Introduction to the AWS Standard

The AWS Standard ("the Standard") is intended to drive water stewardship, which is defined as *the use of water that is socially equitable, environmentally sustainable and economically beneficial, achieved through a stakeholder-inclusive process that involves site- and catchment-based actions.* Good water stewards understand their own water use, catchment context and shared concerns in terms of water governance, water balance, water quality and Important Water-Related Areas, then engage in meaningful individual and collective actions that benefit people and nature.[4]

The Standard outlines a series of actions, criteria and indicators for how one should manage water at the site level and how water management should be stewarded beyond the boundaries of a site. In this Standard, the "site" refers to the implementing entity that is responsible for fulfilling the criteria. The site includes the facility and the property over which the implementer that is using or managing water (i.e., withdrawing, consuming, diverting, managing, treating and/or discharging water or effluent into the environment) has control.

Applicability

The working assumption is that the Standard can be implemented by all entities in all sectors (public and private) anywhere in the world. In cases where entities are too small to easily undertake the Standard by themselves (e.g., very small businesses or farms), if they are co-located sites with similar operations (e.g., a group of small citrus farmers in the same area of a catchment), then they are encouraged to explore implementation as a group, because group certification is permissible under the AWS Certification Scheme (see AWS Certification Scheme for more details).

This Standard applies to any site that interacts with water (i.e., uses, consumes, withdraws, sources, treats, supplies, diverts or discharges water into water bodies). The Standard is intended to apply to all types of water. This includes the following:

fresh water, effluent (contaminated) water, recycled water, salt water affected by fresh water (including brackish water and desalination), drinking water, groundwater (including renewable aquifers, water in the vadose and hyporheic zones, and deeper, so-called fossil water), water in the atmosphere (including precipitation), and solid forms of water (snow, ice, glaciers, etc.).
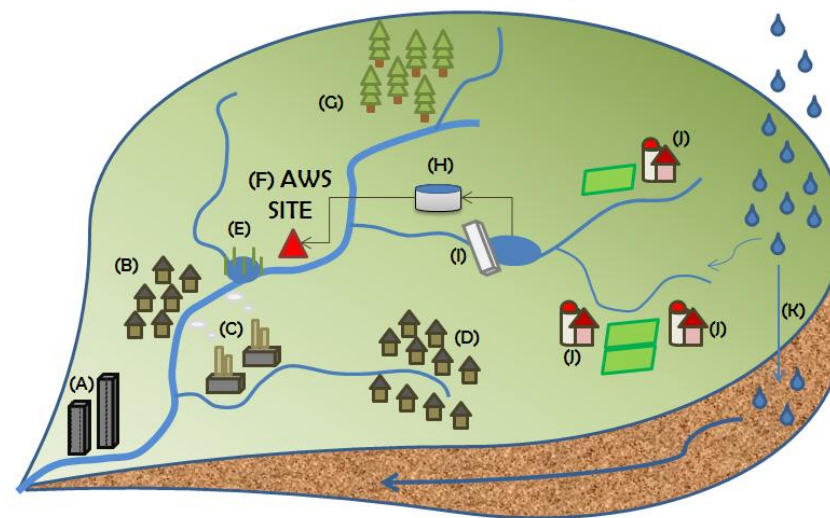

Figure 1: Scope – the site and its catchment

The site (F) may be drawing from service provider (H), who is drawing from a reservoir (I); returning flow to a nearby stream, thereby affecting downstream water quality and quantity for (B) and (A); and relying on a wetland purification services (E) (= an Important Water-Related Area). The upstream forest's (G) erosion control may be important to the catchment management agency (i.e., water governance). The site needs to take actions within the site and act upon prioritized shared water challenges within the catchment (e.g., pollution from J) to mitigate its water risks and create shared value.

Economically beneficial water use contributes to long-term sustainable economic growth, development and poverty alleviation for water users, local communities and society at large.

---

[4] Socially equitable water use recognizes and fulfils the human right to safe water and sanitation and helps ensure human well-being and equity; Environmentally sustainable water use maintains or improves biodiversity and ecological and hydrological processes at the catchment level;

The site-level focus is intended to keep efforts manageable. It allows for impacts to be traced back to actions. However, water stewardship is centred on the recognition that water is a shared resource and requires collaborative solutions. Therefore, the Standard requires the site to work *beyond* its boundaries through engagement with stakeholders and within the catchment (Figure 1).

It is important to stress that *water stewardship is intended to support and contribute to catchment management, not replace such efforts.* For a site, answering the question, "How far does my stewardship responsibility reach?" is critical and is influenced by a number of factors, including where a site draws its water from, how large the site is (both in terms of water use and other resources) and its catchment context (e.g., the number of stakeholders, catchment size, surrounding socio-economic characteristics).

Theory of Change Underlying the Standard

The Standard is based upon a logical sequence of how water stewardship can be driven from site-level actions to result in catchment-level impacts. This so-called Theory of Change is illustrated below (Figure 2):
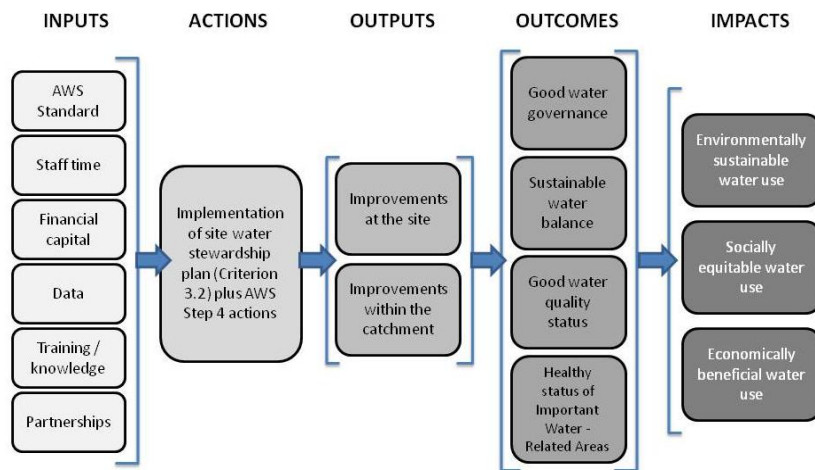

Figure 2: The AWS Standard Theory of Change

Structure of the Standard

The Standard is organized around six steps (Table 1), each of which contains a set of criteria written to contribute to the ultimate set of water stewardship outcomes. Each criterion also has corresponding indicators that help verify that the site is adequately fulfilling each criterion. The six steps are also supported by two key appendices:

1) Appendix A – Glossary of Terms: A glossary of key terms intended to clarify terminology as used by and understood in the Standard.
2) Appendix B – AWS Standard Guidance: Organized by step and criterion, the guidance is an integral part of the Standard and is intended to provide greater clarification and detail about how the criteria should be interpreted and implemented and the intent of the step. The

guidance is also helpful for providing recommended sources of information and examples of practices.

The Standard is intended to encourage continuous improvement and does not need to be implemented beginning at Step 1 and proceeding through Step 6. Rather, it should be implemented as suitable for the site's purposes and may indeed require adaptive, iterative and non-sequential use of the steps and criteria.

The Standard's structure allows for increasing levels of performance in water

Figure 3: The AWS Standard's steps and continuous improvement

stewardship, which are recognized by Core, Gold and Platinum levels. At the Core level, all criteria are required. At the advanced levels, criteria have points attached to them, which reflect both the degree of effort required and the anticipated impact. The aggregation of points results in Gold- or Platinum-level performance. It is important to note that higher levels will also require compliance with all core criteria plus a select number of points from the

optional criteria (Figure 3). More details may be found in the AWS Certification Scheme.

Outcomes of Water Stewardship

The Standard provides a consistent global framework for sites to undertake responsible water stewardship in a manner that is transparent and stakeholder-inclusive. Specifically, the Standard is designed to achieve four water stewardship outcomes: (1) good water governance, (2) sustainable water balance, (3) good water quality status and (4) healthy status of Important Water-Related Areas. Across these outcomes, higher levels of performance (AWS Gold and AWS Platinum) show that the site is achieving best practice results and demonstrating leadership within its industry and catchment.
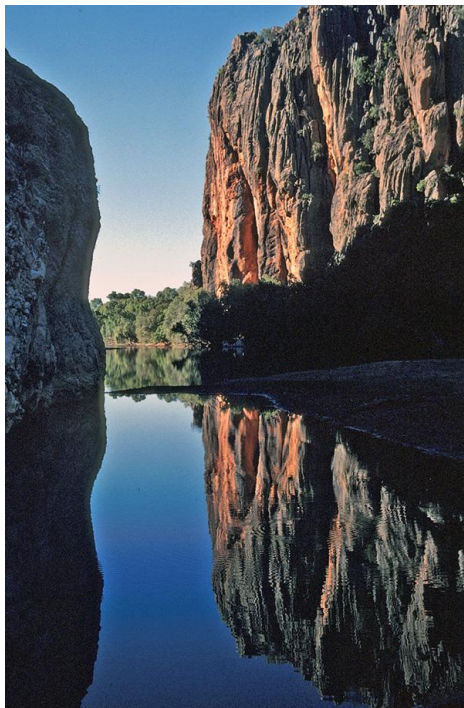
It is important to note that these four outcomes are most sustainable when achieved collectively. The site is expected to contribute to these outcomes via a combination of on-site management and collective action with others.

Outcomes are not intended to be auditable per se; rather, they are broad, basic and fundamental principles of water stewardship.

1) *Good water governance*

The state when the political, social, economic and administrative systems that are in place, which directly or indirectly affect the use, development and management of water resources and the delivery of water services at all levels of society, promote stakeholder participation, transparency, accountability, rule of law, and equity in a manner that is effective, efficient and enduring, and leads to the desired state of the water resource(s).

This outcome addresses both site and catchment aspects of water governance. Site water governance relates to the procedures and rules established when implementing the Standard, respecting local customary rights and complying with the applicable regulatory frameworks. The applicable regulatory frameworks may include international agreements, laws, regulations, permits, licenses, plans and policies that determine how water is governed and must be managed by the site and may include policy instruments at various levels, from local to global, as appropriate. Catchment governance relates to the formal and/or informal mechanisms in place to ensure that water is managed equitably as a resource for all users within the catchment. All these elements can be referred to collectively, in the context of the Standard, as the "good water governance requirements." This outcome also encourages engagement and collaboration with authorities to strengthen and streamline applicable regulatory frameworks and to facilitate adequate enforcement. Lastly, governance also links to engaging others on the subjects of access to safe drinking water, sanitation and hygiene (WASH), reasonable use, and doing "no harm". Good water governance helps sites to mitigate their water risks and plays an important role in addressing shared water challenges through collective action and inclusive stakeholder involvement.

long-term ability of the system to meet the all of the water needs of users in the catchment, including ecosystems, bearing in mind climatic shifts.

3) *Good water quality status*

The state when the physical, chemical and biological properties of water, including whether water quality at the site and within the catchment(s) meets local (and, where applicable, international) regulatory requirements and is fit for the requirements of the range of biotic species present and for any human need or purpose.

This outcome helps ensure that water quality is sufficient to support all uses through the mitigation of physical water risk and reduction of adverse impacts of poor water quality in terms of the impact on the economic, environmental and social benefits derived from the use of water. Assessment of quality (i.e., 'good') is typically based on the extent of deviation from reference conditions. 'Good status' means 'slight' deviation, 'moderate status' means 'moderate' deviation, and so on.

2) *Sustainable water balance*

The state when the amount and timing of water use, including whether the volumes withdrawn, consumed, diverted and returned at the site and in the catchment are sustainable relative to renewable water supplies and are maintaining environmental flow regimes and renewable aquifer levels.

This outcome helps ensure that water uses are compatible with naturally occurring volumes through the mitigation of physical water risk and adverse impacts on water availability. Of particular note with sustainable water balance is that both the timing of the flows and volumes of the flows are balanced in terms of incoming and outgoing waters. Sustainability is determined by the

4) *Healthy status of Important Water-Related Areas*

The state when the specific, environmentally, socially, culturally, or economically water-related areas of a catchment, which contribute disproportionately to human wellbeing, are in a healthy state.

This outcome addresses the specific water-related areas of a catchment that, if impaired or lost, would adversely impact the environmental, social, cultural or economic benefits derived from the catchment in a significant or disproportionate manner and whether those areas are in a state of good health. These areas, which typically provide important attributes to water quantity, quality and uses, at the site and within the catchment(s) can include the water body as well as the adjacent land features tied to the water, such as floodplains, delta/wetland areas, and aquifer recharge or discharge zones. Also included are areas of importance for religious, spiritual, social or cultural purposes, sources of drinking water and areas that provide other important ecosystem services. Achieving this outcome restores or protects these Important Water-Related Areas and addresses all aspects of water risk and the adverse impacts on areas with cultural and ecological importance. Assessment of the health of such an area (i.e., 'healthy') is typically based on the extent of deviation from reference conditions. 'Good status' means 'slight' deviation, 'moderate status' means 'moderate' deviation, and so on.

Points and Levels within the AWS Standard

As noted earlier, the Standard has three achievement levels: Core, Gold and Platinum. The Core AWS level is achieved by conforming with all of the core criteria and up to 40 points, while AWS Gold requires 40-79 points and AWS Platinum requires 80+ points. There are a total of 155 points available throughout the entire AWS Standard.

Level	Conformity with Core Criteria	Cumulative Advanced-Level Criteria Points
AWS Core	Required	0-39
AWS Gold	Required	40-79
AWS Platinum	Required	80+

Criteria, Indicators and Certification

The Standard is rooted in criteria and indicators. The various criteria reflect actions that a site must undertake if it is to be recognized as a responsible water steward under the AWS Standard system. The indicators, in turn, provide evidence of conformance against any given criterion. Ultimately, conformance with the criteria and indicators provides the basis for certification. For full details on the AWS Certification Scheme, please visit the AWS website: *www.allianceforwaterstewardship.org*.

Table 1: Summary table of the AWS Standard (v.1.0)

STEP	AWS Core Criteria	AWS Advanced-Level Criteria	Pts. (max)
COMMIT	1.1 Establish a leadership commitment on water stewardship	1.3 Further the Alliance for Water Stewardship	3 (9)
	1.2 Develop a water stewardship policy	1.4 Commit to other initiatives that advance effective water stewardship	3
		1.5 Secure a water stewardship commitment from the organization's senior-most executive or the organization's governance body	1
		1.6 Prioritize communities' rights to water	8
GATHER & UNDERSTAND	2.1 Define the physical scope	2.8 Support and undertake joint water-related data collection	4
	2.2 Identify stakeholders, their water-related challenges and the site's sphere of influence	2.9 Gather additional, detailed water-related data	3
	2.3 Gather water-related data for the catchment	2.10 Review a formal study on future water resources scenarios	3
	2.4 Gather water-related data for the site	2.11 Conduct a detailed, indirect water use evaluation	7
	2.5 Improve the site's understanding of its indirect water use	2.12 Understand groundwater status or environmental flows and the site's potential contributions	10
	2.6 Understand shared water-related challenges in the catchment	2.13 Complete a voluntary Social Impact Assessment	3
	2.7 Understand and prioritize the site's water risks and opportunities		
PLAN	3.1 Develop a system that promotes and evaluates water-related legal compliance	3.5 Gain stakeholder consensus on the site's water stewardship targets	7
	3.2 Create a site water stewardship strategy and plan	3.6 Develop a formal plan for climate change adaptation	6
	3.3 Demonstrate responsiveness and resilience to water-related risks into the site's incident response plan		
	3.4 Notify the relevant (catchment) authority of the site's water stewardship plans		
IMPLEMENT	4.1 Comply with water-related legal and regulatory requirements	4.9 Achieve best practice results on site water balance	8
	4.2 Maintain or improve site water balance	4.10 Achieve best practice results on site water quality	8
	4.3 Maintain or improve site water quality	4.11 Achieve best practice results on Important Water-Related Areas through restoration	8
	4.4 Maintain or improve the status of the site's Important Water-Related Areas	4.12 Achieve best practice results and strengthen capacity in water governance	8
	4.5 Participate positively in catchment governance	4.13 Advance regionally specific industrial water-related benchmarking	3
	4.6 Maintain or improve indirect water use within the catchment	4.14 Re-allocate saved water for social or environmental needs	6
	4.7 Provide access to safe drinking water, adequate sanitation and hygiene awareness (WASH) for workers on-site	4.15 Engage in collective action to address shared water challenges	8 (14)
	4.8 Notify the owners of shared water-related infrastructure of any concerns	4.16 Drive reduced indirect water use throughout the site's supply chain and outsourced water-related service providers	5 (7)
		4.17 Complete implementation of water-related initiatives	3
		4.18 Provide access to safe drinking water, adequate sanitation and hygiene awareness off-site	5

Table 1 – Continued

STEP	AWS Core Criteria	AWS Advanced-Level Criteria	Pts.
EVALUATE	5.1 Evaluate the site's water stewardship performance, risks and benefits in the catchment context 5.2 Evaluate water-related emergency incidents and extreme events 5.3 Consult stakeholders on water-related performance 5.4 Update water stewardship and incident response plans	5.5 Conduct executive or governance body-level review of water stewardship efforts 5.6 Conduct a formal stakeholder evaluation	3 6
COMMUNICATE & DISCLOSE	6.1 Disclose water-related internal governance 6.2 Disclose annual site water stewardship performance 6.3 Disclose efforts to address shared water challenges 6.4 Drive transparency in water-related compliance 6.5 Increase awareness of water issues within the site	6.6 Disclose water risks to owners (in alignment with recognized disclosure frameworks) 6.7 Implement a programme for water education 6.8 Discuss site-level water stewardship in the organization's annual report	4 (6) 4 2