



# Water Policy Final Version

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## 1. INTRODUCTION

### 1.1 Policy Relevance

Access to water and sanitation are recognized by the United Nations as a human right<sup>1</sup>. However, global water withdrawal has increased by 600% over the past 100 years<sup>2</sup> and the planetary boundary for freshwater was crossed in 2022<sup>3</sup>.

In our industrial business context, **water is critical to continuous performance, resilience, and business growth**. It underpins IFFCO's vision of being *"the preferred provider of sustainable value-added products and services for everyone, everywhere & every day."* As per the results of the IFFCO Water Risk Assessment conducted in 2023, **90% of IFFCO factories are in regions that face water quality and quantity risks**. These risks can have a significant impact on the business, such as the loss of production due to water shortages or increased wastewater treatment costs due to poor water quality. In addition, **all IFFCO sites face a significant risk of experiencing extreme weather events** such as floods or droughts. IFFCO sites are also in regions where there are **risks that employees and local communities do not have access to safe water, sanitation, and hygiene (WASH)**, leading to potential financial losses and operational challenges due to absenteeism and sickness.

Since IFFCO sites operate in different water basins<sup>4</sup> and therefore, deal with different contexts and realities, **water-related challenges must be addressed locally**<sup>5</sup>. For this reason, IFFCO adopts a risk-based approach: evaluating the water-related risks specific to the locations of its sites and acting upon those risks where they are present. Moreover, since water challenges cannot be solved by one user alone, **collaboration among major water users is needed** to reach water security at the basin level. This concept is understood as **water stewardship**<sup>6</sup>.

With this policy, IFFCO intends to implement **best-in-class water management at its sites, mitigate all major water-related risks, and support the sites in moving toward becoming responsible water stewards** in the water basins where they operate.

This policy aims to align IFFCO's water-related priorities, support business needs, and generate awareness of the usage of this essential resource. Inherently, IFFCO aspires to support its sites in becoming a force for water security in their respective regions.

This policy focuses on four water-related impact areas and their related-risks:

- 1) **water quantity**
- 2) **water quality**
- 3) **access to water, sanitation, and hygiene (WASH)**
- 4) **risk assessments and extreme weather events**

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<sup>1</sup> <https://www.unwater.org/water-facts/human-rights-water-and-sanitation>

<sup>2</sup> <https://www.fao.org/aquastat/en/overview/methodology/water-use>

<sup>3</sup> <https://www.stockholmresilience.org/research/planetary-boundaries.html>

<sup>4</sup> For the definition of key terminology, please refer to the glossary in section 7.5.

<sup>5</sup> More information on why water-related challenges must be addressed locally can be found in sections 4.2 and 7.4.

<sup>6</sup> More information on this in sections 4.2 and 7.4.

Water impact area	High-Level definition	Associated Risks	Examples of Risks	Policy Objective
<b>Water Quantity</b>	Water being chronically unavailable due to the natural conditions of the basin or to overexploitation.	Limited physical availability (scarcity) or intense competition for water use (stress)	Water shortages, disputes over water allocation, reduced water permits, financial risks associated with disruptions in operations, higher cost of inputs impacting costs of production, margins, pricing, and profit	Secure enough water for IFFCO's operations while considering local conditions and ensuring sustainable water withdrawals in line with local limits.
<b>Water Quality</b>	Water being of insufficient quality at water withdrawal and/or discharge point.	Water being unfit for use due to low quality (presence of harmful substances or contaminants in freshwater resources)	Water of low quality unsuitable for use in operations and production, enhanced regulations for wastewater quality parameters, increased cost of incoming water or wastewater treatment, financial risk associated with fines in case of improper wastewater treatment	Ensure that IFFCO uses water safely in its operations without compromising on food safety, food quality, and well-being of employees or putting the surrounding environment at risk by breaching wastewater quality standards.
<b>WASH</b> (access to Water, Sanitation, and Hygiene)	Access to safe WASH provided to employees in the workplace	Employees or surrounding communities not having access to safe drinking water, sanitation, and hygiene	Workers' productivity loss, disease outbreak, reputational risk, and failure to meet customer requirements on human rights.	Ensure that IFFCO provides safe access to WASH to all its employees and surrounding communities who don't have access to water.
<b>Extreme Weather Events</b>	Period when an area experiences extreme weather like droughts	Water-related damages due to short-duration extreme events.	Loss of production or supply chain disruptions, profit loss.	Ensure that IFFCO has a mitigation plan in place to implement in case of an extreme weather event

*Table 1. The four water-related impact areas included in the IFFCO policy are water quantity, water quality, WASH, and extreme weather events. This table describes their associated risks and how this policy aims to address them.*

#### IMPORTANT REMARKS REGARDING WORDING USED IN THIS WATER POLICY

- Note that, the term "**shall**" is related to requirements, which are mandatory to be fulfilled, while the term "**should**" is related to recommendations, which fulfilling is optional.
- For key **terminology definitions**, please refer to the **glossary** at the end of this policy.

## 1.2 Purpose

This policy defines short-term and long-term operational guidance for IFFCO ambitions on water stewardship, as a direct response to material water-related risks faced by IFFCO's sites, together with increased customer requirements on sustainability and human rights.

The intention is to lead by example and minimize the company's environmental impacts and water-related risks, as well as inspire IFFCO's business partners and other stakeholders to act on water challenges.

To achieve this ambition, the objectives of this policy are:

- **Contribute to water security.**
- **Ensure universal good practice.**
- **Collect and consolidate water-related data across IFFCO's sites.**
- **Address roles and responsibilities.**
- **Respond to site realities.**

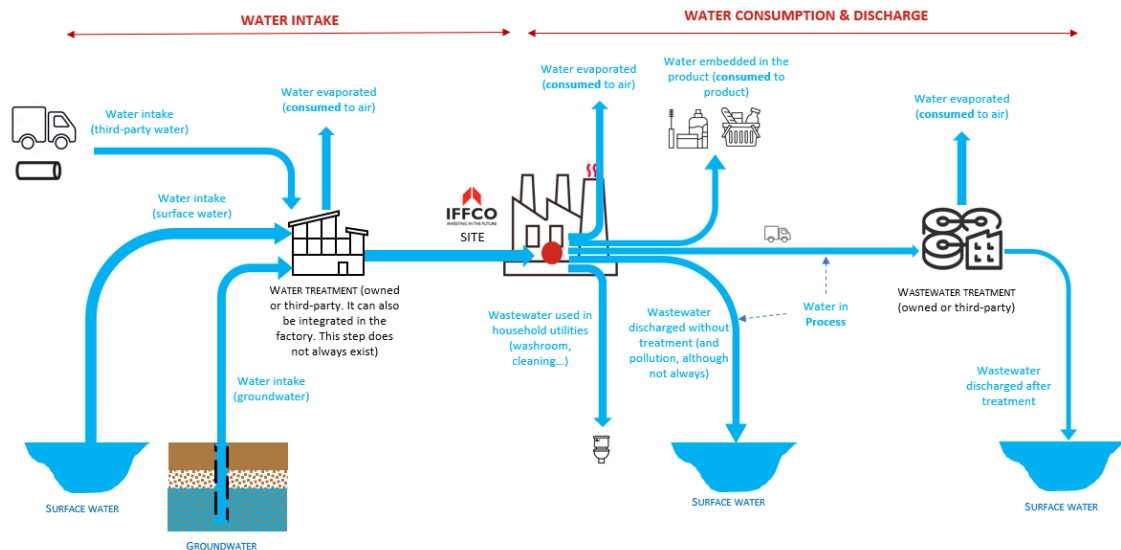
This policy determines what needs to be done to reach the goals by:

- 1) Outlining **guiding principles** for water stewardship at IFFCO
- 2) Setting clear **expectations** on the site's water management and water stewardship efforts
- 3) Listing **actions** that will be undertaken both at the **corporate** and **site** level to ensure that progress is **monitored**
- 4) Promoting continuous **improvement**
- 5) Generating **awareness and ownership** of water topics at site level

## 2. SCOPE

### 2.1 Applicability

This policy applies to all water flows related to IFFCO's sites, with no distinction between water used for operational purposes, domestic purposes, or water added in products, regardless of the site's location, the type of product manufactured, and the processes used (Figure 1). In this policy, IFFCO is to be intended as inclusive of the five Business Groups of IFFCO Holdings Limited and Allana International Limited, which are namely "Agri-Business," "Beauty," "Culinary," "Oils and Fats," "Sales and Distribution." This water policy is complementary to all other existing IFFCO policies linked to the environment shared by corporate and applies to water management and water stewardship within IFFCO's operations at all IFFCO legal entities (incl. production sites, warehouses, and offices).



**Figure 1.** General illustration of a site's water flows.

## 2.2 Compliance

### 2.2.1 Compliance with Local Regulatory Requirements

Water-related legal and regulatory requirements applicable to the site shall always prevail, be understood, and complied with. In case of contradictions between local regulations and this policy, local legislation prevails.

### 2.2.2 Compliance with This Water Policy

All IFFCO employees shall comply with this policy. Monitoring activities and grievance processes may be implemented to measure compliance with this or any other IFFCO policy.

### 2.2.3 Compliance with Corporate and Business Water Quantity Targets

All sites shall comply with the water targets related to water. Targets will be agreed between IFFCO Corporate Sustainability Team and the business for each site, considering local circumstances. These targets shall be revised on a yearly basis as part of the AOP process.

### 2.2.4 Non-Compliance

Any case of non-compliance with this policy shall be reported to the Business Group Leads, Business Unit Leads, IFFCO Corporate Sustainability Team, and IFFCO Corporate Compliance team.

Any case of non-compliance with regulatory requirements (local regulations and permits) shall be immediately reported to the Business Group Leads, Business Unit Leads, and IFFCO Corporate Compliance team.

The non-compliance reports shall include the timing of the non-compliance, the duration, a brief description of the event, and the corrective and preventive actions taken.

When a water-related issue is identified, for example, if water quality exceeds or is close to a regulatory or other accepted quality limit, the site shall quantify how the quality compares to

limits (for relevant parameters) and clearly identify breaches and trends of concern. Information should be immediately shared with the Business Unit (BU) Lead. The same applies to other water-related issues as well, such as if water withdrawals exceed the limit of the permits.

### 2.3 Governance

The implementation of this policy relies on four main roles, each accompanied by main responsibilities as described in Table 2.

Role	Responsibilities
Corporate level	
IFFCO Corporate Sustainability Team Corporate Water Program Team	<i>Coordination and oversight:</i> responsible for overall water strategy, reporting standards, monitoring, water risk mapping, and training/awareness raising.
IFFCO Compliance team	<i>Compliance:</i> Responsible for reviewing reported non-compliance or deviations from the policy with different stakeholders as per the safe place policy.
Business Group (BG) and Business Unit (BU) levels	
Business Group Leads and Business Unit Leads	<i>Overview and Accountability:</i> Accountable for the application of the policy and the projects related to water targets within the businesses' scope. Accountable to ensure compliance with local regulations and delivery and timely reporting of the KPIs. Must ensure timely reporting of non-compliance to the policy as per section 2.4.4.
Site level	
Factory Managers and Operations Managers	<i>Delegation and implementation:</i> Responsible for ensuring that their respective sites are compliant with this policy as well as with local regulations. Responsible for organizing and delegating tasks to enforce this policy at their sites. Responsible execute for executing the projects related to water targets and defined KPIs. Responsible for respecting reporting timelines.
Sustainability champions and co-champions, local HR, HSE, and/or other employees	<i>Support and action:</i> support the factory managers in the implementation and prioritization at the site level. Reporting to factory managers. Provide the data and track the KPIs.

Table 2. IFFCO roles & responsibilities towards the implementation of this policy.

## 3. WATER MANAGEMENT AT IFFCO SITES

### 3.1 Water Quantity

IFFCO's overall objective for water quantity is to **reduce its absolute water withdrawal even if the business is growing**<sup>7</sup>. By not using more water by default if the production is increasing

<sup>7</sup> Please refer to IFFCO's latest sustainability report to find out the latest corporate water-related targets.

(i.e., decoupling business growth from water use), IFFCO wants to position itself as a role model for other companies to follow and ensure its long-term business resilience and continuity. Reference for best practices for water quantity are *Alliance for Water Stewardship (AWS) Standard*<sup>8</sup> and the Global Reporting Initiative's standard *GRI 303: water and effluents standard*<sup>9</sup>.

### 3.2 Water Quality

IFFCO's overall objectives for water quality cover several areas:

- IFFCO sites need to **ensure that water both used as product ingredients as well as for processing purposes is adequate to maintain food safety, food quality, proper usage, and maintenance of the equipment and well-being of employees.**
- IFFCO must avoid **causing pollution of the natural environment**, including water bodies (for more details, consult the *AWS Standard*).
- **Wastewater discharge limits shall be respected, and wastewater shall be treated according to local, national water quality standards, or other approved local government procedures.** Each site shall also assess which site-specific priority substances are aligned with the *GRI 303: water and effluents standard*.

### 3.3 WASH (Access to Water, Sanitation, and Hygiene)

IFFCO's overall objective for WASH is to **provide safe access to WASH to all its employees and to maintain this standard continuously over time**, and therefore align with the Sustainable Development Goal (SDG) 6 "*Clean Water and Sanitation for all*"<sup>10</sup>. The WASH requirements in this policy are based on the *WASH4Work self-assessment tool*<sup>11</sup>, the WASH4Work toolkit and WASH4Work individual action plans available in the IFFCO Library on Echo.<sup>12</sup>

### 3.4 Water Risk Assessments and Extreme Weather Events

IFFCO's overall objective for risks and extreme weather events is to **ensure that mitigation plans are in place before the risks materialize**, as the majority of IFFCO's sites are in basins facing severe water risks. More information on types of risks can be found in the appendix.

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<sup>8</sup> For more information, consult: <https://a4ws.org/the-aws-standard-2-0/>

<sup>9</sup> For more information, consult: <https://www.globalreporting.org/standards/media/1909/gri-303-water-and-effluents-2018.pdf>

<sup>10</sup> For more information, consult: <https://sdgs.un.org/goals>

<sup>11</sup> For more information, consult: <https://wash4work.org/wash-pledge-toolbox/>

<sup>12</sup> For more information, contact IFFCO Corporate Sustainability Team

To ensure that best practices are followed, the following requirements are mandatory for all sites:

IFFCO Water Management Requirements		Details	Additional information
2.1 Water Quantity	2.1.1 Mapping the site's physical scope	All sites shall map their physical scope to obtain an overview of the water infrastructure and of the context of the water basin to quantify water balance adequately. In addition, all sites shall have a comprehensive water mapping.	Table 6 provided suggestions on how to map a site's physical scope.
	2.1.2 Quantifying the site's water balance	All sites' water withdrawal and wastewater discharge shall be monitored monthly, including quantification of: <ul style="list-style-type: none"> <li>- Absolute water withdrawal</li> <li>- Wastewater discharge volume</li> <li>- On-site volumes of water consumption <ul style="list-style-type: none"> <li>o As a raw material in the recipes</li> <li>o For processing purposes (e.g., CIP)</li> <li>o For household purposes (e.g., Washrooms)</li> </ul> </li> <li>- Water intensity: if water losses and changes in storage of water are applicable/feasible to monitor, this shall also be included.</li> </ul>	Table 7 provides an example of how to monitor water balance.
	2.1.3 Quantifying discharge volumes by wastewater treatment methods	Treatment of wastewater (physical, chemical, or biological processes) improves water quality by removing pollutants, solids, and organic matter. IFFCO requires that all sites follow the local regulations outlining minimum levels of wastewater treatment. If national legislations do not exist, facilities shall comply with those of headquarters, in this case UAE, or with corporate guidelines when existing.	Table 8 provides an example of how to report on wastewater treatment levels by volumes of discharged water.
2.2 Water Quality	2.2.1 Identification of point sources and non-point sources of water pollution	All sites shall map their actual and potential sources of water pollution, including: <ul style="list-style-type: none"> <li>- Point sources (e.g., wastewater discharge pipes, chemical storage area, waste disposal facilities, leaks of oil or chemicals, maintenance facilities, etc.)</li> <li>- Non-point sources (e.g., runoff from the use of agricultural chemicals such as fertilizers and pesticides on land, site drainage channel, etc.)</li> </ul>	Table 9 provides an example of how to identify point sources and non-point sources of water pollution.
	2.2.2 Water quality monitoring	All sites shall ensure that their wastewater is monitored and treated according to local regulations. If no local regulations exist, the site shall follow this policy, for example, complying with the thresholds in Table 10. These best-in-class policy thresholds for an established list of water quality parameters should be the objective to reach for all sites. Each site shall also identify potential priority substances of concern.	Table 10 provides a list of best-in-class water quality parameters that all sites should strive to comply with.

<b>2.3 WASH</b>	<b>2.3.1 Mapping of WASH access for employees, contractors, and temporary workers</b>	All sites shall assess current access to WASH for the site's employees, contractors, and temporary workers to determine the current state of access to WASH according to the WASH4Work self-assessment tool requirements. This mapping shall cover permanent, temporary, and mobile work sites, including agriculture, other work site facilities (ex. canteens, nurseries, etc.), as well as staff housing and/or labor accommodation when provided by the sites.	Sites shall refer to the appendix of this policy for a checklist regarding WASH4Work questionnaire requirements.
	<b>2.3.2 WASH action plan</b>	All sites shall address all gaps identified in the mapping with corresponding actions to ensure that all requirements of the WASH4Work questionnaire are fulfilled. When gaps identified are numerous, sites shall prioritize them together with IFFCO Corporate Sustainability Team.	Sites shall refer to the appendix of this policy for a checklist regarding WASH4Work questionnaire requirements.
<b>2.4 Water risk assessments and extreme weather events</b>	<b>2.4 Monitor and record risk-related incidents</b>	All sites shall identify and report all occurrences of drought and flooding in their local water basin. Particular focus should be on extreme weather events that have led to disruption, or risk of disruption, of the daily operations (e.g., if the site is experiencing frequent shortages in water supply, sites shall assess if this can be linked to an ongoing drought, or if this is likely to be a more long-term problem related to problems with the public water infrastructure).	For any questions regarding risks, reach out to IFFCO Corporate Sustainability Team.

Templates for each measure are provided in the appendix. The aim of these templates is to assist with the implementation of the mandatory requirements enlisted above. Moreover, section 6.2 provides more details on KPIs and reporting processes for all mandatory requirements.

## 4. WATER-RELATED MITIGATION AND ADAPTATION SOLUTIONS

### 4.1 Solutions at Site Level

IFFCO has set targets to reduce the company's overall absolute water withdrawals<sup>13</sup>. To contribute to this, sites should strive to reduce their water impact through **Absolute water reduction, Intensity reduction, Pollution reduction, and Extreme weather event mitigation**. Thus, **IFFCO encourages sites to adopt innovative practices and to go beyond business as usual. Technologies shall be used, created, or adopted to benefit the site's water use**. Examples of preventive solutions to implement, based on the action framework AR<sup>3</sup>T (avoid, reduce, restore, regenerate, transform) from Science Based Targets Network (SBTN)<sup>14</sup>, are listed in Table 3.

Avoid	Reduce	Restore	Transform
<ul style="list-style-type: none"> <li>- Eliminate more water intensive inputs in production systems</li> <li>- Eliminate the use of harmful chemicals</li> </ul>	<ul style="list-style-type: none"> <li>- Implement on-site water recycling.</li> <li>- Implement/ improve water efficiency infrastructure, such as replacing conventional cooling towers with water-efficient cooling systems, reclaiming wastewater for reuse in operations, installing process equipment using less water, reducing need for cooling, repairing eventual leakages.</li> <li>- Adopt best water management (use &amp; pollution) behavior.</li> <li>- Implement on-site wastewater treatment.</li> <li>- Reduce use of harmful chemicals.</li> <li>- Train employees on best water management practices.</li> <li>- Capture rainwater for auxiliary purposes onsite.</li> <li>- Optimize cleaning and sanitation processes to be more water efficient.</li> </ul>	<ul style="list-style-type: none"> <li>- Rehabilitate degraded land to increase infiltration and reduce run-off</li> <li>- Participate in replenishment or green infrastructure projects in local basins</li> </ul>	<ul style="list-style-type: none"> <li>- Change production lines to choose more water efficient systems</li> <li>- Reduce production of the most impactful products</li> <li>- Develop sustainable product lines (ex: eco-designed products)</li> <li>- Support and strengthen local water governance</li> </ul>

Table 3. Examples of efficient water use and water pollution preventive solutions.

### 4.2 Working Collectively with Stakeholders to Act on Water Risks

For efficient water management and sound water stewardship, all sites should endeavor to work with other water users in the same basin (for more details, see Figure 2 and Figure 3 in the Appendix). In line with the *Alliance for Water Stewardship Standard*, all sites shall map local stakeholders according to the steps outlined in Table 4.

Stakeholder mapping	
1.	Identify relevant local stakeholders, such as major water users in the local basins (e.g., municipality, major factories).
2.	Understand the stakeholders' water-related challenges, values, priorities, and concerns.
3.	Identify partnerships, possibilities, and ongoing initiatives for collective action and water stewardship activities (sources that can provide information about ongoing projects in the site's basin are, for example, local government, local water agency, local environmental organization, or national and international environmental NGOs).
4.	Develop a site-specific stakeholder engagement plan, including the costs and financing, and start acting.

Table 4. Step-by-step procedure to map local stakeholders.

## 5. SUPPLIERS

The upstream value chain is usually a hotspot for water-related impacts, where raw material production impacts both water quantity and quality. In addition to the requirements of IFFCO

<sup>13</sup> Please refer to IFFCO's latest sustainability report to find out the latest corporate water-related targets.

<sup>14</sup> For more information, consult: <https://sciencebasedtargetsnetwork.org/>

suppliers' code of conduct, sites are encouraged to ensure that suppliers have water-related policies in place.

## **6. REPORTING**

All sites shall report to IFFCO Corporate Sustainability Team. In addition, all sites shall annually prepare and update their Business Continuity Plan (BCP) following the template prepared by IFFCO Corporate Insurance Team. The BCP may in the future encompass a water-related incident response plan, covering water quantity risks, quality risks, WASH risks, and risks for extreme weather events. Grievance processes shall follow the usual IFFCO procedure, detailed in IFFCO IDMS-P-GSOP Safe Space policy<sup>15</sup>.

### **6.1 Monitoring**

All water-related requirements outlined in this policy shall be monitored monthly by sites. Sites need to implement tools and systems to monitor, and report required data. Examples of monitoring mechanisms are checklists, regular meetings with employees in charge of implementing aspects of this policy and reporting processes. Furthermore, each site shall report on their current water management practices, as well as ensure that their incident response plans are up to date and complete.

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<sup>15</sup> IDMS-P-GSOP Safe Space policy V1.0, published on 18<sup>th</sup> April 2023.

## 6.2 Summary of KPIs and Monitoring Frequency

KPI	Description	Frequency
General Practices		
Site Water management Policy	Description of how water management should be implemented at site, including actions to be undertaken, such as water reduction and water reuse projects (concerning quantity, quality, WASH, and extreme weather events)	Annual
Water Quantity		
Withdrawals	Total water intake by water source (m³) <i>(i.e., surface water, groundwater, seawater, produced water, third-party water)</i>	Monthly monitoring, quarterly reporting
Discharges	Total wastewater discharge by destination (m³) <i>(i.e., surface water, groundwater, seawater, third-party water)</i>	
Consumption	Total water added in products (m³) and total water used for processing purposes (m³)	
Water intensity	Total water used with respect to site production (m³/ton)	
Site physical scope	Map of site boundaries, water-related infrastructure, water mapping, and local context of the water basin	Annual reporting
Progress to target	Progress of the site related to targets defined by the site and IFFCO Corporate Sustainability Team, accounting for local circumstances	Annual reporting
Water Quality		
Wastewater quality management	Description of the local regulation’s wastewater discharge requirements (testing frequency, parameters, and thresholds), as well as processes for wastewater treatment and targeted pollutants	Monthly monitoring, quarterly reporting
Wastewater treatment	Volumes and percentages of wastewater discharged according to specified levels of treatments (m³)	
Priority substances of concern	Identification, monitoring, and action plan for site specific priority substances of concern	
Wastewater regulatory and policy compliance	Reporting of wastewater quality results and compliance against local regulation and aiming to reach best-in-class standard as provided in this policy	
Pollution points	Identification of pollution points <i>(i.e., point and non-point water pollution sources)</i>	Annual reporting
Progress to target	Progress of the site related to targets given by IFFCO Corporate Sustainability Team	Annual reporting
WASH		
WASH4Work action plan	WASH score indicating compliance with WASH4Work questionnaire + indications of area of actions identified	Quarterly Monitoring Annual reporting
Change in WASH	List of changes in WASH identified since last corporate assessment	
Progress to target	Progress of the site related to targets given by IFFCO Corporate Sustainability Team	
Risk		
Risk assessments and extreme weather events	Develop and update water-related incident response plan, including mitigation plan in case of extreme weather events	Annual reporting
Incidents	List of incidents impacting the site’s production or infrastructure (due to water quantity issues, quality issues, extreme weather events), and description of measures to mitigate further incidents	Immediate reporting in case of occurrence
Stakeholder Engagement		
Collective action	Description of the site’s involvement in collective water stewardship initiatives, or stewardship activities implemented by site on water-related topics	Annual reporting

**Table 5.** Checklist with water-related KPI. Refer to AOP Guidance from Corporate Sustainability for mandatory KPIs to be tracked.

## 7. APPENDIX

### 7.1 Templates Water Management Monitoring at IFFCO Sites (Related to Section 3)

2.1.1 Mapping the site's physical scope	Tips for the mapping of the site's physical scope
Site boundaries and water-related infrastructure on site	Control that the utilities plan of the site, including all water-related infrastructure, is available and up to date and that water volumes required to be monitored can be tracked.
Third-party water service provider and water basin(s) in which the site is located	Contact the water service provider or local water authority and ask for information such as water withdrawal sources, ultimate wastewater discharge points, and maps of the water basin. If no map of the basin is available, reach IFFCO Corporate Sustainability Team for support.
Water mapping	Identify where water flows inside the factories and quantify these flows with appropriately placed water meters.

*Table 6. Suggestions on how to map the physical scope of the sites.*

2.1.2 Site water use (volumes)	Water withdrawal (m³) surface water	Water withdrawal (m³) groundwater	Water withdrawal (m³) third-party water	Wastewater discharge (m³) to surface water	Wastewater discharge (m³) to seawater	Wastewater discharge (m³) to third-party	Water consumption (m³)	Production volume (t)	Water intensity (m³/t)
Month 1									
Month 2									
Month 3									

*Table 7. Example of template to monitor water balance by reporting volumes by source/destination. Note: Consumption includes both the total water added in products and total water used for processing purposes.*

2.1.3 Volume by wastewater treatment	% of wastewater that is discharged with no treatment	% of the wastewater discharged after primary treatment (provide title)	% of the wastewater discharged after secondary treatment (provide title)	% of the wastewater discharged after tertiary treatment (provide title)
Month 1				
Month 2				
Month 3				

*Table 8. Example of template to report on wastewater treatment levels by volumes of discharged water. The specifics and levels of treatment (primary, secondary, tertiary) need to be specified and reported as percent of total discharge. This table can be used both for sites that are treating their own wastewater, as well as sites discharging to a third-party (this information needs to be indicated).*

2.2.1 Water Pollution Sources	Location	Potential Risk of Water Pollution Source	Type of Pollution Produced	Treatment/ Actions Taken	Needed Action Identified
Point source 1					
Point source 2					
Non-point source 1					
Non-point source 2					

*Table 9. Example of template to identify point sources and non-point sources of water pollution.*

2.2.2 Site Water Quality Monitoring: Month 1	Unit	Threshold	Results
Chemical Oxygen Demand (COD)	mg/L	125 mg/L	
Biological Oxygen Demand (BOD <sub>5</sub> )	mg/L	25 mg/L	
Total Nitrogen (TN)	mg/L	10 mg/L	
Total Phosphorous (TP)	mg/L	1 mg/L	
Total Suspended Solids (TSS)	mg/L	35 mg/L	
pH		5.5-9.5	

Fat, Oil, and Grease (FOG)	mg/L	20 mg/L	
Priority substance of concern 1	mg/L	To be defined by each site	
Priority substance of concern 2	mg/L	To be defined by each site	

**Table 10.** All IFFCO sites should aim to comply with the local regulations or above limits if country local regulations do not have specific limits. Each site shall also identify if there are specific priority substance(s) related to the nature of their site that should be included in the monitoring scheme. The thresholds are defined according to the Urban Wastewater Treatment Directive by the European Commission (<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31991L0271>), (COD, BOD, TSS), The ZDHC framework (N and P), and the Italian law (pH and FOG), Legislative Decree 152/06 Discharge into surface waters. Note: Each site shall refer to the National Environmental Quality Standards (NEQs) of the local country, while the above-mentioned limits can be used as best practice if the country does not have NEQs.

## 7.2 WASH Checklists (Related to Section 3.3)

As per WASH4Work self-assessment tool requirements, mapping and corresponding actions related to WASH access for employees, contractors, temporary workers and when possible, surrounding communities, should include:

Checklist	Definition	Corresponding Category on WASH4Work Self-Assessment Tool
General		
Does site comply with local and national regulations?	All sites shall comply with existing WASH-related local national laws and regulations. Where such regulations do not exist, sites shall refer to UAE (United Arab Emirates) regulations.	GE1.1
Did the site implement all needed WASH-related procedures and policies?	All sites shall have necessary WASH-related procedure and policies in place. Policies must ensure the implementation of access to safe water, sanitation, and hygiene at an appropriate level of standard for all employees in all premises under their direct control.	GE1.2 GE 1.3
Did site implement all needed mechanisms to monitor all WASH activities?	All sites shall have necessary WASH-related monitoring mechanisms in place. These mechanisms are considered “necessary” when they enable the site to address a potential gap identified in the self-assessment. Examples of monitoring mechanisms include (but are not limited to): <ul style="list-style-type: none"> <li>- Washroom cleaning checklists.</li> <li>- Record of training provided to employees.</li> <li>- Checklist of drinking water checks.</li> <li>- Etc.</li> </ul>	GE1.4
Did my site implement all the necessary mechanisms to monitor change in WASH?	All sites shall have the necessary mechanisms to measure change in place. These mechanisms are considered “necessary” when they enable the site to identify a new WASH-related gap.	GE1.5
Availability and quality of drinking water		
Does the site provide sufficient, free, and physically accessible drinking water?	<ul style="list-style-type: none"> <li>- Enough water to provide adequate hydration for workers, sensitive to worksite conditions.</li> <li>- Convenient proximity to workers (within 500 meters and/or workers allowed to have water at workstations).</li> <li>- Physically accessible drinking water facilities, including for workers with disabilities.</li> </ul>	WWWS2.1

	<ul style="list-style-type: none"> <li>- Drinking water is free of charge.</li> <li>- Drinking water is available to workers at any time during work period.</li> </ul>	
Does site provide access to safe water that meets quality standards?	<ul style="list-style-type: none"> <li>- Drinking water is from an improved drinking-water source.</li> <li>- Drinking water source is known to meet government quality standards (if raw water source does not meet standards, it is treated before being consumed by workers).</li> <li>- Drinking water taste is acceptable to workers.</li> <li>- Safe method(s) for drinking water distribution (clean fountain/vessel) are in place.</li> <li>- Drinking water is taken from the storage vessel/source to avoid contamination of the water (e.g., clean cup).</li> </ul>	WWWS2.2
Are drinking water facilities clean and appropriately disinfected?	All drinking water fountains, water coolers, and other storage vessels and sources should be positioned in appropriate areas and cleaned, recharged, and disinfected regularly to ensure that all risk of contamination and infection is avoided. Drinking water stations should be disinfected at least once every two months or more frequently if heavily used.	WWWS2.3
Is drinking water tested to ensure quality and safety?	<ul style="list-style-type: none"> <li>- Drinking water provided within the facility is regularly tested by appropriately trained staff.</li> <li>- Drinking water testing is conducted when environmental conditions change, or there is a waterborne disease outbreak (periodic training of staff for water testing is needed).</li> <li>- If drinking water quality testing indicates water is not meeting standards, mitigative actions are taken, including the workers being notified.</li> </ul>	WWWS2.4
Does the site implement appropriate cleaning, maintenance, and conservation of the water supply system?	<ul style="list-style-type: none"> <li>- Appropriate provisions are made for the regular cleaning of all water supply systems under direct company control a minimum of 2 to 4 times per year (note: cleaning is not mandatory if residual disinfection is provided, and therefore, this would be n/a).</li> <li>- Appropriate provisions are made for the regular inspection, maintenance, and repair of all water supply facilities and drainage systems under direct company control (at least annually for water supply systems).</li> <li>- Water saving technologies are deployed within facilities and other relevant work areas to conserve water used by operations and workers.</li> </ul>	WWWS2.5
Access to workplace sanitation		
Does the site provide access to adequate, improved, convenient toilet facilities?	<ul style="list-style-type: none"> <li>- All employees, regardless of work location, have access to at least 'improved' toilet facilities with adequate superstructures to protect from elements to make sanitation safe and convenient (e.g., at a minimum provision of flush or pour-flush toilet, septic tank, pit latrine, ventilated improved pit-latrine).</li> <li>- Minimum 2 toilet seats and 2 urinal facilities per 45 male workers are provided.</li> <li>- Minimum of 4 toilet seats per 50 females are provided within facilities.</li> <li>- Toilet facility design is in line with local customs and religious and social traditions.</li> <li>- Facilities are accessible to workers with mobility challenges, e.g., the disabled and elderly workers.</li> <li>- If relevant, toilet facilities are provided to agricultural, field, and mine workers.</li> <li>- Ventilation is in place in toilet facilities to remove odors.</li> </ul>	WS3.1

Are wastewater, drainage, and toilet/urinal waste safely managed?	<ul style="list-style-type: none"> <li>- All wash basins, sinks, showers, and toilet facilities under direct company control are provided with adequate drainage and disposal systems to prevent contamination in the immediate and broader environment, i.e., wastewater is conveyed into a municipal sewer and/or pre-treated within the company's premises.</li> <li>- All fecal waste is safely managed, i.e., it is treated before it is returned to the environment or conveyed into a municipal sewer system.</li> </ul>	WS3.2
Are lighting and locks available in the toilet/urinal?	All toilets/urinals are provided with adequate permanent lighting (200 lumens per square meter – lux) and all doors can be locked.	WS3.3
Does the site implement appropriate cleaning and maintenance of the toilet/urinal?	<ul style="list-style-type: none"> <li>- Provisions are in place to clean all toilet facilities under direct company control at least once daily.</li> <li>- Cleaning includes disinfection of all sanitary facilities under direct company control and is carried out at least once a week.</li> <li>- Appropriate provisions are made for the inspection, maintenance, and repair of toilet facilities under direct company control at least monthly, with more frequent maintenance and repairs, if issues are reported by employees.</li> <li>- System is in place for workers to report cleanliness and/or maintenance issues related to toilet facilities.</li> </ul>	WS3.4
Are sanitary products, as well as access to safe disposal, available?	<ul style="list-style-type: none"> <li>- Appropriate provisions are provided within women's toilet facilities for the safe disposal of sanitary products in waste containers that are adequately lined with plastic, wax paper, or other appropriate bags.</li> <li>- Sanitary products are available at the worksite in vending machines or free of charge.</li> </ul>	WS3.5
Does the site dispose of medical waste safely?	Medical waste (e.g., blood, urine, and other bodily secretions) should be disposed of in red bags to hold contaminated medical waste that is considered a biohazard. Scalpels, sharps, and needles, as well as broken lab glass, should be placed in specially made sharps containers that display medical waste warning labels.	WS3.6
Access to workplace hygiene		
Does the site provide access to adequate hygiene/hand washing facilities?	<ul style="list-style-type: none"> <li>- Soap is available at handwashing facilities.</li> <li>- Mechanism for hand and face drying is in place at handwashing facilities.</li> <li>- Water at a standard acceptable for cleansing hands (if non-potable water is used for washing, it is clearly communicated at the point of use) is available at the handwashing facility.</li> </ul>	WH4.1
Does the site post appropriate hand washing behavior awareness signage?	<ul style="list-style-type: none"> <li>- Critical times for handwashing are posted (times include before food preparation, eating, and after using the toilet, contact with bodily fluids, and contact with any potential contaminants).</li> <li>- Handwashing techniques are posted at handwashing facilities includes use of water and soap or ash, washing both hands, rubbing hands together at least three times, and drying hands hygienically - by air drying or using a clean cloth/paper.</li> <li>- Provision of information is in place on how workers exposed to hazardous substances should clean after exposure.</li> </ul>	WH4.2
Does the site provide access to shower and bathing facilities?	<ul style="list-style-type: none"> <li>- One shower is provided for every 10te employees of each gender required to shower during the same shift.</li> <li>- Body soap or other appropriate cleansing agents are provided.</li> </ul>	WH4.3

	<ul style="list-style-type: none"> <li>- Showers have hot and cold water feeding a common discharge line.</li> <li>- Employees who use showers are provided with individual clean towels.</li> </ul>	
Does the site provide access to hygiene and WASH awareness behavior change training?	<ul style="list-style-type: none"> <li>- Hygiene training is provided for all new employees.</li> <li>- Annual refresher courses for all workers with special attention given to employees and other staff involved in food preparation).</li> </ul>	WH4.4
Does the site provide personal protective equipment (PPE)?	<ul style="list-style-type: none"> <li>- Appropriate personal protective equipment, such as gloves and non-slip rubber soled shoes, is provided to all those involved in the cleaning and maintaining toilet washrooms/associated facilities under direct company control.</li> <li>- Workers involved in cleaning and maintenance facilities wear personal protective equipment, which is always worn when cleaning urinals, toilet bowls, showers, hand basins, mirrors, and other associated facilities.</li> <li>- Method for managing used personal protective equipment is in place at the workplace to avoid exposure to worker's families/community.</li> </ul>	WH4.5
Does the site provide training for cleaning and maintenance staff?	<ul style="list-style-type: none"> <li>- Cleaners are trained in the proper cleaning techniques and the use of cleaning materials for WASH facilities.</li> <li>- Employers ensure that workers and relevant contractors follow the specific instructions associated with each WASH facility cleaning product.</li> </ul>	WH4.6
Does the site appropriately store cleaning equipment storage?	<ul style="list-style-type: none"> <li>- WASH cleaning equipment is stored in appropriate conditions that meet the cleaning supplies' packaging guidelines.</li> <li>- WASH cleaning equipment is stored in places dedicated to this purpose (own operations).</li> <li>- Facilities have a dedicated storage unit for WASH cleaning products outside common areas.</li> </ul>	WH4.7
Does the site monitor and report water-related diseases?	Monitoring and reporting of WASH-related diseases at the workplace under direct company control is implemented and he in collaboration with local and national public health bodies.	WH4.8
<b>WASH for suppliers</b>		
Does supplier policy integrate WASH requirements and/or is there a WASH-related supplier policy?	The site has ensured that suppliers have similar WASH-related policies and provisions.	VCS5.1 VCS5.2
<b>WASH and the environment</b>		
Does the site assess and monitor the impact of WASH activities on the environment?	The site has assessed and addressed the impact of their workplace WASH practices on the local environment (ex. Monitor its implementation efforts	CW6.3

**Table 11.** WASH checklist

Sites shall refer to WASH4Work self-assessment tool<sup>16</sup> and to IFFCO WASH toolkit for more details about requirements<sup>17</sup>.

### 7.3 More information on risks (related to section 3.4)

Water risks can be:

- Physical risks (for example, water scarcity, droughts, floods)
- Regulatory risks (for example, rationing, regulatory changes, standard compliances)
- Reputational risks (for example, community opposition, negative media coverage)

Water risks are also classified as basin or operational water risks. **Basin water risks** are linked to the nature and conditions of the basin where a site operates, whereas **operational water risks** are related to the actual activities of a site (how it depends on water and its water management practices).

Examples of water risks that can severely impact site activities and reality are water shortages, which are occurring frequently and are likely to become even more frequent in the future, with altered hydrological cycles due to climate change. Long-term risks and extreme weather events, such as droughts and floodings, require specific mitigation procedures.

Water-related challenges must be addressed locally since the local context differs between water basins.

### 7.4 More information on water stewardship (related to section 4.2)

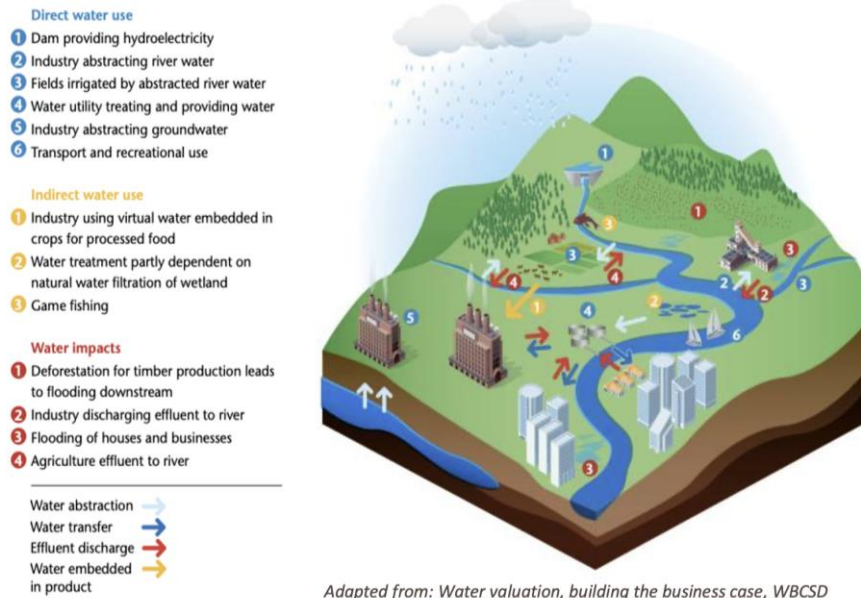
For efficient water management and sound water stewardship, all sites should endeavor to work with other water users in the same basin. For efficient water management, it is encouraged to look beyond the direct operations of the site itself and engage with other water users in the same basin (Figure 2). This is called water stewardship.

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<sup>16</sup> WASH4Work self-assessment tool: <https://wash4work.org/wash-pledge-toolbox/>

<sup>17</sup> Please refer to IFFCO Corporate Sustainability Team to access these documents.

## Users within a water basin



**Figure 2.** Illustration of typical water users. There are different types of water users within a typical water basin: users that use water directly, users that use water indirectly, and users with other water-related impacts.

A water basin is like a water glass with many straws, where every straw is a water user, such as an IFFCO site. To ensure the glass is not empty, the site can withdraw less water, but it must also ensure that other stakeholders in the same basin are using the water sustainably. This policy guides IFFCO in implementing further actions to improve water management and onboard the water stewardship journey (Figure 3).

## A water basin is like a glass with many straws



Adapted from: Water Stewardship Benefits Accounting: A New Approach and Proposed Methodology. Carlo Galli, Paul Reig, and Sam Vionnet, AWS Forum 2017

**Figure 3.** Illustration of water stewardship, where a water basin is compared to a water glass with many straws.

## 7.5 Glossary

**Absolute water withdrawal (or volume):** the amount of water withdrawn by a site per month/year.

**Alliance for Water Stewardship (AWS):** The AWS Standard is a framework to guide water stewardship efforts. To date, 250+ sites have been certified and close to 200 have been registered to be certified. The AWS Standard outlines the journey towards sound water stewardship at site level, across five water stewardship outcomes, following 5 steps. The 5-steps focus on understanding the risks, impacts, and opportunities and addressing shared water challenges collectively with other stakeholders. Implementation of the standard is intended to positively affect/achieve five outcomes: 1) Good water governance: governance which ensures responsible sharing of water resources in the interests of users and the natural environment in line with the principles of water stewardship; 2) Sustainable water balance: ensure responsible sharing of water resources in the interests of users and the natural environment in line with the principles of water stewardship; 3) Good water quality status: where water quality meets the requirements of native flora and fauna, and for human needs where applicable; 4) Important water-related areas (IWRA) (i.e., an area or feature) of high value to humans or nature from an environmental, community or cultural perspective (e.g., recognized conservation areas but also springs and wells used for drinking water, or of cultural significance); and 5) Safe WASH for all.

**Basin:** Area of land where all flowing surface water converges to a single point, such as a river mouth, or flows into another body of water, such as a lake or ocean. Water basins include associated groundwater areas and may consist of portions of water bodies (such as lakes or rivers). Also commonly referred to as 'catchment' and 'watershed.'

**Basin water risk:** The physical, regulatory, and reputational risks due to the nature and conditions of a basin. Basin risk is determined by its geographical location.

**Collective action:** When multiple water users in a watershed set up a partnership to solve shared water challenges in the watershed through water stewardship activities (e.g., land protection, preservation, and restoration, agricultural water demand reduction, stormwater management, etc.).

**Drought:** Acute unavailability of water, where water shortages can impact the site's production.

**Flood:** Overflow of a large amount of water beyond normal limits, where flooding water can damage infrastructure, equipment, or inventory.

**Freshwater:** Water contains only minimal quantities of dissolved salts, thus distinguishing it from sea water or brackish water. All freshwater ultimately comes from precipitation of atmospheric water vapor, reaching inland lakes, rivers, and groundwater bodies directly, or after melting of snow or ice.

**Groundwater:** Water beneath the Earth's surface in the spaces between soil particles and between rock surfaces.

**Non-point source of water pollution:** Pollution that is delivered to the receiving water body in a diffuse manner such as runoff from the use of agricultural chemicals such as fertilizers and pesticides on land, or a site drainage channel.

**Site:** As defined by the Alliance for Water Stewardship, a 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 but nearby areas (especially if they are 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 water sources and/or wastewater plant, these should be considered part of the 'site.'

**Operational water risk:** The physical, regulatory, and reputational risks linked to how a site operates and manages water.

**Physical water risks:** Account for risks related to water quantity, water quality, and extreme weather events. Water quantity risk: Accounts for whether water in the river basin is too little (scarcity) or faces intense competition (stress).

**Physical scope:** Land area or areas relevant to the site's actions and engagement. It should incorporate the relevant water basin but may extend to other relevant political or administrative boundaries.

**Point source of water pollution:** A single identifiable source of pollution such as wastewater discharge pipes, chemical storage area, waste disposal facilities, leaks of oil or chemicals, maintenance facilities, electrical transformers, or livestock facilities where animal waste may concentrate.

**Receiving water body:** Water body that receives discharges, such as rivers, lakes, drainage systems, etc.

**Regulatory risk:** Linked to how water is managed (or governed) in the area or country. Thus, it is heavily tied to the concept of good governance and the fact that businesses thrive in a stable, effective, and adequately implemented regulatory environment.

**Reputational risk:** Linked to stakeholders' and local communities' perceptions of whether companies conduct business sustainably or responsibly concerning water.

**Resilience:** The ability to maintain operations and business viability through adverse conditions. With respect to climate change, this includes the ability to prevent or reduce impacts from risks such as extreme weather that causes flooding and/or prolonged drought.

**Sanitary water:** Domestic water is used in kitchens, bathrooms, etc.

**Science-Based Targets for Nature: Created by the Global Commons Alliance and led by the Science-Based Targets Network (SBTN), with the objective to design** guidance and methods to enable companies to set Science-Based Targets for nature. The leading frameworks for nature targets.

**Shared water challenges:** Water-related issues that are of interest or concern to both the site and to other stakeholders in the basin and which, if addressed, will provide positive impacts, or prevent negative impacts.

**Shared water risks:** Water challenges that threaten both community and private sector viability incentivize companies to invest in sustainable water management outside of their direct boundaries.

**Stakeholder:** A person, group, or organization with an interest or stake in a shared water challenge, may be directly or indirectly affected by water policy, and/or can influence the collective actions outcome positively or negatively, or to impact the reputation of companies associating with them. When the stakeholder participates in the partnership, it becomes a partner.

**Sustainable Development Goals (SDGs):** Officially known as “Transforming our World: the 2030 Agenda for Sustainable Development”, the SDGs are a set of 17 Global Goals with 169 targets among them. Spearheaded by the United Nations through a deliberative process involving its 193 Member States and global civil society, the goals are contained in paragraph 54, [https://sdgs.un.org, A/RES/70/1](https://sdgs.un.org/A/RES/70/1) of 25 September 2015.

**Third-party water:** municipal water suppliers and municipal wastewater treatment plants, public or private utilities, and other organizations involved in the provision, transport, treatment, disposal, or use of water and effluent (i.e., water supplied or wastewater treated by municipal water networks or other organizations).

**Wastewater quality:** Physical and chemical properties of water discharged by a facility. The extent to which the physical and chemical properties of the water will change depends on the process of using the water. Wastewater quality may be measured using many factors, such as suspended solids, reduced biological oxygen demand (BOD) or chemical oxygen demand (COD), metals content, oil/grease content, temperature, pH, etc.

**Water balance:** The difference between water that comes in and out of one site. The total water withdrawal (intake) equals the total of all discharges and water losses such as evaporation losses, leakage, etc.

**Water consumption:** The difference between the total water withdrawal and total water discharge, for instance, water integrated into products, evaporated in cooling towers, or lost through leaks.

**Wastewater discharge:** Water that leaves the site.

**Water intake:** Water withdrawal.

**Water intensity:** The water used concerning the volume of the final product produced is usually expressed in m<sup>3</sup>/ton.

**Water management:** Activity of planning, developing, distributing, and managing the optimum use of water resources. For a site, this could be internal actions to reduce or optimize water use.

**Water quality:** Physical, chemical, and biological properties of water. It will determine if water at the site and within the catchment(s) meets regulatory requirements and is fit for industrial and agricultural purposes, drinking water, sanitation, and environmental needs or purposes.

**Water quality risk:** Accounts for whether water is unfit due to low quality. Extreme weather events: Occurrences of unusually severe weather or climate conditions, often short-lived. For water, it materializes in either too much water (flooding) or too little water (drought).

**Water, Sanitation, and Hygiene (WASH):** Acronym used in the international development landscape refers to the combined effort to address basic human water needs and rights related to accessible, safe water. WASH includes the provision of safe drinking water, adequate sanitation, and hygiene education and is primarily sought after to combat water-related illnesses and diseases. WASH has been recognized as a human right and part of the UN Sustainable Development Goals since 2010.

**Water stewardship (at basin level):** The Alliance for Water Stewardship (<https://a4ws.org/about/>) defines water stewardship as the use of water that is socially and culturally equitable, environmentally sustainable, and economically beneficial, and achieved through a stakeholder-inclusive process that includes both site- and catchment-based actions. Water stewardship is going one step further compared to water management. Water stewardship is about collaborative, stakeholder-inclusive, local actions to reduce a site's impact and contribute to preserving and restoring the overall health of the catchment.

**Water stewardship (at company level):** A process that allows companies to identify and mitigate water-related business risks; manage their adverse impacts on surrounding ecosystems, communities, and businesses; and help enable more sustainable management of shared water resources.

**Water stewardship activity:** Activity that mitigates shared water challenges and water risks and/or contributes to achieving Sustainable Development Goal 6: Clean Water and Sanitation for All. Connecting water risks, SDGs, and shared water challenges is vital to identifying water stewardship activities and potential partners in the water basin where the facility is located. It is important to note that water stewardship activities that reduce water-related risks through collective action can use both conventional infrastructure (e.g., *seawalls, wastewater treatment plants, water retention ponds, waterways*) and/or natural infrastructure (i.e., *Nature-Based Solutions (NBS) such as land cover restoration, constructed or rehabilitated wetland treatment systems or restoring floodplains and planting trees*). For example, wetlands absorb water during wet months and slowly release it during drier ones. Floodplains

constitute a natural protection against flooding. Forests (tree cover) allow for water infiltration, reducing runoff while supporting groundwater recharge.

**Water withdrawal:** The total amount of water withdrawn by a site to be used, also referred to as water intake.