

## AWS step 3.



# ALLIANCE FOR WATER STEWARDSHIP

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  - 3.3.1 IMPLEMENT PLAN TO ACHIEVE SITE WATER BALANCE TARGETS
- 3.3.4 Implement plan to achieve site water quality targets.
  - 3.4.1 Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.
  - \*\*Define the Water Quality Targets\*\*
  - 3.4.2 Where water quality is a shared water challenge, continual improvement to achieve best practice for the site's effluent shall be identified and where applicable, quantified.
- 3.5 Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.
  - 3.5.1 Practices set in the water stewardship plan to maintain and/or enhance the

site's Important Water-Related Areas shall be implemented.

- 3.6 IMPLEMENT PLAN TO PROVIDE ACCESS TO SAFE DRINKING WATER, EFFECTIVE SANITATION AND PROTECTIVE HYGIENE (WASH) FOR ALL WORKERS
  - 3.6.1 Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.
  - 3.6.2 Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for Indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.
  - 3.6.3 Advanced Indicator A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.
  - 3.6.4 In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.
- 3.7 Implement plan to maintain or improve indirect water use within the catchment.
  - 3.7.1 Options for reducing indirect water use
  - 3.7.2 Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified.

## IMPLEMENT:

**Step 3 is the part where the organization implements the plan they developed in Step 2, using the information gathered in Step 1.**

**This step focus on demonstrating that the plan is being implemented effectively.**

*The organization should provide appropriate evidence that it is implementing its water stewardship plan as defined in Step 2. provided these are accessible to auditors.*

### key to effective implementation

1. clear instructions, processes, and procedures
2. clearly defined roles and responsibilities
3. robust training and awareness
4. effective monitoring and measurement

## 3.1 - 3.3 Requirements for CATCHMENT GOVERNANCE:

1. contributed to good catchment governance - everyone involved – from government agencies to local communities and individuals

*Understanding our catchments means we need to understand and integrate a huge range of information. For example, we need to gather information about how people are using the water.*

- ☐ engage with relevant authorities (SWPC , MEWA , MODON, NWC)
- ☐ demonstrate support for improved water governance and water management policies. **to ensure alignment with Saudi Vision 2030 objectives, which prioritize water sustainability 1. Transparency - Transparency is crucial for ensuring that water-related decisions are made in a fair, responsible, and sustainable manner.\***
- ☐ disclose how water is being managed, including the allocation of resources, pricing policies, and the environmental impacts of water use
- ☐ ensuring that water is used efficiently and equitably, without depleting or degrading natural resources
- ☐ Information about the sustainability of water management practices, such as water recycling, conservation efforts, and pollution control
- ☐ sharing plans for water conservation, risk mitigation, and strategies for adapting to water scarcity or climate change.

In addition to its water stewardship plan and records (as required for the AWS Standard), it may also have created additional internal policies, guidance and standards documents.

communicated its water governance approach and water stewardship initiatives. Where relevant, the site should show where its approach has considered the interests and concerns of stakeholders.

### following good catchment governance initiatives:

- Establish site water governance team with clear responsibilities
- Stakeholder communication and strategy development
- Tracking of regulatory compliance requirements and develop systems to adhere to them
- Obtain and maintain required licenses and certificates - Develop water stewardship strategy
- plan and negotiate with stakeholders for plan implementation

## الجدول ٤: توزيع المسؤوليات الرئيسة في تنظيم قطاع المياه

المجالات الرئيسة	الوظائف الرئيسة	الإعداد	الموافقة	الإنفاذ	الرصد
تشريعات استخدامات المياه	خطط التراخيص للسماح باستخدام المياه، بما في ذلك حصص كمية المياه.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة
	نظام تراخيص لأعمال حفر الآبار وإقامة السدود وخطط معالجة المياه.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة
	خطط التعرف لاستخراج المياه (المياه الجوفية والسطحية).	وزارة البيئة والمياه والزراعة	مجلس الوزراء	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة
	قواعد الإفصاح الدقيق والشفاف عن المعلومات المتعلقة باستخدام وجودة موارد المياه.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة
معايير جودة المياه	معايير جودة المياه لاستهلاك مياه الشرب وللإستهلاك الحضري، بما في ذلك الملوثات المسموح بها.	الهيئة العامة للغذاء والدواء	الهيئة العامة للغذاء والدواء	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	معايير جودة مياه الصرف المُعالجة لإمداد الري والزراعة، بما في ذلك الملوثات المسموح بها.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة
	معايير جودة مياه الصرف المُعالجة في إمداد المياه الصناعية.	وزارة التجارة والاستثمار	وزارة التجارة والاستثمار	وزارة التجارة والاستثمار	وزارة التجارة والاستثمار
حماية موارد المياه من التلوث	الوقاية والتخلص من كل من مصادر النقطة ومصادر التلوث المنتشر للموارد المائية.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	الهيئة العامة للأرصاد وحماية البيئة	الهيئة العامة للأرصاد وحماية البيئة
	تشريعات التخلص من الصرف الصحي والنفايات الأخرى في البحر والتربة.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	الهيئة العامة للأرصاد وحماية البيئة	الهيئة العامة للأرصاد وحماية البيئة
	تشريعات استخدام الأراضي للوقاية من أية آثار على موارد المياه.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	الهيئة العامة للأرصاد وحماية البيئة	الهيئة العامة للأرصاد وحماية البيئة
	تشريعات تنفيذ سياسات واستراتيجيات برامج إدارة الطلب للزراعة والري والاستخدام البيئي والصناعي.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة
المحافظة على المياه	تشريعات تنفيذ سياسات واستراتيجيات برامج إدارة الطلب لاستخدامات المياه الحضرية.	وزارة البيئة والمياه والزراعة	وزارة البيئة والمياه والزراعة	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	تراخيص تشغيل شركات خدمات المياه والصرف الصحي ومياه الصرف المُعالجة.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
خدمات المياه والصرف الصحي ومياه المعالجة	المعايير الفنية ومعايير الأداء لخدمات المياه والصرف الصحي ومياه الصرف المُعالجة (الإنتاج والنقل والتوزيع والتجميع والمعالجة).	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	تشريعات استمرار العمل لخدمات المياه والصرف الصحي ومياه الصرف المُعالجة.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	تشريعات لضمان الاستثمار الضروري في القطاع (مراجعة خطط العمل والاستثمار).	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	التشريعات الاقتصادية لشركات خدمات المياه والصرف الصحي ومياه الصرف المُعالجة (بما في ذلك المحاسبة، واحتساب التكلفة، ومتطلبات الإيرادات، وتعريفات المستخدمين النهائيين، وإصدار الفواتير والتحويل، ومستويات التمويل والإعانات).	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	تشريعات إمداد المياه بكميات كبيرة.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	القواعد الرامية للعلاقة بين شركات المياه والصرف الصحي ومياه الصرف المُعالجة وعمالها.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	الوساطة لحل شكاوى العملاء والتحكيم في الخلافات بين الجهات المعنية.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	قواعد الإفصاح الشفاف والدقيق عن المعلومات.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	إجراءات استئجار العروض وتصميم العقود مع القطاع الخاص في عقود البناء والتشغيل والنقل والامتيازات وغيرها من نماذج الشراكة الأخرى بين القطاعين العام والخاص.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج
	التدقيق الفني والإداري في شركات خدمات المياه.	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج	هيئة تنظيم الكهرباء والإنتاج المزدوج

## المبادرة الثانية: تطوير اللوائح التنظيمية والتراخيص ومعايير الجودة المتعلقة بإدارة موارد المياه

وكالة شؤون المياه في وزارة البيئة والمياه والزراعة	الجهة المسؤولة عن التنفيذ
سبتمبر ٢٠١٧	تاريخ بدء التنفيذ (الشهر/ العام)
١,٥	الفترة الزمنية (بالسنوات)
<ul style="list-style-type: none"> <li>وزارة البيئة والمياه والزراعة.</li> <li>هيئة تنظيم الكهرباء والإنتاج المزدوج.</li> <li>شركة المياه الوطنية.</li> <li>المؤسسة العامة لتحلية المياه المالحة.</li> <li>الهيئة العامة للأرصاد وحماية البيئة.</li> </ul>	الجهات المعنية
من ١٢ إلى ١٦ مليوناً (الدعم القانوني).	التكلفة المقدرة (بالريال السعودي)
الأنشطة الرئيسية	
<ul style="list-style-type: none"> <li>الحصول على التأييد والموافقة من كافة الجهات المعنية في إصدار الأنظمة والتراخيص والقوانين (إدارة الموارد المائية).</li> <li>تشكيل لجنة خبراء لوضع الأنظمة والتراخيص والقوانين المتصلة بها.</li> <li>إعداد أنظمة وتراخيص وقوانين مفصلة، بما في ذلك تحديد الأدوار والمسؤوليات المتعلقة بإصدار الموافقة والرصد والإنفاذ.</li> <li>الحصول على التأييد والموافقة من الجهات المعنية ذات الصلة، مثل هيئة تنظيم الكهرباء والإنتاج المزدوج، ووزارة الشؤون البلدية والقروية، وغيرها من الجهات.</li> <li>إصدار وإنفاذ الأنظمة المعتمدة والتراخيص والقوانين.</li> </ul>	
مؤشرات الأداء الرئيسية	
تم إصدار الأنظمة والتراخيص والقوانين (نعم / لا).	
مخاطر التنفيذ	
<ul style="list-style-type: none"> <li>عدم ملاءمة أو اكتمال الأنظمة والتراخيص والقوانين.</li> <li>التأخير في الحصول على الموافقة اللازمة للأنظمة التي تم إعدادها.</li> </ul>	

## 3.2 IMPLEMENT SYSTEM TO COMPLY WITH WATER-RELATED LEGAL AND REGULATORY REQUIREMENTS AND RESPECT WATER RIGHTS

### 3.2.1 A process to verify full legal and regulatory compliance shall be implemented

- ☐ Develop a Water Management Policy. (rainwater harvesting, wastewater treatment and reuse)
- ☐ Equity and fairness in water distribution
- ☐ Connect with registered agencies to identify and map overall regulatory requirements
- ☐ Review the compliance against the stipulated requirements
- ☐ Identify the compliance gaps
- ☐ Disclose and take actions to close the gaps

- ☐ Monitor for changes to regulations and newly inducted regulations
- ☐ providing adequate drinking water facilities to employees within site premises to respect the water rights of its employees

## What is the water resource management strategy?

The water resource management strategy involves integrated planning and management of water resources, considering social, economic, and environmental factors to achieve sustainable development, supply, and usage of water.

## How Can You Help in Water Management??

**Conduct Regular Water Audits:** Check for leaks and inefficiencies in your property's water system to ensure optimal use and contribute to a sustainable water management plan

**Support Water-Saving Initiatives:** Participate in or donate to programs focused on water conservation and smart water management, amplifying the impact of collective efforts

## Best Innovative Water Management Practices





### Rainwater Harvesting :

This practice involves collecting and storing rainwater for later use

### Smart Irrigation Systems

automated controls to optimize irrigation schedules and water usage

### Implement IWRM policy:

PRINCIPLE 1	PRINCIPLE 2	PRINCIPLE 3	PRINCIPLE 4
 <p>Freshwater is a finite and vulnerable resource, essential to sustain life, development, and the environment</p>	 <p>Water development and management should be based on a participatory approach, involving users, planners, and policy-makers at all levels</p>	 <p>Women play a central part in the provision, management, and safeguarding of water</p>	 <p>Water has an economic value in all its competing uses and should be recognised as an economic good</p>
<p>Being critical to sustaining life, freshwater is a finite resource as a hydrological cycle yields a certain quantity of water per period, which cannot be adjusted to human actions. This principle also highlights that water plays an important role in development while being quite vulnerable to its effects. Therefore, effective water management requires a holistic approach that recognises interactions within natural systems and links social and economic development with ecological sustainability.</p>	<p>Governing water resources involves a broad range of actors across multiple scales and sectors with sometimes competing interests. Accordingly, water development and management should be based on a participatory approach, which would give recognition to inputs of multiple stakeholders, including users, planners, and policy-makers at all levels. This will coordinate varying interests as well as democratise the whole decision-making process to ensure the protection of environmental resources and respect for cultural values and human rights.</p>	<p>Women play a crucial role in the provision, management, and safeguarding of water for domestic use and, in many countries, for agricultural use. However, as a result of social and cultural traditions, the role of women remains marginalised in key areas such as management, problem analysis, and the decision-making processes related to water resources. Therefore, it is important to increase women's involvement in these key areas to achieve sustainable water use.</p>	<p>Being an essential part of life, societies, and economy, the values and benefits of water both as an economic and social good vary. While water resources are 'free', water infrastructure and services come at a cost that needs to be recovered. Ignoring the full value of water can cause failures, while misperceptions about the value of water can prevent benefits from being maximised. Water efficiency across sectors must be promoted to maximise benefits and reduce pressure on available resources.</p>

## the management of hazardous waste.



the disposal of hazardous waste is being done through approved (MWAN) contractor.

### 3.3 IMPLEMENT PLAN TO ACHIEVE SITE WATER BALANCE TARGETS

3.3.1 and 3.3.2 For targets defined in Step 2, the organization should show what the targets are. and how it has progressed towards them in a format that is clear and appropriate. This would include results from catchment water replenishment projects. Where targets are not met or approached, then justification should be given.

- ☐ set target for water consumption
- ☐ monitor water balance targets as water intensity per unit product produced.
- ☐ track and report progress
- ☐ conduct water replenishment projects
- ☐ monthly and annual water intensity .
- ☐ implement various water conservation initiatives to reduce the water consumption of plant.
- set annual targets to improve the water use efficiency

#### 3.3.1 IMPLEMENT PLAN TO ACHIEVE SITE WATER BALANCE TARGETS

- set targets for Water Recycling,
- set targets for Water Reduction

3.3.3 Where the organization re-allocates water savings for external benefits or uses, then it should demonstrate this action is legally compliant and has appropriate regulatory approval, where applicable. The organization should take such actions in consultation with catchment authorities and key stakeholders. It is also understood that in some cases, the organization may have no mechanism, legal or otherwise, to reallocate water.

الرئيسي، وإدارة المخيريه مع مدج دوييه.

وقد كشفت مقارنة الدراسات السابقة عن وجود توافق في الحاجة إلى ترشيد الطلب على المياه، وبشكل خاص في القطاع الزراعي، وتشدد الدراسات كذلك على أهمية اعتماد نهج متكامل لتطوير وتوجيه وتنويع مصادر إمدادات المياه الوطنية والمحلية، وتحسين العمليات في القطاع، وإجراء تقييم شامل للإطار المؤسسي وآليات الحوكمة الممكنة، والنظر في احتمالية مشاركة القطاع الخاص في تقديم الخدمة. وتمتلك المملكة مخزوناً احتياطياً محدوداً من المياه الجوفية غير المتجددة القابلة

يجب التوعية في الترشيد في استهلاك المياه، خصوصاً للقطاع الزراعي وإيصال رسالة أن المياه الجوفية غير متجددة في حال تم

## الاستدامة البيئية

الجدول ١١: مؤشرات الأداء الرئيسة للاستدامة البيئية

الرقم	مؤشرات الأداء الرئيسة	النوع	الوحدة	الوضع الراهن	الهدف
١	استهلاك المياه الجوفية غير المتجددة	متأخر	مليار متر مكعب	٢٠,٦	ما بين ٥ إلى ٩
٢	حصة المياه الجوفية غير متجددة من مصادر الإمداد البلدي	متأخر	%	٣٥%	٣٠%
٣	حصة المياه الجوفية غير متجددة من مصادر الإمداد الإجمالية	متأخر	%	٨٠%	أقل من ٥٠%
٤	حصة المياه الجوفية المتجددة من مصادر الإمداد الإجمالية	متأخر	%	٩%	أكثر من ٢٠%
٥	حصة المياه السطحية من مصادر الإمداد البلدي	متأخر	%	٣%	أكثر من ٧%
٦	حصة المصادر البديلة من مصادر الإمداد الإجمالية	متأخر	%	٠%	يحدد لاحقاً
٧	حصة الطاقة المتجددة من مصادر إمدادات وقود تحلية المياه	متقدم	%	٠%	٢٥% (تمهيدي)
٨	مياه الصرف الصحي المعالجة المجمعة	متأخر	%	-	١٠٠%
٩	نسبة عائد الصرف الصحي	متأخر	%	٤٠%	٧٠%
١٠	معدل إعادة استخدام مياه الصرف الصحي المعالجة	متأخر	%	١٧%	٧٠%
١١	كفاءة الري	متقدم	%	٥٥%	٧٥%
١٢	نسبة الآبار التي تحتوي على نظام العدادات - القطاعين البلدي والصناعي	متقدم	%	-	١٠٠%
١٣	نسبة الآبار المرخصة - القطاعين البلدي والصناعي	متقدم	%	٠%	١٠٠%
١٤	نسبة الآبار التي تحتوي على نظام عدادات - القطاع الزراعي	متقدم	%	-	١٠٠%
١٥	نسبة الآبار المرخصة - القطاع الزراعي	متقدم	%	٠%	١٠٠%
١٦	معدل استهلاك الفرد	متقدم	لتر/ فرد/ يوم	٣٦٣	١٥٠ كحد أقصى
١٧	حصة المياه المتجددة في الطلب الكلي للمياه للأغراض الزراعية	متقدم	%	١٠%	٤٣%
١٨	استهلاك المياه الجوفية المتجددة في قطاع الزراعة	متقدم	مليار متر مكعب	١٩	٦,٥

An organization may make such re-allocations where water savings are beyond what is required to achieve a sustainable water balance.

Re-allocations may benefit environmental, cultural and social needs in the catchment.

Legal compliance is required to ensure approval and to avoid liabilities (black water events).

This is particularly important for water supplied for human use, but also for water bodies containing important biodiversity and cultural values, for which water quality is critical.

There should also be confidence that re-allocated water does not create a risk of flooding, erosion or other damage or to third parties.

Whatever the purpose, the organization must be confident the water quality is safe and compliant for the intended use and should include water treatment if necessary to achieve this.

- ☐ Providing a drinking water supply to a small local community
- ☐ Providing irrigation water to subsistence farmers
- ☐ Aquifer recharge
- ☐ Offering water to Indigenous groups disadvantaged by water markets.



### 3.3.4 Implement plan to achieve site water quality targets.

In some cases, the site may not be legally compelled to re-allocate saved water, but may wish to do so for social, cultural, or environmental needs. The organization may use any method of quantification it considers appropriate.

#### 3.4.1 Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.

**For each water quality target, the evidence should show: the water body or feature it applies to, the target water quality and planned timescale to achieve it.** The organization should show how it is progressing against this plan. Where it is not progressing at the planned rate, the organization should provide an explanation of why it thinks it is not achieving this, and appropriate corrective action to do so

set specific water quality target to comply with local water quality standards.

#### Define the Water Quality Targets

- If specific targets have not been set, establish them based on:
  - **Regulatory Compliance:** Align with local water quality standards (e.g., permissible limits for chemical, biological, and physical parameters).
  - **International Guidelines:** Where local standards are insufficient, adopt global benchmarks such as WHO or ISO standards.
  - **Site-Specific Needs:** Address critical parameters like Total Colony Count (TCC), nutrient levels, heavy metals, and pH, particularly those affecting operational processes or stakeholder health.

Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified

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

prepare and compare the water quality data for {} 2023 and {} 2024. It is seen that there to show improvement in water quality parameters.

As a minimum, effluent quality should be legally compliant. Best practice will mean ensuring it is of the highest quality feasible (beyond compliance), especially for regions where wastewater regulations are weak or non-existent. Where water quality is a shared challenge, then the quality concern should be identified (e.g. elevated levels of a particular chemical) and this taken into account in treatment and discharge location.

- ☐ recycling all treated effluent.
- ☐ no effluent shall be sent out of factory premises
- ☐ site shall monitor the quality of treated effluents through a 3rd party laboratory

the laboratory results should include

1. Biological Oxygen Demand (BOD),
2. Chemical Oxygen Demand (COD),
3. Total Suspended Solids (TSS),
4. pH,
5. nutrients,
6. and heavy metals.

should be with International best practices or guidelines (e.g., IFC, WHO).

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

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

- defined system in place for maintenance of internal IWRAs.
- set annual cleaning schedule for RWH ponds and RWH pits.
- tree plant (improve water quality , enhance Biodiversity , Supports Groundwater Recharge )

construct rainwater harvesting pits as Important Water Related Areas (IWRAs) to recharge groundwater. These pits are consistently maintained, cleaned, and their condition is regularly monitored.

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## 3.6 IMPLEMENT PLAN TO PROVIDE ACCESS TO SAFE DRINKING WATER, EFFECTIVE SANITATION AND PROTECTIVE HYGIENE (WASH) FOR ALL WORKERS

The site is recommended to evaluate the water-related data collected on WASH provision at the site by defining SMART monitoring indicators which should enable the site to determine any particular gap in access or adequacy in comparison of some independent standards and guidelines and considering internal inputs from the workforce. The site should provide a description of and quantify any additional measures implemented to improve the level of access and adequacy of WASH at the site, developed as a result of the assessment completed under Indicator 1.3.8. This should take equitable account of gender needs, and any other special needs and includes, but is not limited to, improvement in access and adequate provision of drinking water, toilets, washing facilities, hygienic areas for food and drink consumption, and potentially showers.

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### 3.6.1 Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.

- provides treated water to its workers through the drinking water stations
  - provides separate bathroom facilities (provided for male and female staff) for its workers and visitors within its operational facilities
- 

### 3.6.2 Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for Indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.

- reducing fresh water consumption

provide Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective

### **3.6.3 Advanced Indicator A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.**

- start initiative to provide free drinking water for nearby outdoor workers

A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.

- provide its water management plan
  - present evidence of implementing awareness sessions on handwashing
- 

### **3.6.4 In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.**

Where local communities have poor access to WASH, there can be significant potential for an organization to support and provide new facilities, whether independently, with peer organizations or the authorities. Where local communities are a source of employees, such provision can help improve the health and wellbeing directly of its own workers and their families. This indicator calls for the site to share information and advocate for change, and there is no expectation that the site is required to construct and maintain infrastructure to provide WASH in the catchment outside of the site.

- conduct Educational video for farmers by field technicians on issues related to WASH (water, basic sanitation and hygiene) on the farm.
  - provide Washing facilities close to the bathrooms, available for use, and with access to soap or other cleaning product for washing hands
- 

## **3.7 Implement plan to maintain or improve indirect water use within the catchment.**

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### 3.7.1 Options for reducing indirect water use

- Switch to a different service or product supplier that is known to use less water to provide the same level, quantity, and quality of primary inputs.
- Engage with existing suppliers to encourage them to improve their practices.
- Targets for minimization of packaging (less packaging equals to less embedded water use)
- promote drip irrigation
- conduct a survey and analysis of the watershed source for water consumption and pollution

It is important to ensure that choices about switching suppliers are based on measurable water use data and not on theory or modelling.

water footprint assessments are a means to raise awareness about how much water is typically used for a product or food item

send questionnaire to suppliers to understand water-related situation, included water quantity, water cost, product capacity, what catchment they belong to and wastewater discharge. water quality, status of ecosystem services and environment.

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### 3.7.2 Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified.

Achieving a reduction in indirect water use will often require engagement with suppliers to understand how they use water, and encouragement for them to modify their practices so as to make savings. Suppliers may do this directly, or they may rely on support from the organization

N/A

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Advanced Indicator

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

N/A

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

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

No shared water infrastructure at this time.

if shared, meetings shall be conducted.

### **3.9 Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.**

This criterion regards the progress towards implementing and achieving best practices. In the spirit of continual improvement, core indicators 3.9.1 to 3.9.5 address actions towards achieving best practice implementation, realizing there will be some elapsed time before full implementation is realized. This is to avoid the site being considered non-conformant with the Standard in that time period. AWS is preparing a compendium of best practices towards the five outcomes that will provide further guidance for criterion 3.9

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#### **3.9.1 Actions towards achieving best practice, related to water governance, as applicable, shall be implemented.**

- ☐ Conduct annual internal audits, and the Internal Audit Checklist
  - ☐ finding list and corrective actions were reviewed.
  - ☐ site shall be compiled with the AWS Sustainable Water Management Manual
  - ☐ Publish AWS training materials at online training platform; then all employees and colleagues of sibling company could access.
- 

#### **3.9.2 Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.**



provide a list of all the best practice projects which have been implemented on the water capturing tech, most of which centre around improved technologies for irrigation and general water management.

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### **3.9.3 Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.**

close monitoring of the quality of water used, not only for drinking, operation and irrigation and manage waste water. ensure all quality practices is implemented

- Measurement comparison of water temperature, pH, SS, COD 2.
  - Test DO and BOD at the receiving water bodies and discharge points.
- 

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

- Tree domestication in the plant site.
  - Commit to quarterly monitoring of relevant values as detailed in the ESIA report.
- 

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

- WASH awareness shall be conducted in nearby schools and communities, and relevant information is posted on community bulletin boards.
  - regularly cleans the toilets to maintain the cleanliness, and refill the necessary facility like tissue or handwash.
  - The site regularly clean and maintain the drinking water facility, and performs water quality testing to ensure the compliance of drinking water.
- 

### **3.9.6 Advanced Indicator Achievement of identified best practice related to targets in terms of good water governance shall be quantified.**

N/A

### **3.9.7 Advanced Indicator Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.**

N/A

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### **3.9.8 Advanced Indicator Achievement of identified best practices related to targets in terms of water quality shall be quantified**

- By pairing with subsequent treatment equipment, various wastewater systems can effectively degrade pollutants and reuse them
  - setup wastewater recycling systems, which reducing pollutant concentrations again and achieving the dual goals of pollutant reduction and recycling
-