here form the basics and can assist in the development of a water balance.

Total volumes can indicate the organization's relative significance as a user of water and provide a baseline figure for other calculations. Along with trend data, these volumes can also suggest the level of risk posed by future disruptions to water supplies or increases in the cost of water.

Units: Volumes should be reported in megaliters per year (1 megaliter = 1 million liters or 1,000 m3).

Data accuracy: There may be uncertainty linked to water accounting information that could impact data accuracy. Uncertainty can arise from data gaps, assumptions, metering/measurement constraints including equipment accuracy, data management, etc. The emphasis should be on reporting transparently and on providing an explanation for why reported data is uncertain or wholly or partially estimated or modelled, rather than sourced from direct measurements. (Source: adapted from CDP).

Boundaries: Water is considered to have crossed the boundary of your organization, at either the corporate or site level, when your organization in any way uses it, comes into contact with it, is required to manage it or when it becomes incorporated into your products. It therefore includes any water use and management by your organization outside of its physical corporate fence; for example, to provide a street cleaning service or in fields remote from a manufacturing plant. The scope of this organizational boundary is defined by your chosen reporting boundary. (Source: adapted from CDP).

i. Total water withdrawn on annual basis

- a) **Water withdrawals – total volume:** The sum of all water drawn into the boundaries of the organization (or facility) from all sources for any use over the course of the reporting period.
- b) For withdrawals, data may be collected from several sources, including water meters, water bills, calculations derived from other available water data or the organization's own estimates if no reference data exists.
- c) **Rainwater:** If a company is managing rainwater, or is dependent on it for production of goods or the delivery of services, it should try to estimate and disclose it as a withdrawal from the hydrological system into the company boundary. Note that in some jurisdictions rainwater is considered a withdrawal source and organizations are required to report its collection and use. (Source: adapted from CDP)
 - i. Companies may choose to exclude collected rainwater and domestic sewage from their water withdrawal/discharge volumes if the resulting error in their water balance would be less than 5%. This prevents discharge volumes being larger than withdrawals.
 - ii. Including rainwater helps companies better understand their water dependency and risks. For some companies, precipitation/rainwater volumes may constitute a principal input of water at site level. This includes run-off where it has to be managed. In these cases, excluding rainwater from water accounting would not be a true reflection of site water balance. In addition, there may be reduced impacts from using rainwater in place of other local freshwater sources.

ii. Total water discharged on annual basis

- i. **Water discharges – total volume:** The sum of effluents and other water leaving the organization's boundary and released to surface water, groundwater water or to third parties over the course of the reporting period.
- ii. This includes all water leaving the company boundary, whether it is: considered used or unused, released through a defined discharge point (point source discharge), or released over land in a dispersed or undefined manner (non-point source discharge), or as wastewater removed from the organization via truck.

iii. Total water consumed on annual basis

- i. **Water consumption:** The amount of water drawn into the boundaries of the organization (or facility) and not discharged back to the environment or a third party over the course of the reporting period.
- ii. Water consumption measures water that is no longer available for use by the ecosystem or local community in the reporting period. Reporting the volume of water consumption contributes to an organization's understanding of the overall scale of its impact due to water withdrawal on downstream water availability. (Source: adapted from CDP)
- iii. CDP notes that it is important to distinguish the term 'consumption' from the term 'water withdrawal'. It notes that water consumed is water that during the reporting year: has been incorporated into products, crops or waste; has evaporated or transpired; consumed by humans or livestock; has been stored in a controlled manner because it is polluted to the point of being unusable by other users, and so that it does not leave the organization's boundary; has been stored during the reporting year for use or discharge in a subsequent reporting period; is otherwise excluded from discharges out of the organization's boundary so that it is no longer available for use by the ecosystem or local community.
- iv. Consumption may be measured directly or modelled, or it can be calculated by subtracting the total water discharge from company boundary from total water withdrawn into the company boundary during the reporting period.
- v. If the company discharges more water than it withdraws, for example, because it has used and then discharged previously stored water, a negative consumption value is possible. This would indicate a net contribution to the water environment in the reporting year.
- vi. Consider separately reporting the total water consumption in areas of high or extremely high water risk, as defined by WRI Aqueduct Water Risk Atlas, WWF Water Risk Filter, or other credible sources.

iv. **Average Water Intensity**

- i. **Water Intensity:** A metric providing the relationship between the total volume of water consumed over the reporting period and a defined unit of activity most relevant to the reporting organization.
- ii. An organization with discrete product outputs may wish to report its product water intensity (water consumed per unit of product). Such as total water use per vehicle produced or total water use per component produced.
- iii. An organization with a diversified product portfolio or service-based business may wish to report its financial water intensity (water consumed per dollar revenue).

v. **Water Pollutant Tracking:** A policy or process is in place to identify and classify potential water pollutants associated with the organization's activities that could have a detrimental impact on water ecosystems or human health.

- i. **Water pollutants:** physical (including thermal), biological, or chemical agents (organic, inorganic substances or heavy metals) that have the direct or indirect potential to negatively modify/contaminate water bodies and/or water ecosystems or affect human health.
- ii. Water pollutants pose a threat to the quality of surface and groundwater bodies and their dependent ecosystems. It is recommended that organizations have a policy or process in place to identify and classify the potential water pollutants associated with the substances they handle and the properties of their discharges. It is important that companies identify and classify potential water pollutants linked to their business operations and products, and are able to effectively manage these. (Source: adapted from CDP)

II. Water-Related Risk Assessment

Due to the hyper local nature of water risks and impacts, it is important for companies to develop procedures that assess levels of risk based on uses and locations. One of the most important aspects of a corporate water stewardship program is conducting a water-related risk assessment.

This information is critical for a comprehensive yet refined overall view of water-related risk. Even high-level risk assessments help companies to prioritize risk mitigation actions and inform the development of policies and targets.

Since water is a shared resource, and water-related impacts are localized, organizations are increasingly encouraged to prioritize action in areas with water stress and to understand and respond to local contexts.

Organizations are encouraged to assess anticipated forward trends in withdrawals from water stressed areas, encouraging a transition towards business models which minimize potential threats to rivers, lakes, aquifers, and streams. Conducting a water-related risk assessment can support the evaluation of your organization's dependence on potentially contested sources, as well as potential impact on sensitive locations.

Water stress is a driver of business risk and, as stress is projected to worsen, transparency is critical to support stakeholders in understanding elevated business risk due to operations in water stressed areas. Knowledge of areas of high water stress also may help your organization identify where water stress may be affecting its operations, now or in the future, as well as to prioritize sustainable water management practices.

- i. **Water-Related Risk Assessment:** An appropriate process is in place to conduct a water-related risk assessment.
 - a. Examples of publicly available tools for assessing water-related risks include the [WRI Aqueduct Water Risk Atlas](#) and the [WWF Water Risk Filter](#).
 - b. Organizations can complement the results of these tools with their own assessments or by using other methodologies. Some companies will use more granular data and local knowledge of the basins in which they operate to assess which withdrawals are from stressed areas. For example, an organization may consider its facility to be in a water-stressed sub basin or other smaller geographic level, though a global data set suggests that the particular catchment is not stressed. Many national and regional water authorities will also have suitable maps, databases and environmental assessments available.
 - c. Organizations are encouraged to review and update their water risk assessments regularly, especially in response to significant changes in operations, catchment conditions, or stakeholder concerns. This proactive approach ensures that water stewardship strategies remain aligned with evolving risks and opportunities. Generally accepted best practice is to reevaluate the risk assessment at least every three years, assuming no known significant change has occurred in the interim.
 - d. Additional information on conducting an assessment can be found in the [SP Water Stewardship Action Matrix](#).
 - e. Organizations should be prepared to describe the nature and methodology of the risk assessment.

- ii. **Identification and mitigation of high water risks:** If a high risk is identified, there is a process in place to establish a strategy or plan that documents how high-risk water-related challenges are managed and mitigated.
- a. **High water-related risks** include those risks which have had or are anticipated to have a substantive effect when considering the inherent risk (existing in the absence of controls, i.e. not considering any mitigation or management measures that have been or could be implemented) as well as the residual risk (remaining after a specific action has been taken to manage the risk). (Source: adapted from CDP)
 - b. **Substantive effect** is an outcome that has a considerable or relatively significant impact on an organization at the corporate level in terms of risks and opportunities. This could include operational, financial or strategic impacts that undermine, or provide opportunities for, the entire organization or part of the organization. (Source: adapted from CDP)
 - c. **Mitigation plan:** An organization may use the information gathered through the risk assessment process to lay out planned targets and actions towards addressing key challenges, and risks, and opportunities identified.
 - i. There are two principal categories of action to consider: immediate actions to address an urgent problem, a high risk issue or to capitalize on an opportunity; and, long-term actions to provide ongoing protection against risk or to achieve an improvement of status via opportunities over time.
 - ii. Actions may be prioritized according to the urgency and level of risk, through consultation with selected stakeholders, taking into account their interests and concerns.
 - iii. Detailed guidance on developing a plan may be found in the [Alliance for Water Stewardship \(AWS\) Standard](#).
- iii. **Identification of key activities in high-risk / high-stress watersheds:** A process is in place to identify whether the organization operates, sources or otherwise carries out key activities in high-stress or high-risk watersheds. It is recommended that the type and potential financial impacts of such risks be assessed.
- a. **Water stress** is a concept that considers several physical aspects related to water resources, including water availability. As good practice, a water stressed area should be measured at the catchment level at a minimum. Indicators to assess areas for water stress and their thresholds for reporting as recommended by CDP include¹:
 - i. **Water availability** – category equal to/greater than ‘High risk’: 3.4 ([WWF Water Risk Filter](#)). WWF recommends that users also take into consideration ‘Medium risk’: >2.6. This category is based on a multi-model approach which integrates the best available global water scarcity risk indicators: water depletion, baseline water stress, and blue water scarcity.
 - ii. **Baseline water stress** – indicator equal to/greater than ‘High’: 40-80% ([WRI Aqueduct Water Risk Atlas](#)). This refers to ratio of total annual water withdrawals to available renewable water supply.
 - iii. **Baseline water depletion** – indicator equal to/greater than ‘High’: 50-75% ([WRI Aqueduct Water Risk Atlas](#)). This refers to the ratio of total annual water consumption to available renewable water supply.

¹ Thresholds referenced are as defined by CDP, WWF Water Risk Filter, and WRI Aqueduct methodologies.

- b. **High-risk** may include areas of limited water availability, flooding, and/or poor quality of water. Common tools to assess these and the thresholds for reporting as recommended by CDP include²:
- i. WWF Water Risk Filter:
 - 1. Limited water availability: when the physical risk category 'Water Availability' is equal to/greater than 'High risk': 3.4. WWF recommends that users also take into consideration locations facing equal to/greater than 'Medium risk': >2.6;
 - 2. Flooding: when the physical risk category 'Flooding' is equal to/greater than 'High risk': 3.4. WWF recommends that users also take into consideration locations facing 'Medium risk': >2.6;
 - 3. Poor quality of water: when the physical risk category 'Water Quality' is equal to/greater than 'High risk': 3.4. WWF recommends that users also take into consideration locations facing 'Medium risk': >2.6.
 - ii. WRI Aqueduct Water Risk Atlas:
 - 1. Limited water availability: when the risk indicator 'Water stress' or 'Water depletion' is equal to/greater than 'Medium – high';
 - 2. Flooding: when the risk indicator 'Riverine flood risk' or 'Coastal flood' is equal to/greater than 'Medium – high';
 - 3. Poor quality of water: when the risk category 'Physical Risk – Quality' or when either of the risk indicators 'Untreated connected wastewater' or 'Coastal eutrophication potential' is equal to/greater than 'Medium – high'.

² Thresholds referenced are as defined by CDP, WWF Water Risk Filter, and WRI Aqueduct methodologies.

III. Water Policies And Targets

Contextual water policies and targets can be developed when relevant data has been gathered and the full range of water-related risks assessed, and potential mitigating actions identified.

Ensuring that company targets are directly responsive to risk and local impacts means they will be, by definition, contextual. Having corporate policies or commitment statements provides guidance for the organization and leads to more strategic implementation of water stewardship projects.

- i. **Water-related policies and commitments:** An enterprise-level water-related policy or equivalent commitment is in place.
 - a. SP has developed an Automotive Sector Water Stewardship Policy which serves as a general acknowledgement of the importance of water and achieving water stewardship outcomes to the sector.
 - b. It is recommended that individual stakeholder groups consider adopting a commitment statement that: Reflects water's materiality at that position in the value chain and the unique attributes each stakeholder group has to address shared water challenges and opportunities; and identifies specific water stewardship actions that act as aspirational targets of each stakeholder group.
 - c. Examples of potential automotive value chain water-related policy and/or commitment statements may be found in the [SP Water Stewardship Strategy Framework](#).
 - d. If no policies or commitments are in place, organizations should be prepared to report on any plans they may have to develop these, or why such policies are not relevant to their organization.
- ii. **Water-Related Goals and Targets:** Enterprise-level and/or site-level water-related targets are established for sites in areas with high or extremely high water stress.
 - a. Consider the range of water-related targets set within your organization and the processes you have in place to ensure that they are meaningful and that their progress and impact is monitored. It is recommended that targets have specific, measurable, quantitative outcomes. They may be related to your organization's direct operations, or other parts of its value chain.
 - b. If your organization has plans to develop targets in the future, it is recommended to indicate the nature of the target you intend to set, the anticipated timeline, and any other relevant plans.
 - Information on the case for context-based water targets can be found in the following publication: [Exploring the case for context-based water targets](#).
 - Guidance for companies on how to set site-level water targets can be found in the following publication: [Setting Site Water Targets Informed by Catchment Context: A Guide for Companies](#).
 - The Science Based Targets Network is developing science-based targets for nature, including freshwater: [Freshwater - Science Based Targets Network](#).
 - c. If no goals or targets are in place, organizations should be prepared to report on any plans they may have to develop these, or why such targets are not relevant to their organization.

IV. Supply Chain/Value Chain Engagement

It is important to begin water stewardship efforts within the sphere of influence most directly under a company's operational control. At the same time, engaging stakeholders, customers, and others in the value chain can lead to a better understanding of impact and risk. This may also lead to identification of shared water-related opportunities that, when addressed, may enhance brand value.

From a sector perspective, engaging in and understanding the risks in the supply chain or value chain may lead to industry-scale actions with potential to increase the competitiveness of the sector. An important first step is simply to engage and begin building a better common understanding of water use, impact and risk in the sector. When possible, organizations are encouraged to prioritize engagement with specific suppliers on specific water-related issues, guided by an understanding of their dependencies and/or impact on water resources.

If an organization is not engaging with its supply chain or value chain on water-related issues, stakeholders may wish to know why it is not engaging in any way and what its plans are to do so in the future.

- i. **Supply Chain/Value Chain Engagement:** A process is in place for the organization to engage with its own suppliers and/or value chain on water-related issues and cascade water-related requirements / expectations of their customers through the supply chain.
 - a. **Supplier:** an entity upstream from the reporting organization that provides or sells raw materials, processed materials, finished products or services to the reporting organization
 - b. **Value chain:** the entire sequence of upstream and downstream activities, sites, resources, and relationships associated with the reporting organization's operations, starting with the raw materials and extending through end-of-life management, aimed at providing or receiving value from an organization's products and services within, upstream, or downstream of direct operations.
 - c. The organization should be prepared to describe how it engages with its supply chain / value chain on water-related issues. If the organization does not currently do so, it should be prepared to explain whether a plan is in place to engage the supply chain in the future or why such engagement is not relevant.

Conclusion

In conclusion, while these groupings of metrics do not necessarily tell the whole “story” of any single organization’s water stewardship efforts, they do provide a good indication of whether an organization has the key aspects in place to understand water uses, impacts and risks.

Data monitoring/collection, risk assessment procedures, policies and targets, and stakeholder engagement form the pillars of a sound corporate water stewardship program. This information may help companies reduce costs and risks, as well as build brand value. As a benefit, these four themes are common and aligned across key third party sustainability reporting/disclosure frameworks in the global marketplace. Increasing consistency within the automotive value chain regarding voluntary disclosure of such metrics is expected to help increase the sector’s awareness of its impact on water resources and build more credibility and transparency through strategic external reporting.

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Contact: Please submit any feedback on this guidance or suggestions for future improvements to info@supplierspartnership.org.

Appendix A: Supply Chain Engagement on Water

Water risks are diverse, complex, local and shared, not one-size fits all. Supply chain engagement tends to be more effective when tailored based on water risks and maturity. When evaluating priorities for engagement with suppliers on water-related risks, an organization may wish to consider factors such as:

- Which suppliers / sites are most important to the overall business?
- Which suppliers / sites are exposed to the highest overall levels of water-related risk?
- Which suppliers / sites have appropriate policies and procedures in place to manage water-related risks?

Generally, overall water-related risk can be viewed as combination of risk due to company operations and risk due to watershed conditions. However, the prioritization and urgency of water-related risk for a particular site or organization may be subjective based on individual priorities and risk tolerances.

While each company will make its own risk threshold determination, the following provides one example of the relationship between watershed risk and operational risk.

- Watershed (Water Scarce) + Operations (Water Intensive) = Higher Risk
- Watershed (Water Abundant) + Operations (Water Intensive) = Medium Risk
- Watershed (Water Scarce) + Operations (100% Re-use) = Medium/Low Risk
- Watershed (Water Abundant) + Operations (Non-water Intensive) = Lower Risk

While it is important for organizations to engage their supply chains on water-related issues, it is not necessarily recommended that organizations request all suppliers track and report on all water metrics. Rather, when possible, organizations are encouraged to prioritize engagement with specific suppliers on specific water-related issues, guided by an understanding of their dependencies and/or impact on water resources.

The matrix on the following page provides an example approach for prioritizing supplier engagement on water based on overall risks and maturity of the supplier.

Engagement with suppliers can take many forms but at a high level engagement involves understanding how suppliers' water use and management practices affect the organization's overall water stewardship goals and seeking opportunity to help identify, educate and/or advance shared water challenges and opportunities for collective action. In seeking to engage suppliers in water stewardship efforts, organizations can consider opportunities such as:

- **Supply Chain Mapping:** Begin to identify key suppliers whose operations are likely to be more water-intensive or located in water-stressed regions to evaluate priorities for further action.
- **Assess Water Risks:** Conduct higher-level assessment of potential water-related risks associated with known suppliers' operations and encourage or support suppliers in conducting their own risk assessments and developing mitigation plans.
- **Educate and Collaborate:** Educate suppliers on water stewardship principles, tools, targets and leading practices. Work with key suppliers to develop and implement water stewardship projects in shared watersheds.
- **Monitor and Report:** Establish mechanisms to monitor suppliers' water-related risks and performance and report on progress towards shared water stewardship goals.

Wherever possible, deeper engagement should be guided by an understanding of suppliers' risks, dependencies and/or impact on water resources.

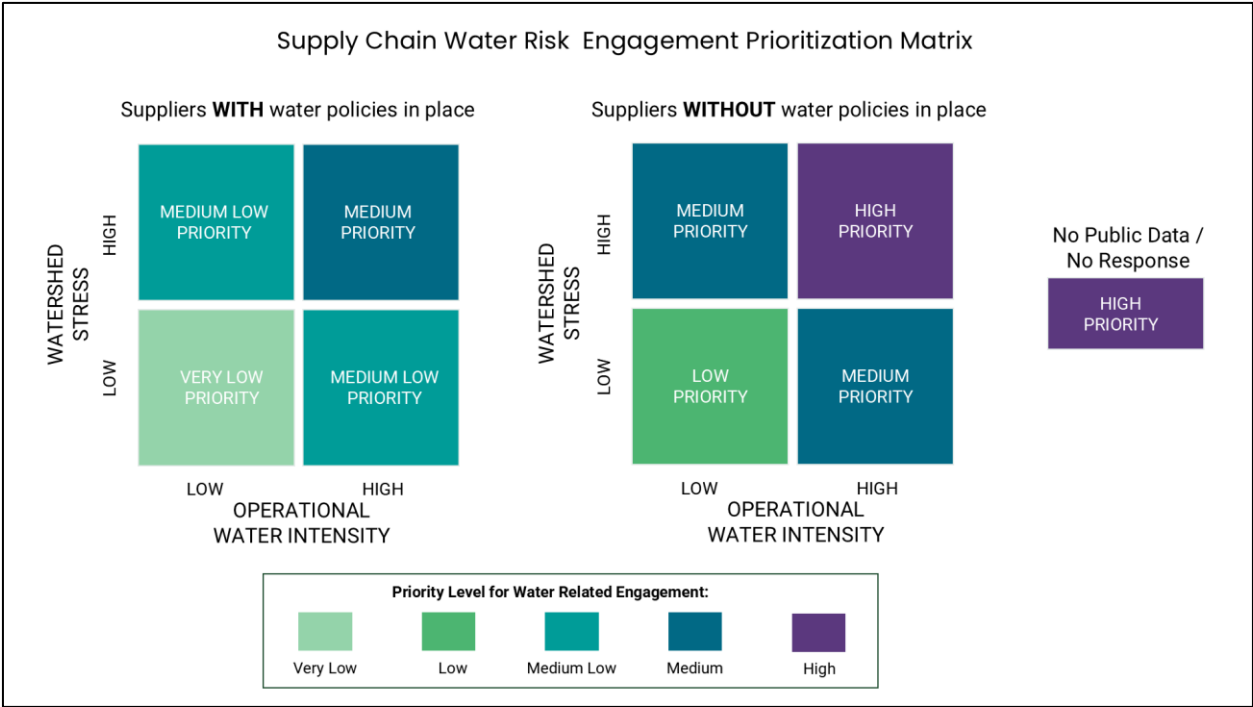


Figure 1: Example approach of prioritizing supplier engagement on water based on risks and maturity of the supplier.

Appendix B: Water Stewardship Glossary

This guidance document incorporates and summarizes definitions and methodologies adapted from various publicly available water reporting frameworks as noted in the references.

Alliance for Water Stewardship (AWS): The Alliance for Water Stewardship (AWS) is a global membership collaboration of businesses, NGOs and the public sector. Our members contribute to the sustainability of local water resources through their adoption and promotion of a universal framework for the sustainable use of water – the International Water Stewardship Standard, or AWS Standard.

Aspects List: Any part of your company's activities that can interact with the environment, either positively or negatively. This could be chemicals that are emitted into the air from a vent during one of your processes, or chemicals that could be expelled in your wastewater. This could also be taking into account the use of resources that your processes utilize, or the environmental effect of the amount of waste you dispose of.

Aquifer: Geological unit containing groundwater. It must have sufficient porosity to hold water and sufficient permeability to allow easy flow. Porosity is created by the space between grains of rock, and by cracks and fissures. Aquifers occur on many scales, ranging from small and local units to hundreds of square kilometers. Thickness ranges from one meter to hundreds of meters. A water table (or unconfined) aquifer lies just below the ground surface and is vulnerable to pollution. A confined aquifer lies below an impermeable rock layer (such as clay) which helps protect it from surface pollution.

Catchment: The geographical zone in which water is captured, flows through, and eventually discharges at one or more points. The concept includes both surface water catchment and groundwater catchment. A surface water catchment is defined by the area of land from which all precipitation received flows through a sequence of streams and rivers towards a single river mouth, as a tributary to a larger river, or to the sea. A groundwater catchment is defined by geological structure of an aquifer and groundwater flow paths. It is replenished by water that infiltrates from the surface. Depending on local conditions, surface and groundwater catchments may be physically separate or interconnected. Alternative terms are watershed, basin, and river basin.

CEO Water Mandate: The CEO Water Mandate is a special initiative of the UN Secretary-General and the UN Global Compact, implemented in partnership with the Pacific Institute. The CEO Water Mandate mobilizes a critical mass of business leaders to address global water challenges through corporate water stewardship, in partnership with the United Nations, governments, civil society organizations, and other stakeholders. The Mandate is a commitment platform for business leaders and learners to advance water stewardship. Endorsing companies commit to action across six key elements and report annually on progress.

CDP: CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts including a comprehensive water reporting platform.

Contextual Water Target: Targets informed by the surrounding catchment (watershed) context and helping to focus resources toward the right water-related challenges in the right places and are strategically relevant to both the target-setting water user and other water users in the catchment (watershed).

Discharge: Water-related discharge from a site, including drainage, wastewater (effluent), used cooling water, and irrigation surplus. The quality of discharged waters may range from good to polluted, depending on its origin, use and treatments applied.

Documented: Having some form of evidence (paper, electronic, or other) of conformance. Information presented shall be at a frequency, level of accuracy and over a sufficient time period to enable meaningful conclusions to be reached in relation to the requirement. Documented information is reviewed annually and updated where necessary.

Goal (or Target): A specific time-bound objective that sets the desired outcome at site, corporate, basin, or other levels. For example, “By 2020, a 20% increase in total water efficiency as compared to 2015,” or “By 2020 a 10% decrease in total nitrogen discharges as compared to 2017.”

Groundwater: Water below the surface of the Earth stored in porous spaces and fractures within rock or layers of sand and gravel (aquifers). In water resources management the term more specifically applies to water that can be extracted at a viable rate, quantity and quality for human use (with or without treatment). Saline water or water contained in rocks of very low permeability is not conventionally considered groundwater.

High water-related risks: Those risks which have had or are anticipated to have a substantive effect when considering the inherent risk (existing in the absence of controls, i.e. not considering any mitigation or management measures that have been or could be implemented) as well as the residual risk (remaining after a specific action has been taken to manage the risk).

Indirect Water Use: Water used in a site’s supply chain representing that which is used in the manufacturing and provision of all products and services, excluding water used on site. In effect, it is the sum of ‘embedded water’ of all products and services. Indirect water can also include outsourced services that use water (such as laundering, or fleet washing).

Integrated Water Resource Management: “IWRM” is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

International Water Stewardship Standard (“AWS Standard”): A globally applicable framework for major water users to understand their water use and impacts, and to work collaboratively and transparently for sustainable water management within a catchment context. The Standard is intended to drive social, environmental, and economic benefits at the scale of the catchment.

Metric: Any form of quantitative or qualitative measure used to track progress at a site, whether corporate, basin level, or other levels.

Monitored: Collection and analysis of information at set locations and at regular intervals in order to provide data on water conditions. Information presented shall be at a frequency, level of accuracy and over a sufficient time period to enable meaningful conclusions to be reached in relation to the requirement.

Objective: The desired outcome aimed at by a target or goal. For example, “align site water use with catchment water balance.”

Science-Based Water Target: A target that supports a company in reducing their impacts on freshwater resources if it is in line with what the latest hydrological science says is necessary to meet the sustainable freshwater quantity and quality thresholds of the basin in which the company and its value chain operate.

Shared Water Challenge: A water-related issue, concern, or threat shared by the site and one or more stakeholders within the catchment(s). Examples include physical water scarcity, deteriorating water quality and regulatory restrictions on water allocation.

Shared Water Opportunity: The possibility of an entity experiencing a positive gain resulting from water stewardship efforts (e.g., financial improvement, shareholder approval, improved brand image, etc.).

Site: For the AWS Standard, the site is the physical area over which the implementing organization owns or manages land and carries out its principal activities. In most cases it is a contiguous area of land but may also include physically separated areas and all areas owned or managed by the site (especially if in the same catchment). For a factory, the 'site' is typically represented by the fenced area encompassing all its buildings, parking, and storage areas. For farming, it encompasses its fields, buildings, and storage areas. Where the organization operates its own water sources and/or wastewater plant, these should be considered part of the 'site'. For example, for a bottled water factory that operates a physically separate water source (e.g., spring or borehole), this should be considered part of the "site."

Stakeholder: Any organization, group, or individual that has some interest or "stake" in the implementing organization's activities, and that can affect or be affected by them. The four main categories of stakeholder are: (1) Those who impact on the organization; (2) Those on whom the organization has (or is perceived to have) an impact; (3) Those who have a common interest; (4) Neutral – those with no specific link, but with whom it is relevant to inform. Of most relevance to water stewardship are stakeholders associated with water use and dependency, but engagement should not be limited to these.

Substantive effect: An outcome that has a considerable or relatively significant impact on an organization at the corporate level in terms of risks and opportunities. This could include operational, financial or strategic impacts that undermine, or provide opportunities for, the entire organization or part of the organization.

Supplier: an entity upstream from the reporting organization that provides or sells raw materials, processed materials, finished products or services to the reporting organization.

Total Cost of Water: The total cost of water includes the direct costs to procure, treat and discharge water as well as indirect costs associated with water-related regulatory compliance, fees, fines, emergencies and the maintenance of wells, pumps, valves and other machinery that move water into, through and out of a facility.

Value Chain: the entire sequence of upstream and downstream activities, sites, resources, and relationships associated with the reporting organization's operations, starting with the raw materials and extending through end-of-life management, aimed at providing or receiving value from an organization's products and services within, upstream, or downstream of direct operations

WASH: Acronym for Water, Sanitation and Hygiene. It is used in the international development sector to refer to the combined area of effort to address basic human water needs and rights related to access to safe and sufficient water for drinking, food preparation and washing. It also includes the provision of good washing and toilet facilities and the principal of hygiene education to combat the spread of water-related illnesses and disease.

Watershed: Alternate term for catchment. River basin or basin may also be used as alternatives. AWS mainly uses the term catchment which can slightly differ in meaning from how watershed is used in North America.

Water Balance: The change in water supply at a site level, or at a catchment level, determined by the difference between average intake, precipitation, evapotranspiration and water discharge (typically taken at the main drain of the site or catchment).

Water consumption: The amount of water drawn into the boundaries of the organization (or facility) and not discharged back to the environment or a third party over the course of the reporting period. Water consumption measures water that is no longer available for use by the ecosystem or local community in the reporting period.

Water Discharges: The sum of effluents and other water leaving the organization's boundary and released to surface water, groundwater water or to third parties over the course of the reporting period.

Water Footprint: Measures the amount of water used to produce each of the goods and services we use. It can be measured for a single process, such as growing rice, for a product, such as a pair of jeans, for the fuel we put in our car, or for an entire multi-national company. The water footprint can also tell us how much water is being consumed by a particular country – or globally – in a specific river basin or from an aquifer.

Water Governance: Water governance encompasses all aspects of how water is managed by governments, regulators, suppliers, and users. It includes water resources management, protection, allocation, monitoring, quality control, treatment, regulation, policy and distribution. Good water governance ensures responsible sharing of water resources in the interests of users and the natural environment in line with the principles of water stewardship. Water governance also applies to how water is managed at a given site or within a company.

Water Intensity: A metric providing the relationship between the total volume of water consumed over the reporting period and a defined unit of activity most relevant to the reporting organization.

Water Management: The control and movement of water resources to minimize damage to life and property and to maximize beneficial use.

Water pollutants: physical (including thermal), biological, or chemical agents (organic, inorganic substances or heavy metals) that have the direct or indirect potential to negatively modify/contaminate water bodies and/or water ecosystems or affect human health.

Water Quality: The quality of a natural water body in terms of physical, chemical, and biological parameters. The relevant quality standards are defined by national or local regulation and guidelines. Where these are absent, then international standards and guidelines should be applied. Good water quality status is where it meets the requirements of native flora and fauna, and for human needs where applicable. The status is not required to be pristine (i.e., contaminant free) or of drinking water quality (which would be classed as high-water quality status).

Water Risk: The possibility of an entity experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought).

Water Scarcity: The lack of sufficient available water resources to meet the demands of water usage within a region for environmental and human needs. Physical water scarcity is when there is insufficient water in natural water bodies. It may be a natural condition (e.g., in arid regions) or may result from excessive water abstractions for human uses.

Water Source: The physical structure from which a water supply is abstracted from a water body. For groundwater, it may be a natural spring, a borehole or water well. For surface water, it is a 'water intake'. It can also include the immediate surrounding zone of the main water body, in effect, the zone that feeds the point of abstraction. It may apply to multiple abstraction points where they are associated, for example, a wellfield.

Water Stewardship: 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.

Water Stress: The ability or lack thereof, to meet human and ecological demand for fresh water; compared to scarcity, "water stress" is a more inclusive and broader concept. Water stress occurs when the demand for water exceeds the available amount during a certain period or when poor quality restricts its use.

Water Withdrawal: The sum of all water drawn into the boundaries of the organization (or facility) from all sources for any use over the course of the reporting period.