

Alliance for Water Stewardship Assessment Report

Prepared for, HERA S.p.A.

(Via Setta 4, Sasso Marconi, Bologna, Emilia Romagna, Italy)

AWS-000213

Prepared by: SGS

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CLIENT:	HERA S.p.A.
	Via Setta 4, Sasso Marconi, Bologna, Emilia Romagna, Italy
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1 EXECUTIVE SUMMARY

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard (Version 2.0) for **HERA S.p.A.** (hereinafter referred to as "the site") located at **Via Setta 4, Sasso Marconi, Bologna, Emilia Romagna**, in **Italy**.

The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 2019.

HERA S.p.A., is a group which gives service to 3.6 million of citizen, Val di Setta plant produce potable water.

On March 31st and April- 1st, 2021, SGS Tecnos, S.A.U., (hereinafter referred to as "SGS") conducted the conformity assessment for site's facilities and activities with regard to certification to the AWS Standard on site by Simona Olivi and on remote by Jerónimo Casas. A total of one finding was raised during the course of the audit process, and it was categorized as observation.

On June 17th, 2021, SGS Tecnos, S.A.U., (hereinafter referred to as "SGS") conducted the site visit with regard to certification to the AWS Standard. No findings were raised during the visit.

Given the review of evidence produced at the **HERA S.p.A.**, SGS recommends that **HERA S.p.A.** is awarded **AWS Core Certified** status with a surveillance audit interval of annual frequency.

2 SCOPE OF ASSESSMENT

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard (Version 2.0) for **HERA S.p.A.** (hereinafter referred to as "the site") located at **Via Setta 4, Sasso Marconi, Bologna, Emilia Romagna**, in **Italy**.

The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 2019.

On March 31st and April- 1st, 2021, SGS, conducted the conformity assessment of site's facilities and activities with regard to certification to the AWS Standard. Table 2.1 presents SGS audit team. The audit plan is attached as a separate document.

On June 17th, 2021, SGS Tecnos, S.A.U., (hereinafter referred to as "SGS") conducted the site visit with regard to certification to the AWS Standard. No findings were raised during the visit.

Table 2.1 SGS Audit Team

Audit Team	Qualifications/Experience	
Jerónimo Casas de Gonzalo	Leader Auditor	AWS certified auditor, with more than 19 years experience in pollution control, environmental impact assessment, ISO14001 audit and training.
Anna Giuliani	Local Auditor	Local expertise
Paula Gómez Geras	Technical Reviewer	AWS certified auditor, with more than 14 years experience in pollution control, environmental impact assessment, ISO14001 audit and training.

During the conformity assessment, the audit team spent 0,5 day on the stakeholder consulatation meeting, and 1,5 days on the inspection of site's documents, installations and activities in its plant, together with personnel interviews and document reviews.

Site provided most of the requested supporting documentation as evidence before the audit carried out. SGS provided initial feedback on the gaps between site's current management and the level required by the standard during the closing meeting of the conformity assessment on April the 1st, 2021.

Site visit pictures.





3 STAKEHOLDER ANNOUNCEMENT AND CONSULTATION

Following the AWS Certification Requirements, before the on-site conformity assessment, site's prepared a stakeholder announcement, which stated intention to pursue AWS certification.

The pursue of AWS certification for the site was publicly available on AWS site and in a twiter and instagram



GruppoHera @GruppoHera



They have shared this information with their external stakeholders and their employees with various internal tools.

The AWS certification audit was carried out in remote and the site provided the stakeholder's mapping in advance of the audit to enable communication with a selected sample and replace the on-site stakeholders' consultation meeting.

The stakeholders Identified by **HERA S.p.A.** are the following:

- Philip Morris Manufacturing & Technology Bologna (PM MTB)
- ARPAE Environmental Authority (Region level)
- ATERSIR genzia Territoriale dell'Emilia Romagna per i Servizi Idrici
- Autorità del Bacino del Fiume Po
- Città Metropolitana di Bologna
- Comune di Marzabotto
- Comune di Sasso Marconi
- Confindustria Emilia
- · Consorzio della Bonifica Renana
- Regione Emilia Romagna
- G.A.C.R.E.S. Gestione Acque Canali Reno e Savena
- Aeroporto G. Marconi
- CAMST Food and catering industry
- Ducati Motor Holding
- Fabbri 1905
- Granarolo
- Grandi Salumifici Italiani Alcisa
- Gruppo Unipol
- BASF

Follow stakeholders were intervewed during the audit:

- ARPAE
- Consorzio della Bonifica Renana
- PMI MTB
- Granarolo

Previously, **HERA S.p.A**, organized several individual stakeholder meetings, where the majority of identified stakeholders actually participated. Evidences about these meetings were showed during the assessment.

4 DESCRIPTION OF CATCHMENT

In 2002, the Hera Group pioneered Italy's first aggregation of municipalized companies that, with a multi-business approach, manage the provision of water, energy and waste and waste management services to citizens and businesses.

The Primary Aqueduct of Bologna, managed by Hera Spa, draws water from superficial and deep water sources but not from spring sources. The groundwater is drawn from active wells

The surfacewater is drawn from the Reno and Setta River.

The Val di Setta plant, located at the confluence of these two rivers, is responsible for the catchment and treatment of the collected water.

AWS HERA is referred to Val di Setta potabilization plant.

The Reno River's watershed (approximately 6,000 km2) extends over most of the Emilia-Romagna region as illustrated in Figure 1 and 2.

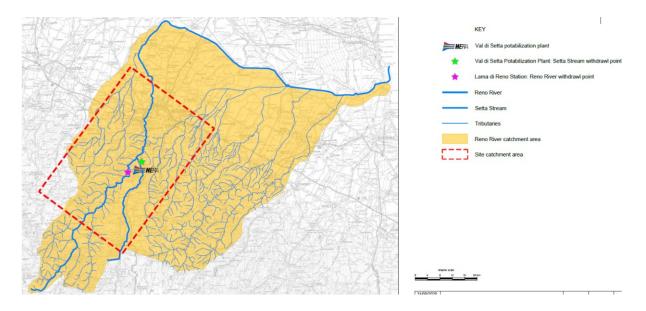


Figure 1- Val di Setta catchment area 1

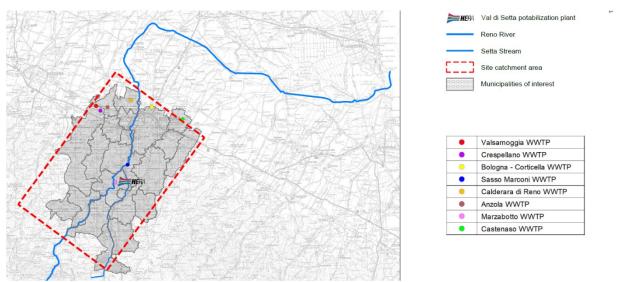


Figure 2 - Catchment area-municipalities 1

See below the location of the plant with respect to the fork of the Setta and the Reno in figure 3.

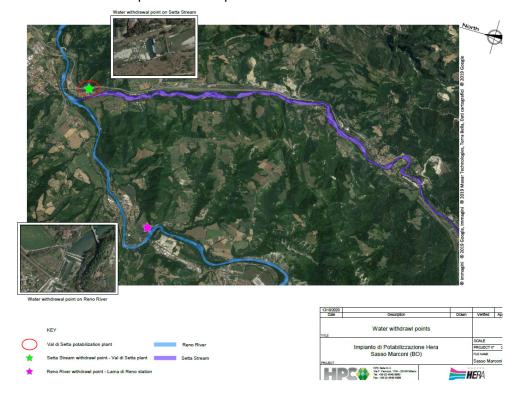


Figure 3 - Val di Setta Water withdrawl points

The catchment area, especially in the fork of the two rivers, is related to some naturalistic sensitive important areas, like Parco Regionale del Montesole (8) Monte Radicchio Rupe di Calvenzano (7). See Figure 4

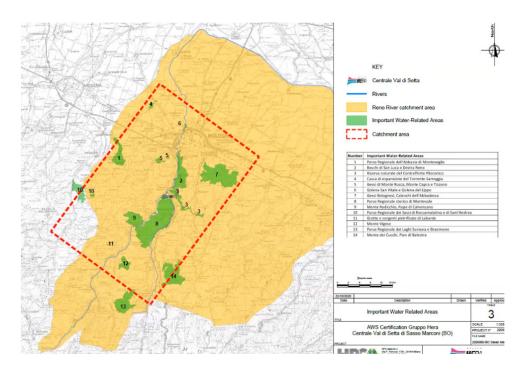


Figure 4 - Natural sensitive areas 1

Principle data for Val di Setta:

- Overall withdrawals permission from both Reno/Setta:
- Maximum daily production: (variable in order to respect minimum vital flow of Setta and Reno)
- Potable water feeded to distribution network
- Aqueduct feeded, acquedotto primario bolognese:
- Citizens: 738.899 (data 2017)

The environmental condition of surface water of rivers and streams, is evaluated throught the analysis of chemicals-phisicals-biologicals parameters. The monitoring network of ARPAE (Emilia Romagna Region) is characterized by some representative sampling point, each one with specific sampling profile

The last available Report is referring the last three years 2017-2018-2019.

The analysis chiamical-phisical-bological for the evaluation of environmental state are carried out onspecific points of the regional monitoring stanetwork. In the map below, Figure 6, the 5 stations in red colour are included in the catchment; the 2 ones in green colour are outside the catchment but influencing them.

Every station is checked with specific frequence, the final results are summarized below in the figure n.7. When the results are non so good, ARPAE can change the frequency schedule of sampling; so for example occured for Sasso Marconi – Ponte Giordani, passed from a 8 time year check (2014-2016) to an operative control, quarterly sampling.

LIMECO index measures the chemical and phisical state of water streams true di analysis of OD, N-NH4, N-NO3, P tot. To complete the analysis of LIMeco index also pollution from nutrients and biological and micro biological charge (BOD5, COD, E. Coli) are measured.

In the catchment, only the station of Casalecchio chiusura bacino montano has registered an out-range value for Escherichia coli.

The evaluation of biological state measures elements as diatomee bentoniche, macro invertebrati bentonici e aquatic macrophytes.

RESULTS: The ecological state is classified as Good and Adequate for all the monitoring stations of the catchment and it has been stationary during last five years eccept for Lama di Reno (6001200) that passed from a level Good (2014/2016) to Scarce (2017).

To evaluate chemical state they are monitored the substances listed in list of priority (E list), the priority substances (P list) and dangerous priority substances (PP list) of regulation 76/464/Cethat defines the standards of environmental quality to be in compliance with in terms of yearly average concentration (SQA-MA) and of maximum allowable concentration (SQA-CMA) if required.

RESULTS: The chemical state is classified as Good for all the monitoring stations of the catchment and it has been stationary during last five years.

The ecological status of surface water downstream the artificial basins depends significantly on the variability of the flow rates during the year.

This factor is increased by temperature trend with the consequent development of trophic phenomena.

Therefore, the increase in drought events is currently the main factor that has the greatest impact on water stress, often mitigated by the management of the basins located in the mountains upstream the catchment area.

However, the management of these basins may involve some risks for the chemical quality and biological ecosystems of the rivers, during and following the periodic emptying and maintenance activities. Above this, it should be noted what has happened recently for the Pavana basin.

Pavana basin (used for hydroelectric production) has limited size and it's outside the regional territory but the effects affected by its emptying during summer 2020 has created significant consequences for Reno river quality status (see note 1 below).

Pavana basin is.

Note1_On 28/07/2020 there was a release of sediment from the overrun in the Limentra stream of Sambuca, which caused a clear increase in turbidity and fish death as a result of reduced oxygen availability, with consequences for the entire river ecosystem.

A new regional law is being studied to regulate hydroelectric concessions, setting strict rules for the correct and sustainable use of oversea.

5 SUMMARY OF SHARED WATER CHALLENGES

HERA S.p.A., has developed a list of main shared water challenges. Reasons for ranking was provided together with reasons why the challenges are to be considered priorities for both stakeholders and the site.

Below a list of the identified shared water challenges:

- a) good water management
 - a. Joint campaigns with AWS site of PM MTB
 - b. AWS dedicated webpage and commitment disclosure
 - c. In Buone Acque Report
- b) sustainable water use, reduce water consumption in HERA S.p.A. factory; Improve water balance and governance
- c) good water quality
- d) Contribute to prevention of spread of Covid-19 within the premises.
 - a. Hand sanitizer production
 - b. WASH best practice disclosure
- e) Raise awareness between stakeholders within the basin and take collective actions to address shared water challenges
- f) compliance with legal and other requirements related to water management and water quality, at least in the area under the control/influence of the company

A more detailed presentation of shared water challenges, risk ans opportunities identified by **HERA S.p.A.** has been presented in Table 4.1 below. Information in the table below has been extracted from reference Water Stewardship Plan.

SC 2021.02	Joint campaigns with AWS site of PM MTB	Conduction of joint campaigns with local stakeholder and AWS-certified site of PM MTB located in the same catchment territory Joint forces with a fellow AWS site in order to work together towards common AWS outcomes	8 9
SC 2021.01 Val di Setta Virtual Tour		Virtual Tour of the Val di Setta Plant with an interactive commentary from a Hera employee The tour aims at reaching out to children from local schools in order to raise awareness and disclose information on the potabilization process which takes place in the Val di Setta plant Active actions/efforts to engage with young generation of water users to increase general understanding on water-related themes	
SC 2020.14	Hand sanitizer production	Production and provision of hand sanitizer for employees in order to mitigate COVID-19 spreads Awareness on basic WASH principles related to COVID-19 virus diffusion amongst local population	(4)
SC 2020.13 Project Adaptation		Awareness videos on the platform Adaptation (www.adaptation.it) related to the effects of climate change on the Emilia Romagna Region with a particular focus on the importance of water Presentation and disclosure of Gruppo Heras water-related projects and actions	® G
AWS dedicated webpage and commitment disclosure		Dedicated AWS section on Gruppo Hera's website in order to publicly disclose periodic news and information regarding AWS AWS V 2.0 Commitment ha been disclosed and published on Gruppo Hera's website: the Val di Setta potabilization plant has publicly divulgated its commitment to the 5 AWS Outcomes and Standard requirements	
SC 2020.11 Employee information disclosure		Internal disclosure amongst employees regarding AWS achievements, initiatives carried out, outcome and benefits related to water stewardship implementation Internal communication is obtained via banners, PIA (<i>Portale Informativo Aziendale</i>), newsletters, internal communications videos (i.e. <i>Facciamo il Punto</i>), Led wall videos etc.	

SC 2020.10	Consumer Associations Meetings - Incontri Associazioni Consumatori	Active actions/efforts to inform and raise awareness with water consumers on Hera's water stewardship journey, implemented best practices and outcomes to address shared water-related risks.	
SC 2020.09 In Buone Acque Report		Public disclosure on implemented best practices for sustainable water stewardship Raised visibility amongst catchment users on tap water quality Direct effort in reaching out to the local population and community	\$
SC 2020.08	Customer information disclosure	External information disclosure via newsletter VedoHera to consumers related to water themes and sustainability topics Information and best practice disclosure related to water related projects	S
SC 2020.07 Social media disclosure		External information disclosure on social medias (Instagram, LinkedIn, Twitter) related to commitment to sustainable water management and announcement of AWS standard implementation for the Val di Setta plant Raised awareness amongst users in the catchment community on good water governance strategies and the need of responsible water management to conserve shared water resources	\$
SC 2020.06 Stakeholder engagements		Active actions/efforts to address water challenges and adopt a sustainable approach at catchment level by engaging relevant stakeholders in the AWS certification journey Participation to technical tables, one-on-one interviews and programs for safeguarding the water resource by involving national as well as local stakeholders Increased awareness of proper water resources management with stakeholders both at local and national scale through dedicated meetings, follow-ups and sharing of information	8 9
SC 2020.05	Advertising campaign focused on water stewardship	Public disclosure via advertising campaigns on tap water quality and control procedures behind potabilization production processes Raise awareness amongst potable water users in the local territory	SS

SC 2020.04 Educational videos and laboratories for Schools		Educational laboratories, workshops and videos (i.e. La Grande Macchina del Mondo) focused on water-related themes in order to raise awareness on the importance of water especially amongst young water users Engagement with local schools and community members with the scope of better understanding water-related risks and water-saving strategies that can be carried out at home (i.e. closing the tap when washing your hands)	
SC 2020.03 Press Release: Comunicato Stampa		Official press release in occasion of World Water Day (WWD) Raise awareness amongst all users on Hera's water stewardship milestones by 2022: reduce its internal water consumptions by 10% Press release related to articles in which Hera	
SC 2020.02 House Organ (HO) magazine		Periodic articles related to water matters are published in Hera's internal magazine, House Organ (HO - n.151, n. 156, n.157), in order to raise awareness amongst employees on water topics Disclosure in occasion of World Water Day (WWD) and for the announcement of the AWS Standard implementation at the Val di Setta plant Hera water challenge competition launched on HO Better understanding amongst employees of AWS and water-related topics	
SC 2020.01 WASH best practice disclosure		Disclosure amongst employees of WASH best practice actions in bathrooms and lavatories Availability of potable water dispenser in common area Better understanding of sanitation and hygiene practices to undertake, also in relation to the COVID-19 pandemic	4
SC 2019.04 Hera Business Solution - Audit Idrico		Due to Stakeholder engagements related to AWS activities, Granarolo has requested a Water-related Audit to share with Hera water reduction technologies and strategies to reduce potable water consumption and implement water stewardship	8 9
SC 2019.03 Diario dei Consumi		Domestic users will be provided with a report (sent via email) illustrating their yearly water consumption and their water use compared to that of an average user The project has the purpose to create awareness amongst the local population, encourage water savings and facilitate the tracking of their water consumption The project will be created together with <i>Politecnico di Milano</i> which will analyse and certify the results	8 3

SC 2019.02 IWRA conservation Bonifica Renana ro		Support of a joint and resilient project with Stakeholder Consorzio di Bonifica Renana related to IWRA n. 14, Monte dei Cucchi - Pian di Balestra The project aims to restore and conserve a lake area, Lago di Castel dell'Alpi, located in IWRA n. 14 and created due to a landslide event in 2014	
SC 2019.01	App. Acquologo	Mobile App for domestic users in order to track their water quality status in their municipality, and inform on leakage detection. The App also provides users with various function related to water monitoring and screening	S

T 2021.01 Water Safety Plan (WSP)		Application of the WSP to the Val di Setta plant in order to optimize and ameliorate potable water quality controls and monitoring activities for the production line Implementation of best practices for quality and quantity production of potable water	© ©
T 2020.03	Setta water withdrawal structure renewal	Planned renewal operations related to the water withdrawal structure on the Setta Stream The project aims to optimize water removal from the Val di Setta plant for the well being of downgradient IWRAs and Stakeholders	
Т 2020.02	Water reduction settings in filter washing	Optimized settings and consequent water reduction during filter washing for a total of 12 filters: - shorter washing times - rationalization - 30% efficiency before the implementation of new settings - use of raw water instead of potable	③
T 2020.01	Strategic study on climate change scenarios (CMCC-NOMISMA study)	Joint project in cooperation with Stakeholders: Autorità di Bacino del Fiume Po, Consorzio di Bonifica Renana and Canali di Bologna Aim to evaluate the impact of climate change scenarios on water availability in Città Metropolitana di Bologna The outcome is the implementation of mathematical forecasting models to define future scenarios in water availability The purpose is the appropriate investment on water assets in order to prevent water scarcity	

	1		,			
Т 2019.07	Water consumption reduction - Gruppo Hera		Water consumption reduction - Gruppo Hera		By 2023 Hera Group aims at reducing by 15 % its water consumption for internal (baseline consumption 1,500,000 cm registered in 2017) Water reduction achievements will be evaluated on a yearly basis All Offices of the Group are involved in this project and actively participate to this common reduction milestone	\$
T 2019.06	Predictive maintenance of pipelines		Application of forecasting mathematical models to detect water leakages by use of: historical data regarding pipe ruptures pipeline age and construction data (i.e. material) geological data (i.e. soil type) This data will be successively used to create a maintenance timeline			
T 2019.05	Automation of Acquedotto Primario Bolognese		For the production of drinking water, the Acquedotto Primario Bolognese is dependent on withdrawals from: - surface water bodies in the Val di Setta plant (simultaneously from the Reno River and Setta Stream) - underground waterbodies in Hera's well plants. By withdrawing from different water bodies: water stress is reduced, local aquifers are preserved, ground subsidence effects decreased and the DMV of the rivers is respected	8		
T 2019.04	Implementation of Monitored Districts		Distrettualizzazione: division of the aqueduct system in districts in order to monitor water consumption in nocturnal hours and verify water losses in a more effective way			
	Programmed maintenance of pipelines		Periodic monitoring of pipeline status via programmed inspections and substitution in order to reduce leakages and water losses			
T 2019.03	Programmed water Water loss loss detection detection in distribution	Scheduled water leakage detection in the Provincial territory of Bologna: different portions of the water distribution network are controlled in order to detect hidden leakages and losses and successively carry out maintenance activities	8			
	network Emergency interventions Scouting for new technologies		Emergency interventions in case of problematics related to failure or leakage detection			
			Investigation and scouting for new technologies in order to increase leakage detection effectiveness and efficiency (i.e. by use of cosmic-rays) Currently, ultrasound detection is the most used technology to detect water losses			

T 2019.02	Integrated management of the Acquedotto Primario Bolognese	For the production of drinking water, the Acquedotto Primario Bolognese is dependent on withdrawals from: - surface water bodies in the Val di Setta plant (simultaneously from the Reno River and Setta Stream) - underground waterbodies in Hera's well plants. By withdrawing from different water bodies: water stress is reduced, local aquifers are preserved, ground subsidence effects decreased and the DMV of the rivers is respected	8 6	Aqueduct Emilia Management Office F. Maffini
Т 2019.01	Water bagging	Resilient action in case of malfunctioning or interruption of potable water provision: domestic users will be provided with water bags	(3)	Aqueduct Emilia Office

6 INDICATORS CHECKLIST

As per the requirement set out in the AWS certification requirements below is a checklist of all the CORE AWS indicators with the relevant reviewed evidence provided by **HERA S.p.A.**, and the indicator with which it is associated.

Table 5.1 Evidence reviewed by SGS against each CORE AWS indicator

Clause	Details	Yes	No	Comments/Evidence
1	GATHER AND UNDERSTAND			
1.1				ewardship purposes, including: its operational boundaries; the water sources from scharges; and the catchment(s) that the site affect(s) and upon which it is reliant.
1.1.1 (core)	The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:			Within the framework the AWS Policy, the company defined as the scope of the public commitment to respect AWS "the area under its control/influence", the site is defined within the factory limits
	 Site boundaries; Water-related infrastructure, including piping network, owned or managed by the site or its parent organization; Any water sources providing water to the site that are owned or managed by the site or its parent organization; Water service provider (if applicable) and its ultimate water source; Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies; 			The site boundaries delimitate the entire area over which the site has control. They include the built area and the lands associated to the facility. This information can be visioned in mapped format in 1.1.a.

Clause	Details	Yes	No	Comments/Evidence
	- Catchment(s) that the site affect(s) and is reliant upon for water.			Val di Setta potabilization plant is a raw water treatment plant for the production of potable drinking water from superficial water sources. It is composed of two treatment lines: one of which treates water withdrawn from the Setta Stream while the other from the Reno River. The Val di Setta plant provides potable water to the Primary Acqueduct System of Bologna (Sistema Acqudottistico Primario di Bologna) which consequently supplies the Provincial Municipalities of Bologna (32 Municipalities). The territories served by the Primary Acqueduct System of Bologna can be viewed in 1.1.b. The water-related infrastructures related to the site and the various treatment steps, phases and hydraulic piping network can be visioned in mapped format in 1.1.b. The maintenance and monitoring protocols of the infrastructures are also available. The main stages of the raw water potabilization treatment include, Pre-flocculation, Presedimentation/desanding, Lifting system, Pre-ozonization, Distribution and conditioning, Clariflocculation, Filtration (with sand), Ozonization, Final disinfection and immission into the supply network: From these basins and via an adductor conduct, the potabilized water is transfered to the accumulation basin of Casalecchio and the tangenziale idrica of Bologna. The potable water will then be passed on to the Cunicolo Romano, the Roman acqueduct of the Bologna, which is responsible in delivering the potable water to centrale di rilancio di Viale Aldini, the central station of Viale Aldini in Bologna. The sludge produced in the pre-sedimentation and clariflocculation phases undergoes two main stages of waste treatment, Sludge thickening, Mechanical dehydration: via a pressure treatment Since 2009, the Val Di Setta plant draws water simultaneously from two superficial water bodies: 1) Reno River, specifically from the Lama di Reno station in the Municipality of Marzabotto (BO)

Clause	Details	Yes	No	Comments/Evidence
Olause	Details	163	INO	From September 2009, the overall derivation concession for both the Reno River and the Setta Stream The production capacity of the Val di Setta Plant is seasonably variable according to the minimum vital flow of the Reno River and Setta Stream. The Val di Setta Plant discharges in: Public sewage network Ziano di Sotto, the following mixed waters originated from the HeraTech laboratory, industrial waste waters, from the washing of laboratory instruments and equipment, domestic waste waters, from sanitary services and meteoric waters, from run-off waters of parking and covered
				 Superficial waters (Reno + Setta), the following mixed waters originated from the Site area: Discharge n.1 and n.2 in the Setta Stream: meteoric waters (from the run-off of external and covered areas) and excess superficial waters not sent to the potabilization plant. Discharge n.3 in Reno River: industrial waste waters (from sludge treatment), domestic waste waters (from sanitary services) and meteoric waters (from the
				run-off of external and covered areas). The receiving water bodies of the site's discharge can be identified in the dedicated map in 1.1.d. Water discharge permits and relative modifications to the Environmental Authorization (AUA) for the Val di Setta plant are also available in 1.1.f. Site's catchment has been defined on the basis on the site's water withdrawal bodies as well as their up and down-stream areas of influence. For the Val di Setta plant, these are superficial water bodies, the Reno River and Setta Stream. The Site's catchment area has a dimension of approximately 1,680 km2. This information can be visioned in mapped format in 1.1.e.

1.2 Understand relevant stakeholders, their waterrelated challenges, and the site's ability to influence beyond its boundaries.

1.2.1 (core)	Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified. This process shall: - Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people; - Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies; - Provide evidence of stakeholder consultation on water-related interests and challenges; - Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups; - Identify the degree of stakeholder engagement based on their level of interest and influence.			According to AWS, the company has defined the following categories of internal (top management and employees) and external stakeholders (entities other than HERA S.p.A.): Those who impact the organization such as regulators, water service provider. Those on whom the organization has (or is perceived to have) an impact such as other water users,neighbors, NGOs, municipalities,local community. Those who have a common interest such as similar business sectors, contractors. Those who are neutral, with no specific link, but with whom it is beneficial to maintain a positive reputation and relationship such as consumers and employees. The main/most relevant stakeholder groups, that is the groups of individuals, organizations and/or companies that affect and/or could be affected by the site's activity, have been identified and mapped: the Stakeholder Map, 1.2.b. shows the location of each relevant stakeholder present in the catchment area, while the Stakeholder List, 1.2.a., states: Type of stakeholder and if external/internal Level of Interest (High/Moderate/Low) Current and/or potential degree of Influence Engagement date Stakeholder concerns
1.2.2 (core)				Demonstrated and provided evidence of active outreach and consultation on water-related interests and challenges with relevant Stakeholders has been illustrated in the Stakeholder Communication Memorandum, 1.2.c., and in the Stakeholder Communication Evidence, 1.2.d.
1.3	Gather water-related data for the site, including: wa costs, revenues, and shared value creation.	iter bala	ance; wat	er quality, Important Water-Related Areas, water governance, WASH; water-related
1.3.1 (core)	Existing water-related incident response plans shall be identified.			The Emergency Response Plan identifies the functional areas of the potabilization plant, the emergency actions associated to each hazardous product as well the emergency procedure to follow in case of accidents.

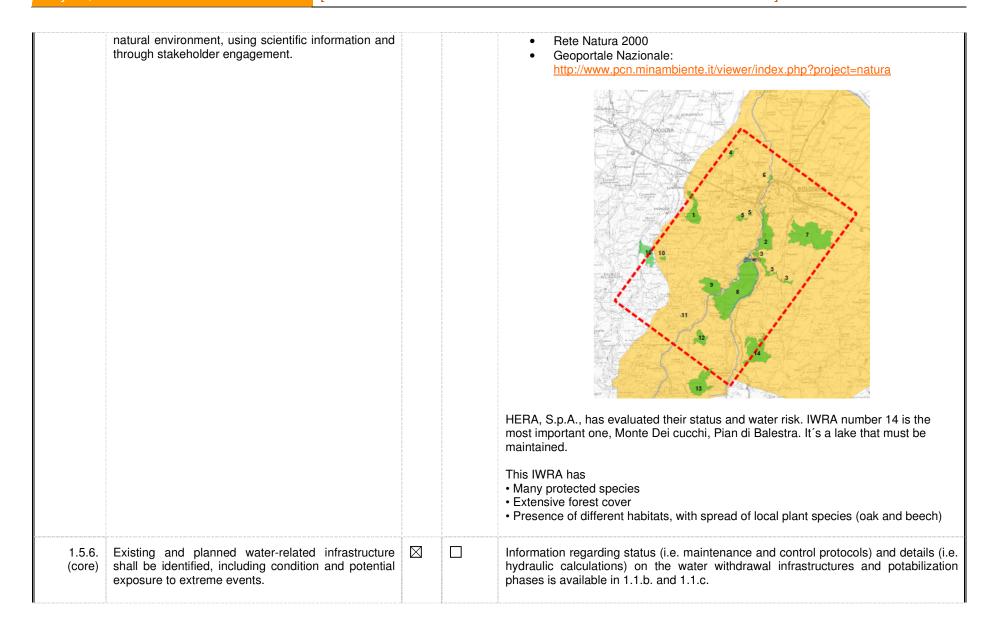
			Scenarios described include: exceedances in emissions/discharges, flood events, pipe ruptures and spillages, fires etc. There is Map illustrating the ubication and stockage of the hazardous substances stored on-site as well as the location of security signage and fire extinguisher ubication. The behaviour procedures to adopt in case of accidents and emergency numbers to call are available to employees. In the event of on-site events, they shall be recorded, at this moment there are not any event.
1.3.2 (core)	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped.		Site water balance: illustrated in 1.3.b., shows the water demanding potabilization phases and successive water losses before emission in the Acqueduct System. Site water efficiency (average potable water production efficiency) is of 92%. The ratio of raw water withdrawn from the environment to potable water fed into the Acqueduct System is therefore equal to 1.08 I withdrawn per 1 I fed into the network.
1.3.3 (core)	Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified. Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.		Site has a quantified annual variation in water usage rates which depend on water turbidity and the minimum vital water flows (DMV). This has been shown in a ppt. in 1.3.b. which illustrates that surface water withdrawls are at their minimum during summer In order to mitigate the effects of shared water-related challenges (i.e. water scarcity due to scarce precipitations and summer water shortage), between 1999 - 2008 the Site has utilized water from the Invaso di Brasimone, an artificial basin in use for hydroelectric use, during the summer months.
1.3.4 (core)	Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.		HERA S.p.A performs the qualitative monitorings, according to the legal requirements in force: Raw water Potable water drinking water analysis analysis of water after treatment Discharge water

1.3.5 (core)	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.		The Site has identified the following potential sources of pollution: Hazardous substances storage: there are several dedicated in-house storage areas. Stored substances include flammables, chemicals used in the laboratories and during the potabilization phases. Chemicals are stored in a roofed-in area and are equipped with proofing pools. No chemical spillage incidents have ever occurred. The Hazardous substance storage and signage map are available in 1.3.a. Sludge treatment plant: the site operates its own sludge treatment plant and discharges treated wastewater into the public sewage network sewage of Ziano di Sotto (in accordance to Annex 5 - Table 3 of Lgs. Decree 152/2006 - Part 3).
1.3.6 (core)	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.		Within the facility in Val di Setta, there are no significant water-related areas
1.3.7 (core)			Annual water-related costs for 2019 were divided and the data were showed to the audit Team. All water-related costs for the functioning, management, and maintenance (ordinary and extraordinary) of the Val di Setta plant are included in the overall costs for the management of the Integrated Water Service (SII) in the ATO territories. The water tariff will consequently depend on all activities related to the management and maintenance of the SII as well as costs related to new infrastructures being built or purchased.
1.3.8 (core)	Levels of access and adequacy of WASH at the site shall be identified.		The Site ensures access and adequacy of WASH
1.4			ry inputs; the water use embedded in the production of those primary inputs the identified); and water used in out-sourced water-related services.
1.4.1 (core)	The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.		Embedded water (or virtual water) is essentially the hidden water used behind a product or service.

			The Indirect water use is the water used within a site's supply chain: it is the water used for the creation, processing and transportation of goods and services supplied and used by the site. The ratio of raw water withdrawn from the environment to potable water fed into the Aqueduct network is equal to 1.08 I withdrawn per 1 I fed into the network.
1.4.2 (core)	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.		Outsourced services that consume water are typically processes that are required for the ongoing operations of the site. The HeraTech Laboratory is located within the Site boundaries but is an independent outsourced service that supplies the Val di Setta Plant with the analytical results for physical and chemical parameters regarding the Site's water quality.

5	Gather water-related data for the catchment, include and WASH	ing: wa	ter gove	ernance, water balance, water quality, Important Water-Related Areas, infrastructure
1.5.1. (core)	Water governance initiatives shall be identified, including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.			HERA S.p.A., has identified the most important initiatives in the catchment The water-management strategies and water stewardship plans for the catchme territory water resources are governed at Regional, Provincial and Local scale by main water Governance Plans, 1. Piano di Tutela delle Acque (PTA) of the Emilia-Romagna Regio (https://ambiente.regione.emilia-romagna.it/it/acque/temi/piano-di-tutela-delle-acque 2. Piano Territoriale di Coordinamento Provinciale (PTCP) of the Bologna Province (https://www.cittametropolitana.bo.it/pianificazione/PTCP - documenti di piano/Variante al PTCP in materia di Tutela delle Acque) 3. Piano d'Ambito di ATO5 - Ambito Territoriale Ottimale of the Bologna Province (http://www.atersir.it/servizio-idrico/territorio-provinciale-di-bologna) Site is integrating governance actions in the AWS strategy plan in order to safeguar the quality and quantity of the catchment surface water resources.
1.5.2. (core)				HERA S.p.A., aims to identify all legal and regulatory requirements with specific environment, therefore, including for water management. Applicable water-related legal and regulatory requirements have been identified an described in detail in 1.5.c. folder HERA S.p.A., complies with the applicable water related legal and regulator requirements.
1.5.3. (core)	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.			The catchment water balance has been developed in "Catchment Water Balance" fi The catchment water-balance has been illustrated in a ppt.: the data for this study h been obtained from ARPAE/Emilia Romagna Region and Hera and the relati documentation used has been saved as supporting documents. This document describes the catchment as it was mentioned in the Criteria 1.1 Physical Scope".

			The report «Idrometeoclima 2019» of the Emilia Romagna Region highlights that all Regional rivers have a highly variable waterflow during the year. The flow rates are however higher than average. The same trend has been observed for the Reno River and its basin, he Primary aqueduct network of Bologna feds only The Provincial territory of Bologna and a littele contribute to ferrara acqueduct. the other Provincial territory have their own acqueduct and water source In addition to the catchment water balance calculated in this present study, various analysis on public environmental literature sources (i.e., ARPAE, Regione ER) regarding catchment water availability have been conducted. The following future scenarios can be consequently highlighted: • temperatures are rising while rainfalls are projected to decrease in the future • deep acquifer water bodies act as important water storages for the local territory and should not be overexploited Considering that the main contributor to catchment area inflows is rainfall and the main contributor to outflows is evapotranspiration, these two projections highlight a future increase in evapotranspiration rates together with a decrease in precipitation. To conclude, although the Site's catchment water balance illustrates a catchment territory which is not overexploited in terms of water use, future climate change scenarios illustrate a dramatic toll in temperature raises that, together with unsustainable usages of deep acquifer water bodies, could trigger increasing stress in terms of water availability and use.
1.5.4. (core)	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.		Data supplied by ARPAE (2017, updated each 3 years) describes the water quality, including physical, chemical and biological status. There are two sampling points downstreams which quality is identified as enough. There is a sampling point upstream which quality is identified as enough. It's due to a hydroelectric plant. ARPAE assess the ecological and chemical state The water quality is describe in document 1.5.e. Catchment water quality_2020.10.07.ppt
1.5.5 (core)	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people orthe	\boxtimes	HERA, S.p.A. has identified 14 Important Water-Related Areas in the catchment. The IWRA were identified using: • World Database on Protected Areas (WDPA): https://www.protectedplanet.net/



1.5.7. (core)				Population's access to safe drinking water and sanitation facilities at catchment Area.
1.6	Understand current and future shared water challe water challenges.	enges	in the ca	atchment, by linking the water challenges identified by stakeholders with the site's
1.6.1 (core)	3			The shared water challenges have been identified and prioritized, on the basis of their impact on relevant Stakeholders, and the initiatives to address them identified.
1.6.2. (core)	•			See point 5 from this report.
1.7	Understand the site's water risks and opportunitie	es: Ass	ess and	prioritize the water risks and opportunities affecting the site based upon the status
•••	of the site, existing risk management plans and/or			
1.7.1 (core)	,			The water risks faced by the Site have been illustrated in a water-related risk assessment conducted for the catchment territory using the Water Risk Filter (http://waterriskfilter.panda.org/) an AWS Standard Tool.
1.7.2	Water-related opportunities shall be identified,			At global scale, the WRF highlights a very high baseline water stress risk for the catchment area
(core)	including how the site may participate, assessment and prioritization of potential savings, and business opportunities.			The baseline water stress risk indicator is based on the total annual water withdrawals to total available renewable supply - a higher value indicates more competition amongst users
				At local scale, studies of the Emilia Romagna Region highlight that the Provincial territory of Bologna has been subjected to ground subsidence due to past over-exploitation of underground water bodies and water recharge areas, especially those associated to the acquifer <i>Conoide del Reno</i> .
				In accordance to the Regional policies of the Water Protection Plan, a minimum vital water flow (<i>DMV – Deflusso Minimo Vitale</i>) for superficial water bodies must be respected in order to maintain optimum water quantity and healthy water-related environments. The DMV for the Setta Stream is of 270 l/s while the DMV for the Reno River 800 l/s for the Reno River

At regional scale, ARPAE weekly monitoring campaigns highlight the *DMV* and water-surface elevation of the tributaries in the Reno River watershed.

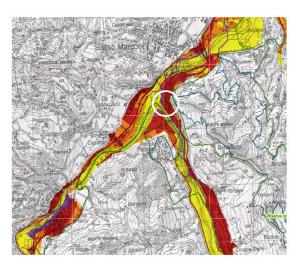
Flood risk

At global scale, the WRF highlights a high flood risk for the catchment area.

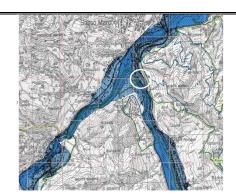
The flood risk indicator is based on the recurrence of severe floods within the 30-year time frame period of 1987- 2017

At regional scale, the Flood Risk Management Plan of the Emilia Romagna Region also highlights the ubication of the Site in a high flood risk area (flood return period between 100 - 200 years) and adjacent to an area subjected to a very high flood risk (flood return period between 20 - 50

At local scale, the <u>Flood Risk Management Plan</u> of the Emilia Romagna Region highlights the location of the Site in a high flood risk area (R3).



At local scale, the <u>Flood Risk Management Plan</u> of the Emilia Romagna Region highlights the location of the Site in an area subjected to a medium flood probability (P2 – M) with a flood return period between 100 - 200 years.



Drought occurrence

At global scale, the WRF highlights a low drought risk for the catchment area. However, the projected change in occurrence of droughts is moderate. This means that droughts are expected to increase in the future.

The drought risk indicator is based on drought conditions over the last three years (May 2015 - May 2018) using Standardized Precipitation and Evaportaion Index.

At regional scale, ARPAE hydrometoclimate monitoring campaigns highlight that 2019 resulted as the hottest and rainiest year since 1961: climate change is triggering periods of excessive and disastrous rainfalls to periods of water scarcity and consequent drought occurrence.

Surface Water contamination

At global scale, the WRF highlights a high surface water contamination risk for the catchment area.

The surface water contamination risk indicator is based on a wide range of pollutants with negative effects on water security (i.e. toxic effects, oxygen depletion, algal blooms etc.) for both humans and freshwater biodiversity.

At regional scale, ARPAE monitoring campaigns on surface water quality highlight, for the 8 sampling points present in the catchment area, a generally good water quality status

Conclussion

		C	Classification		
			Global WRF	Regional data	General
e	ess	7	/ery High	High	High
		H	High	High	High
		H	High	High	High
ta	aminatio	on H	High	Low	Moderate
е	е	N	Moderate	High	Moderate
la	ation	ĩ	/ery Low	-	Very Low
		noval f	ed water-relate	acquifer bodies t area by implem ad risks with enga elevant catchmer	agements and
tr wa gn	vareness on ns involving	g stake			
tr wa gn	vareness on ns involving nt safe-guard	g stake rding a	actions along th	ne Setta Stream ted to flood risk	
otr Wa gn nt no w	vareness on ns involving nt safe-guard nd protect th water quality	g stake rding a he loca ty para	actions along th al areas subjec ameters for opti	ne Setta Stream	in order to
otr want no was e	vareness on ns involving nt safe-guard nd protect th water quality is maintenance potable wa es and distri	g stake rding a he loca ty para nce act ater us ribution water	actions along that areas subject ameters for optitivities on water see by optimizing an entwork or stewardship the areas along the second stewardship the areas along the area	ne Setta Stream ted to flood risk mum chemical a	nd ecological uctures zation

.8	Understand best practice towards achieving AW relevance.	/S out	tcomes:	Determining sectoral best practices having a local/catchment, regional, or national
	Relevant catchment best practice for water governance shall be identified.			All that results in actions necessary from risk analysis and documented in the Action Pla of the Register of AWS risks and opportunities are information that can be registered in the category "Good practices"
1.8.2. (core)	Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.			The annual management analyses on AWS performance mention which of the actions set to achieve the objectives were effective and declared "Good practices"in Managemer Analysis Report, following their classification, as far as possible, into the main categories Good AWS management practices Good practices related to quantitative water balance sheet Good water quality practices Good practices related to access to drinking water, sanitation and hygiene facilities (WASH)
1.8.3. (core)	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.			Good practices related to important water-related areas (IWRA), if applicable. The best-pratices implemented to achieve the 5 AWS outcomes are illustrated in the Water Stewardship Plan & Strategy in 2.3.
1.8.4. (core)	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.			
1.8.5 (core)	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.			GOOD WATER SUSTAINABLE GOOD WATER IMPORTANT SAFE WATER, GOVERNANCE WATER QUALITY WATER-RELATED SANITATION BALANCE STATUS AREAS AND HYGIENE FOR ALL (WASH)

2	COMMIT AND PLAN									
2.1	Commit to water stewardship by having the senior-most manager in charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving if the outcomes, and the allocation of required resources.									
2.1.1. (core)	, ,			AWS Commitment of the Val di Setta Plant has been publicly disclosed Gruppo Hera's official Webpage in both Italian and English language https://eng.gruppohera.it/group/business activities/business _water/sustainability/aws_certification AWS Policy contains the following information: • the scope of AWS • general objectives in accordance with the specifications of the AWS standard. AWS Policy signed and updated whenever necessary is communicated to all employees, as well as to external stakeholders (as appropriate). VIDEO dedicated to AWS The AWS certification and the related path undertaken by Hera, were presented in a short video which from November 2020 were broadcasted to now monitors focaled riside the Bologan headquarters. The video shows images of the plant and the area on which it stands and superimposed short texts that thereby explant the undertaken by the community in a 360° prospective.						

2.2.	Develop and document a process to achieve and maintain legal and regulatory compliance.											
2.2.1. (core)	The system to maintain compliance obligations for water and wastewater management shall be identified, including:			The system identifies the responsible persons/positions within the organization to maintain compliance with water related legal or regulatory requirements.								
	- Identification of responsible persons/positions within facility organizational structure											
	- Process for submissions to regulatory agencies.											
2.3	Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and oppo											
2.3.1. (core)	A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.			 The responsive and resilient Water Stewardship Strategy Plan has been created in response to the risks and challenges identified in Step 1. It contains: Risks and challenges that concern not only the site and its water supply but the entire catchment territory SMART (Specific, Measurable, Achievable, Realistic and Time-based) targets and objectives Actions that work towards obtaining all 5 AWS outcomes in line with the Standard requirements (i.e. good water governance, sustainable water balance, good water quality status, IWRA, WASH) The actions and projects illustrated in the responsive and resilient Water Stewardship Strategy Plan have been classified in: Technological, projects focused on water-saving and optimization Social and Community, actions focused on raising awareness, engagement and best practice disclosure 								
				Prior to the obtainment of the AWS Certification for pilot plant Val di Setta, Gruppo Hera was already involved and engaged in ambitious projects and actions in order to mitigate water-related risks by optimizing potable water consumption, reducing water losses and raising awareness on the importance of water throughout the local territory.								
				Activities with local communities and stakeholders were implemented in order to communicate and disclose best-practices actions as well as engaging on common								

			projects for the well-being of common IWRA. With the obtainment of the AWS Certification, Gruppo Hera has become the fist water service provider and multi-utility in the world to formalize and consolidate its efforts regarding water stewardship implementation.
2.3.2 (core)	A water stewardship plan shall be identified, including for each target: - How it will be measured and monitored - Actions to achieve and maintain (or exceed) it - Planned timeframes to achieve it - Financial budgets allocated for actions - Positions of persons responsible for actions and achieving targets - Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.		The Action Plan is issued (from Register of AWS risks and opportunities) specifying: shares (short-term or long-term) term responsible resources other stakeholders involved relationship with AWS Objectives During the audit are reviewed the following actions. Social and community actions: Join Campaing with AWS site PM MTB Val di Setta Virtual Tour Hand Sanitizer production for workers Project Adaptation, Social activity with a famour regional journalist where the citizens are asked about water sustainability Water Audit, program to make audits to the most important companies in the catchment in order to identify ways to reduce the water comsumption, at this moment, Granarolo, Ducati and Fruit company at Ravenna. Diari del consume or Consumptions Diary. IWRA action at IWRA number 14 Technological Actions Water safety plan Strategic study on climate change, this study help to understand and know the water availability. It's focused about water but it studies other topics. Water comsumption reduction Pipeline predicitive maintenance activities. Automation of Aquedotto Primario Bolognese Water loss detection in distribution Network Programmed pipelines maintenance Programmed water loss detection

				 Emegency interventions Scouting for new technologies This activity is focused to avoied water leakages, not to reduce the consumption but it's the consequence of this action. Water Bagging, Water bags are distributed in case of interrupt of distribution. 					
2.4.	Demonstrate the site's responsiveness and resilience to respond to water risks								
2.4.1 (core)	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.			The responsive and resilient Water Stewardship Strategy Plan (2.3) has been created in order to mitigate and responded quickly and positively to water-related events and/or risks.					

3	IMPLEMENT							
3.1.	Implement plan to participate positively in catchme	chment governance.						
3.1.1. (core)	Evidence that the site has supported good catchment governance shall be identified.			The site has also actively engaged with relevant stakeholder groups in order to support and contribute to good catchment governance. Evidence of engagement and active outreach (i.e. written correspondence, meetings, questionnaire disclosure etc.) is illustrated in 1.2.c. Stakeholder Communication Memorandum and 1.2.d. Stakeholder Communication Evidence.				
3.1.2. (core)	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.			N/A				
3.2.	Implement system to comply with water-related leg	gal and	regulatory	y requirements and respect water rights.				
3.2.1. (core)	A process to verify full legal and regulatory compliance shall be implemented.	prescription check-list for the 3 disch documentation of corrective action deviations reference documentation already ga		 AUA-related documentation demonstrating legal compliance and AWU prescription check-list for the 3 discharge points documentation of corrective actions taken to address water quality related 				
3.2.2 (core)	Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.			N/A				
3.3.	Implement plan to achieve site water balance targe	ets.	-					
3.3.1 (core)	Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.			Water balance improvement activities are included in the responsive and resilient Water Stewardship Strategy Plan (2.3).				

3.3.2 (core)	annual targets to improve the site's water use efficiency, or if practical and applicable, reduce		Activities that have been performed to improve water balance are both site-specific to the Val di Setta Plant as well as catchment based for the Primary Aqueduct Network of Bologna. The Val di Setta Plant supplies potable water to the Primary Aqueduct Network of Bologna so, in order to have resilient and consistent progress in terms of water balance, the following catchment and site specific actions have been implemented: Investing in infrastructure (to increase efficiency) Eliminating wastages (i.e. reduce leakages via maintenance and monitoring, predictive activities etc.) Implementation of water efficient processes (i.e. water reduction settings) Investigating and scouting for new technologies (to help further identify opportunities for water savings) Engaged with identified Stakeholders in order to raise awareness and seek collaborations in public and private water saving initiatives The site is currently not planning to increase its withdrawals. Concessions and limits for surface water withdrawals have been set in based on Regional and National laws			
3.3.3. (core)	volumetric total use shall be implemented. Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	\bowtie	in accordance with the minimum vital water flow (DMW). They are described deeply in the action plan. N/A			
3.4.	Implement plan to achieve site water quality target	s.				
3.4.1. (core)	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.		Site currently guarantees optimum water quality, in accordance to legal limits and targets, • Daily online and manual samples monitor the various potabilization phases			
3.4.2. (core)	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.	\boxtimes	 Management procedures are in place in case of threshold exceedances in water quality parameters Turbidity values are monitored daily in order to regulate and adapt surface water withdrawals 			

3.5.	Implement plan to maintain or improve the site's a	nd/or c	catchmer	Waste water quality is monitored daily in line with AUA prescriptions and limits illustrated in Table 3 of Annex 5 of the Lgs. Decree no. 152/2006 Potable water quality is monitored daily before emission in Primary Aqueduct Network The site has demonstrated, with quantitative data, performance relative to the water quality maintainance and monitoring Water quality in the catchment has been illustrated as good in a study conducted by the site in 1.5.e Int's Important Water-Related Areas.
3.5.1. (core)	Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.			The IWRAs identified in the catchment area are illustrated in 1.5.f. IWRA improvement activities are carried in order to restore and improve the status of IWRAs in the catchment territory. The project is illustrated in the responsive and resilient Water Stewardship Strategy Plan (2.3) and evidence of implementation is available in 3.1. The project is carried out with stakeholder Consorzio della Bonifica Renana in order to collaborate synergically to the well being of water-related and vulnerable environments in the common territory
3.6	Implement plan to provide access to safe drinking site's control.	water,	effective	sanitation, and protective hygiene (WASH) for all workers at all premises under the
3.6.1. (core)	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.			Workers have access to safe drinking water, adequate sanitation and hygiene awareness, especially in relation to the COVID-19 pandemic. Evidence of implementation is available in 3.1
3.6.2. (core)	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.			N/A

3.7.	Implement plan to maintain or improve indirect water use within the catchment.										
3.7.1. (core) 3.7.2. (core)	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified. 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.			To address its indirect water use, the site has must take action beyond its property boundary and engage members of its supply chain and/or outsourced water-related services located within the catchment. The only outsourced service identified is the HeraTech Laboratory. The HeraTech Laboratory is located within the Site boundaries but is an independent outsourced service that supplies the Val di Setta Plant with the analytical results for physical and chemical parameters regarding the Site's water quality.							
3.8	Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have										
3.8.1. (core)	Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.			Shared water-related infrastructures are out of the control of the site, but represent a key area of risk exposure i.e. due to ageing, degradation and inadequate infrastructures and/or infrastructures that is exposed to extreme events and other risks. Shared water-related infrastructures in the catchment territory connected to storing withdrawing, moving or delivering water are directly connected to HERA. The site has however provide evidence of engagement with owners of water-related infrastructures in the catchment territory, Canal Consortium (responsible for managing the canals in the catchment territory and ENEL managers of artificial basins, Invaso d Brasimone and Bacino di Pavana, located in the catchment area and up-stream to the site.							

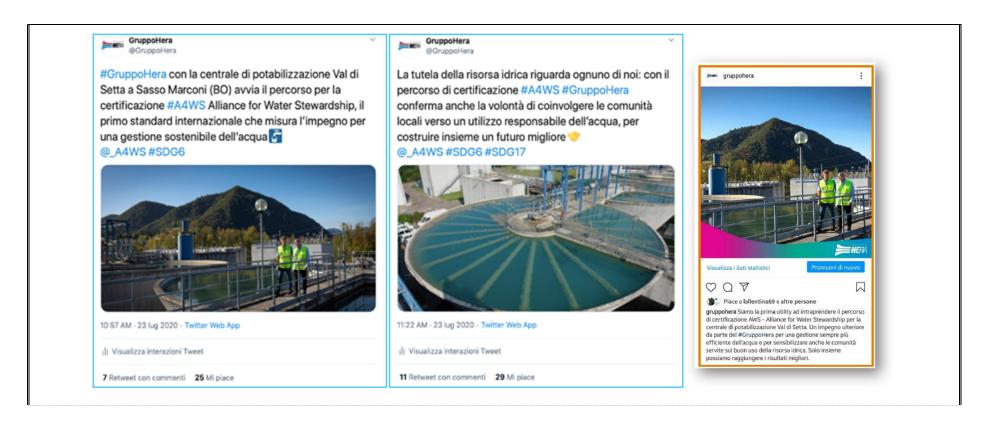
3.9	Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.									
3.9.1. (core)	Actions towards achieving best practice, related to water governance, as applicable, shall be implemented			Action plan is introduced information about the objectives with which the actions are related, but also the category of "Good practices" associated, following the classification in one of the categories: • Good aWS management practices						
3.9.2. (core)	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.	\boxtimes		 Good practices related to quantitative water balance sheet Good water quality practices Good practices related to access to drinking water, sanitation and hygien facilities (WASH) 						
3.9.3. (core)	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.			Good practices related to important water-related areas (IWRA), if applicable						
3.9.4. (core)	Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.									
3.9.5. (core)	Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.	\boxtimes								

4	EVALUATE									
4.1	Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achie stewardship outcomes.									
4.1.1 (core)	Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated			 The evaluation of the site's water stewardship performance includes: List of actions taken and the extent at which they are being, or have been met Evaluation of improvements: if the actions are being effective in mitigating water- 						
4.1.2. (core)	Value creation resulting from the water stewardship plan shall be evaluated.			related risks/challenges • Evaluation of the shared-values/benefits generated at catchment level (i.e. reducing water-related risk, improving natural capital and ecosystem services) • Evaluation of the financial cost-benefit component: investment costs and cost						
4.1.3 (core)	The shared value benefits in the catchment shall be identified and where applicable, quantified.	\boxtimes		savings in order to help justify the measures taken List of 5 AWS outcomes achieved						
				Performance information is available in the AWS water strategy plan.						
4.2	Evaluate the impacts of water-related emergency is and preventative measures.	nciden	ts (includ	ling extreme events), if any occurred, and determine the effectiveness of corrective						
4.2.1. (core)	A written annual review and (where appropriate) root- cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.			No significat water-related emergency incident (i.e. spills, leakages, natural disasters such as gùfloods or droughts that have disrupted the water infrastructures and water availability etc.) has been recorded to date						

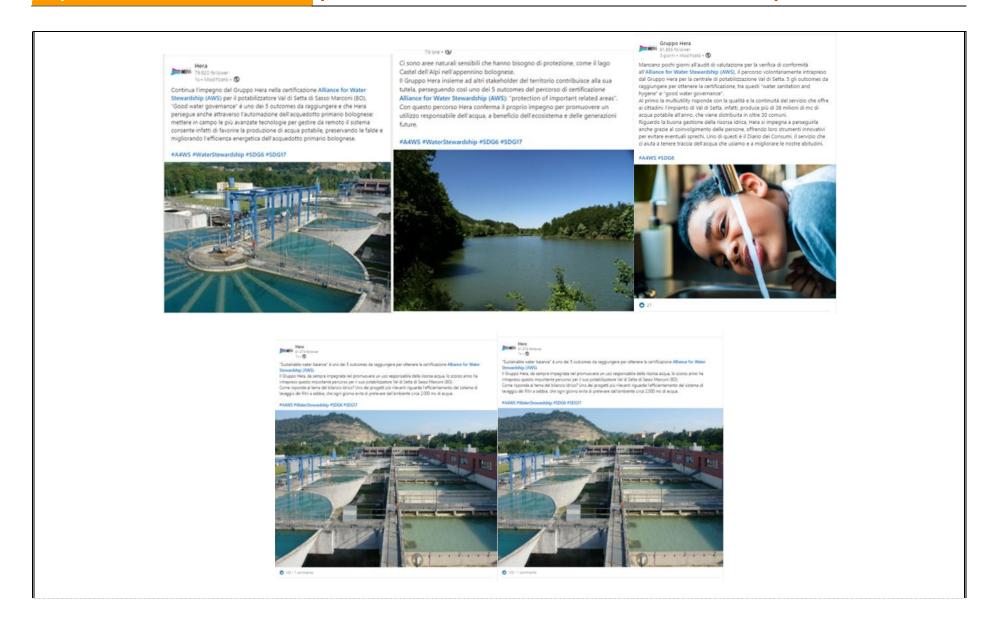
4.3.	Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.									
4.3.1 (core)	Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.			The site has proven evidence of communication efforts towards various stakeholders and interest groups. The site will continue to involve stakeholders in the future in order to share and review water stewardship performance and outcomes. Feedback and comments from the stakeholders have also been reported.						
4.4.	.4. Evaluate and update the site's water stewardship improvement.		corporati	ing the information obtained from the evaluation process in the context of continual						
4.4.1. (core)	The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the evaluations in this step and these changes shall be identified.			The site's responsive and resilient Water Stewardship Strategy Plan (2.3.) will be evaluated and updated periodically (at a minimum on an annual basis) in order to ensure positive progress and regular data collection and monitoring. The evaluation document is available at 4.1.						

5	COMMUNICATE & DISCLOSE									
5.1	Disclose water-related local laws and regulati		nal go	vernance of the site's manager	ment, including the pos	itions of those account	able for legal compliance with water-related			
5.1.1. (core)	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.			The site's water-related internal governance focuses on responsibility and accountability of water-related matters and water stewardship implementation (5.1). This has been disclosed publicly to the stakeholders during the various meetings and presentations (1.2.d). The roles and responsibility of those accountable for water related emergencies and compliance in water-related matters is also available in 1.3.a.						
The me service: The me associa	Every year Hera organizes 2 tours of meetings with the representatives of the Consumer Associations of the 7 territories served in Emilia-Romagna. The meetings focus on a presentation dedicated to various topics that may be of interest to the Associations (rates, bonuses, regulatory updates, news in environmental services, etc.). This year the 1st round of meetings was canceled due to COVID, while the 2 nd was organized online. The meetings were held on the TEAMS platform between the 21 st and 29 th October 2020 and were attended by a total of 33 representatives of 16 of the main consumer associations of Rimini, Forlì-Cesena, Bologna, Modena, Ferrara and Ravenna The Vedo Hera newsletter is the communication tool dedicated to providing news of the Group's main projects linked to sustainability. Vedo Hera is sent by e-mail and reaches all customers who have activated online services, such as bills.									
				VEDOHERA NOTICE SULLA SOSTEMBLITA	Il contesto internazional Perche' e' importante	е				
	Acqua, l'impegno di Hera per la massima trasparenza e accessibilità del servizio idrico in buone Acqua Perché bere l'acqua di rubinetto Parti 2019 Perché bere l'acqua di rubinetto domanda di acqua dolce quota per la quale entro il 2030 le risorse disponibili a livello globale non saranno sufficienti (Nazioni Unite) 1,87 € costo dell'acqua al metro cubo in Italia, tra i più bassi d'Europa (Ambrosetti, 2018)									
				La multiutility rilancia il proprio impegno sul fronte dell'acqua, minacciata al vetto globale dagli effinit del cambiamento cimasico e da una domanda che rischia di aguerrare la disponibilità della risona. Nel report in buone acque, già onine, i risultati e gli obiettivi del Grispo su qualità dell'acqua polishie, contrasto al cambiamento cimatico ed economia circolize.	FAMIGLIE italiane che preferiscono non bere l'acqua dal rubinetto per mancanza di fiducia (Istat, 2018)	42,4% PERDITE complessive sulla rete idrica italiana (Arera, 2018)				

5.2	Communicate the water	r stew	ardship plan w	rdship plan with relevant stakeholders.						
5.2.1. (core)	e) plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.		and 1.2.d catchmen A Commulation been high Links to the https://www.aadf-f488	Stakeholder engagement and communication actions have been illustrated in 1.2.c. Stakeholder Communication Memorandum and 1.2.d. Stakeholder Communication Evidence, in which the site presented its water stewardship journey, disclosed relevant catchment-based information regarding shared water-related risks and implemented best practices in line with AWS outcomes A Communication Plan for all AWS communication activities performed to-date are available in 5.2. These actions have also been highlighted in the responsive and resilient Water Stewardship Strategy Plan in 2.3. Links to the following, Report in Buone Acque: https://www.gruppohera.it/documents/688182/4526990/In buone acque 2019 Versione completa.1600681935.pdf/a50b8f3c-aadf-f488-8f40-72ac06c7dafc?t=1607000207170						
5.3. (core	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.			\boxtimes		The site has publicly disclosed its water stewardship performance via 5 dedicated social media po (on Instagram, Twitter and Facebook), highlighting how each AWS outcome (i.e. good was governance, water quality, water quantity, IWRA and WASH) have been specifically applied a implemented through AWS dedicated projects and actions. Some vidences of disclosure are availabellow. Prior to AWS Certification obtainment, the Site will disclose a dedicated Water Stewardship Repon its official WebPage in the dedicated section to the AWS Certification.				







5.4	Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.							
5.4.1. (core)	•			Stakeholder engagement actions have been illustrated in 1.2.c. and 1.2.d. The site has provided information to the stakeholders regarding shared water-related challenges and risks common to the catchment territory. Information and studies conducted by the site (1.5.d. and 1.5.e.) were sent to public-sector agencies (ARPAE, Regione ER) for validation. •In addition to formal disclosure, the site has undertaken active actions and efforts to address shared water challenges with fellow stakeholders (i.e. Consorzio della Bonifica Renana on IWRA remediation project, Philip Morris Bologna on water stewardship awareness etc.). These actions are present in the responsive and resilient Water Stewardship Strategy Plan (2.3).				
5.4.2. (core)	, ,			The above mentioned efforts has been performed to engage stakeholders and pubic-sector.				
5.5	Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well a corrective actions the site has taken to prevent future occurrences.							
5.5.1. (core)	Any site water-related compliance violations and associated corrections shall be disclosed.			During 2020 there have been no violations compliance. No corrective actions have been necessary to prevent future compliance violations.				
5.5.2. (core)	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.							
5.5.3. (core)								

7 AUDIT FINDINGS

A findings log was issued to HERA S.p.A. which detailed the findings raised for the audit. As there were a large number of documents supplied to SGS as evidence and each one had to be reviewed, the findings log acted as a live document and was updated periodically until all indicators and documents had been reviewed for compliance. HERA S.p.A. was then afforded time to respond to the findings and supply additional information for SGS to the review and to either accept and close the finding or request further information or action. Once all findings were closed by the Lead Auditor all documentation and audit trail were then reviewed by the Certifier.

7.1 MAJOR NON CONFORMITIES

During the course of the audit non major non-conformances were raised.

7.2 MINOR NON CONFORMITIES

Non minor non-conformances were raised during the audit process.

7.3 OBSERVATIONS

One observation was raised during the remote audit which are only to be considered as improvement opportunities. No action is necessary during this audit period but these issues would most likely come under scrutiny during a surveillance audit scenario.

Table 7.3.1. Observations and New Information Requests raised during the AWS audit process

No.	Туре	Ref.	Details	Response by HERA, S.p.A.	Relevant References
1.2.1.	Observation	1210BS	Observation 01 Although HERA, S.p.A. managed to engage and bring in consultation the stakeholders, the current COVID-19 situation has not allowed to plan and take more actions due to engage them It will be an strong point of interview in the first surveillance audit.		

8 SUMMARY

In reviewing the body of evidence presented by HERA, S.p.A. it is apparent that a considerable quantity of effort and work has been put into the preparation for the audit for Alliance for Water Stewardship Certification.

Non major and minor non-conformities have been identified.

9 OPPORTUNITIES FOR IMPROVEMENT

The certification audit for HERA, S.p.A. against the AWS Standard Version 2.0 is for the initial assessment of conformity and as such allows for some areas for improvement going forward.

10 CONCLUSIONS AND RECOMMANDATIONS

Given the review of evidence produced and site audit performed at the HERA, S.p.A., SGS recommends that HERA, S.p.A. – located at Via Setta 4, Sasso Marconi, Bologna, Emilia Romagna, Italy is awarded AWS Core Certified status with a surveillance audit interval of annual frequency