

WATER STEWARDSHIP PLAN - AYF 2024

Updated : November 2024

No.	Goal (AWS OUTCOMES)	Identify Shared Water Challenge	Scope of Implementation	Action	Target	Time frame	Performance evaluation	Shared Value Creation		
								Economic Value	Social Value	Environment Value
1	Good water governance	n/a	1.1: Development of Water Stewardship plan to address key water issues faced by community	Consultative meeting with relevant stakeholders to identified and discuss to get feedback. (By Internal Nestle Platform, CRP 3.0 Actions 2022-2024)	Every 3 years	Oct 2025	Follow up actions which were identified by Community relation program		Addressing water challenges, engaging the community, and fostering collaboration. These efforts contribute to the well-being of the community and the environment.	
		n/a	1.2: Communicated Water Stewardship plan and stakeholder announcement	Communicated Water Stewardship plan to stakeholders in convening meeting	Once a year	Oct 2024	Record the number of participants who attended the training and collect feedback from participants through the minutes of meeting.		By sharing the water stewardship plan and updates with stakeholders, the team ensures transparency and builds trust. This helps in maintaining a positive relationship with the community and other stakeholders	
		Pollution from waste water from household and industries	1.3: Notification to catchment authorities and communities on sites water stewardship strategy and plans	AWS Initiative shared with identified stakeholders on different engagement levels in form of on-site and off-site meetings	Once a year	Oct 2024	Record the number of participants who attended the training and collect feedback from participants through the minutes of meeting.		These meetings provide a platform for collaboration with various stakeholders, including local authorities and community groups. This collaboration can lead to joint initiatives and projects that benefit the community and the environment	
		n/a	1.4: Meetings with identified stakeholders to have consensus on current water stewardship work and future water related development	To organize a meeting with the relevant stakeholders to provide them with updates and give them an opportunity to share any feedback they may have. This way, the site can capture the latest information and input from stakeholders.	Once a year	Oct 2024	Record the number of participants who attended the training and collect feedback from participants through the minutes of meeting.		Addressing water challenges, engaging the community, and fostering collaboration. These efforts contribute to the well-being of the community and the environment.	
		Flood	1.5: Periodic Notification to management on water related infrastructure of any concerns	Notify to management team and sharing water related infrastructure if any concern 1.Update external water related infrastructure by July24 in the factory management meeting	If any changes	If any changes	Internal and external infrastructures have been reviewed on BCP preparation session, and sharing water related infrastructure if needed.		To update the information during the meetings allows for a more inclusive approach. This helps in gathering diverse perspectives and feedback, which can lead to more effective and sustainable solutions.	
		n/a	1.6: Communicate to suppliers to get vendor water management techniques as good water stewards	- Communication to laundry vendor to share their water management techniques as a good practice - Good practice from Indorama sharing https://sustainability.indoramaventures.com/en/environmental/water-management	Once a year	Feb 2024	Water management techniques as a good practice will be shared to stakeholders and get feedback on any concerned issues.		Encouraging suppliers to implement effective water management techniques helps in reducing water consumption and improving water quality. This can lead to healthier ecosystems.	
2	Sustainable water balance	Depletion of the GW	2.1: As identified via stakeholder consultation and hydrogeological study underground water quantity might affected with high withdraw which can impact to shared water challenge area	-Deep wells are run base on designed yield to avoid over-exploitation and conducted water withdrawal monthly review to comply with the licenses.	Zero non-compliance and Fully-comply with the license	Jan to Dec 2024	To ensure to avoid over-exploitation factory will monitor following point below; - Monthly report review to comply with licenses - Static water level monitoring		By operating deep wells based on designed yield and the license the team ensures that water extraction is sustainable and does not deplete the aquifer. This helps in maintaining the natural balance of the ecosystem and prevents long-term environmental degradation.	
		Depletion of the GW	2.2: Monitor for Static and Dynamic levels of Deep wells	We have Aquassay system (internal online platform) which is monitoring DWL real time and will alert/notify immediately if trend is abnormal. No abnormal trend observed.	Daily monitoring for well static and dynamic level	Jan to Dec 2024	To verify that the withdrawal volumes do not exceed the permitted limits and that all regulatory requirements are met.		By monitoring the static and dynamic levels of deep wells, the team can ensure that water extraction is sustainable and does not lead to over-exploitation of the aquifer. This helps in maintaining the natural balance.	
		Depletion of the GW	2.3: Improve water resource management at catchment level	Improve site's water consumption by water saving project.	3,000 m3	Dec 2024	Measure the reduction in water consumption after implementing the water-saving project. Monitoring water consumption and initiated water saving projects by weekly. - Water saving 3,000 m3 in Y2024 - Cost saving 32,111 THB		Implementing water-saving projects helps in reducing the overall water consumption of the site. This contributes to the conservation of water resources, which is crucial for maintaining the natural balance of the ecosystem.	
		Depletion of the GW	2.4: To comply Nestle Net Zero Road Map	Reduce water usage by implementing internal water saving initiatives.	3,000 m3	Dec 2024	Measure the reduction in water consumption after implementing the water-saving project. Monitoring water consumption and initiated water saving projects by weekly. - Water saving 3,000 m3 in Y2024 - Cost saving 32,111 THB		Implementing water-saving projects helps in reducing the overall water consumption of the site. This contributes to the conservation of water resources, which is crucial for maintaining the natural balance of the ecosystem.	
		Depletion of the GW	2.5: Improve water table of catchment	Ensure deep wells operation on safe yield and water losses monitoring to avoid over withdraw via weekly monitoring	1.357 of Water ratio	Weekly	Measure the reduction in water consumption after implementing the water-saving project. Monitoring water consumption and initiated water saving projects by weekly. - Water saving 3,000 m3 in Y2024 - Cost saving 32,111 THB		Implementing water-saving projects helps in reducing the overall water consumption of the site. This contributes to the conservation of water resources, which is crucial for maintaining the natural balance of the ecosystem.	
		Depletion of the GW	2.6: Explore water saving initiatives for site to meet water usage target	Identify Water Map and review to prioritise where is main contribution of losses.	3,000 m3	Feb 2025	Assess the effectiveness of the review process in identifying the main areas of water losses. This includes pinpointing specific processes or areas where water losses are significant and initiate the water saving projects.		Implementing water-saving projects helps in reducing the overall water consumption of the site. This contributes to the conservation of water resources, which is crucial for maintaining the natural balance of the ecosystem.	

		n/a	2.7: In-direct water usage	Conduct the Environment and water awareness refresh training to encourage them to improve water usage	Once a year	Feb 2024	Record the number of participants who attended the training.		Encouraging suppliers to implement effective water management techniques helps in reducing water consumption and improving water quality. This can lead to healthier ecosystems.
3	Good water quality status	Salinization of the water (surface and GW)	3.1: Drinking and Natural mineral water quality for Deep wells and Finished products.	To conduct water quality analysis, including both ground water and finished products, at the NQAC laboratory in Vittef, France.	Zero non-compliance and Fully comply with Thai regulation	Jan to Dec 2024	Ensure that all tested parameters meet the Thai regulatory standards for drinking and natural mineral water. To compare them with the legal limits. Monitoring has been proceeded as plan and action in case of deviation found.	Regular water quality analysis ensures that both groundwater and finished products meet high safety and quality standards. This is crucial for protecting public health and maintaining consumer trust.	
		Pollution from waste water from household and industries.	3.2: Sustainable water quality results for waste water	Concern parameters are regularly tested for waste water	Zero non-compliance and Fully comply with Thai regulation	Jan to Dec 2024	Ensure that all tested parameters meet the Thai regulatory standards for wastewater. To compare them with the legal limits. Monitoring has been proceeded as plan and action in case of deviation found.		To ensure the quality of discharged water and prevent environmental pollution
		Pollution from waste water from household and industries.	3.3: Target zero landfill by identifying recycling and incineration with heat recovery technique.	All types of solid waste is completely transformed to go to zero landfill which ultimately can exploit underground water bodies (via lechate) as well as surface water. Scrap vendors developed to: 1. Recycle all plastic waste from site 2. Incinerated with heat recovery	1. Managing plastic waste to recycle vendor by daily 2. Incinerated with heat recovery by monthly	Jan to Dec 2024	Ensure on waste disposal method and monitor to comply with Zero landfill.		Transforming all types of solid waste to achieve zero landfill creates shared value by protecting water resources, conserving land.
		Pollution from waste water from household and industries.	3.4: Water quality monitoring at Klong Dan canal (receiving body)	To conduct water quality analysis in Klong Dan canal	Once a year	Sept 2024	Verify that the water quality analysis is conducted at the required frequency. Regular testing helps in maintaining an up-to-date understanding of the water condition.		To ensure the quality of discharged water and prevent environmental pollution
4	Healthy status of Important Water-Related Areas	Pollution from waste water from household and industries.	4.1: Maintain the condition of water receiving bodies	Klong Dan cleaning	Once a year	Dec 2024	Reduction in blockages and maintain the condition of water receiving bodies and ensure that the canal cleaning is completed as scheduled.		To Eliminate plastic waste and undesired plant in the canal. The Water will have an easier passing through and also environmental benefits to the community.
		Pollution from waste water from household and industries.	4.2: Community well water quality monitoring	To conduct water quality monitoring for 8 wells	Once a year	Oct 2024	The site can ensure that the community well water quality monitoring program is effective and transparent.	Transparent and regular communication of water quality results builds trust with the local community. It shows that the company is committed to ensuring the safety and well-being of the community.	
		Pollution from waste water from household and industries / Water Regeneration	4.3: Kanom Jeen canal water quality monitoring	To conduct water quality monitoring in Klong Kanom Jeen	Every 2 years	Apr 2025	Klong Kanom water quality was monitored to ensure the program is effective and transparent. It encourages community members to take an active role in maintaining and protecting their environment.	Involving the community in canal cleaning activities fosters a sense of ownership and responsibility towards local water resources. It encourages community members to take an active role in maintaining and protecting their environment.	Canal cleaning program helps in removing pollutants and debris from the water, which improves water quality and supports the health of aquatic ecosystems. This contributes to the overall environmental sustainability of the area.
		Pollution from waste water from household and industries.	4.4: Water quality monitoring for catchment Ayuthaya province	Water quality of upstream and downstream river were monitored by refering the result from government	Quarterly	Jan to Dec 2024	Regularly monitor water quality result from the Government, focusing on key parameters such as pH, DO, BOD and nitrate levels.	Transparent and regular communication of water quality results builds trust with the local community. It shows that the company is committed to ensuring the safety and well-being of the community.	
5	Safe water, sanitation and hygiene for all (WASH)	Pollution from waste water from household and industries.	5.1: Maintenance and Improvement of WASH on site	Continually improve better sanitation services to staff on site. Aim to have all restrooms equipped with necessary supplies such as soap, hand sanitizers, and disinfectants. Regularly inspect and maintain these facilities to ensure they are clean and operational.	Zero non-compliance and Fully comply with Thai regulation	Jan to Dec 2024	Ensure the site has access to clean and safe drinking water. This can be measured by the number of water access points installed.	Demonstrating a commitment to the health and well-being of employees can build trust and strengthen relationships with the local community. It shows that the company values its workforce and is dedicated to providing a safe and healthy working environment	
		Pollution from waste water from household and industries.	5.2: WASH Assessment for communities	To support community in accessing to clean water that meet the criteria set by the UN.	To support community around the factory can access to clean water	Jan - Dec 2024	Ensure that the donated bottled water comply with the Thai regulatory. To verify compliance, need to conduct regular tests on the water quality.	Demonstrating a commitment to the health and well-being of employees can build trust and strengthen relationships with the local community. It shows that the company values its workforce and is dedicated to providing a safe and healthy working environment	

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	Goal (ORGANIZED BY AWS OUTCOME AREA)	Identify Shared Water Challenge	Scope of Implementation	Action	Target	Timeline	Performance evaluation	Value creation
1	Good water governance	n/a	1.1: Development of Water Stewardship plan to address key water issues faced by community	AWS team has identified internal and external actions to be undertaken under AWS Umbrella in light of identified water challenges by CRP 3.0	To identified water challenges by CRP 3.0	every 3 years	Follow up actions which were identified via CRP 3.0	Interviews have been conducted since 2022 and multiple opportunities have been identified within defined physical scope
		n/a	1.2: Communicated Water Stewardship plan and stakeholder announcement	Periodic monitoring when it has any information changed, it will be revised and updated.	Yearly Stakeholder convening meeting	Yearly	Keep the information up to date if any changed	Communicate to all stakeholder following the plan.
		Surface water pollution (Kanom Jeeen canal)	1.3: Notification to catchment authorities and communities on sites water stewardship strategy and plans	AWS Initiative shared with identified stakeholders on different engagement levels in form of on-site and off-site meetings	Yearly Stakeholder convening meeting	Yearly	Communicated water stewardship plan via stakeholder convening	Water stewardship plan has been disclosed on website and is easily accessible to all stakeholders. Websites link has also been already shared with them.
		n/a	1.4: Meetings with identified stakeholders to have consensus on current water stewardship work and future water related development	Consultative meeting with relevant stakeholders to identified and discuss to get feedback. (CRP 3.0 Actions 2022-2024)	Interview every 3 years	every 3 years	Follow up actions which were identified via CRP 3.0	n/a
		Flood	1.5: Periodic Notification to management on water related infrastructure of any concern	Notify to management team and sharing water related infrastructure if any concern	Sharing water related infrastructure if any concern	if any change	Internal and external infrastructures have been reviewed on BCP preparation session	n/a
		n/a	1.6: Communicate to suppliers to get vendor water management techniques as good water stewards	Communication to laundry vendor to share their water management techniques as a good practice	Yearly meeting	Yearly	Relevant information will be shared to stakeholders and get feedback on any concerned issues.	Site started communication with Laundry service provider on indirect water use awareness. Encouraged Laundry supplier to reduce water use.
2	Sustainable water balance	Depletion of the GW	2.1: As identified via stakeholder consultation and hydrogeological study underground water quantity might affected with high withdraw which can impact to shared water challenge area	-Deep wells are run base on designed yield to avoid over-exploitation and conducted water withdrawal monthly review to comply with the licenses.	Monthly review	Monthly	To ensure to avoid over-exploitation factory will monitor following point below; - Monthly report review to comply with licenses - Static water level monitoring	n/a
		Depletion of the GW	2.2: Monitor for Static and Dynamic levels of Deep wells	Analysis of well static and dynamic levels are done to take relevant actions if need.	Daily review	Daily	- This has been done regularly as plan and will be used to review and update once we conduct water resources study. - We have Aquassay system which is monitoring DWL real time and will alert/hotly immediately if trend is abnormal. No abnormal trend observed.	n/a
		Depletion of the GW	2.3: Improve water resource management at catchment level	Improve site's water consumption by saving project.	2,800 m3	Yearly	Weekly monitoring water consumption and initiated water saving projects. - Water saving 2,800 m3 in Y2023 - Cost saving 30,450 THB	Cost saving 29,971 thb
		Depletion of the GW	2.4: To comply Nestle Net Zero Road Map	Reduce water usage by implementing internal water saving initiatives.	2,800 m3	Yearly	Weekly monitoring water consumption and initiated water saving projects.	Cost saving 29,971 thb
		Depletion of the GW	2.5: Improve water table of catchment	Ensure deep wells operation on safe yield and water losses monitoring to avoid over withdraw via weekly monitoring	1.25 of water ratio	Weekly	Weekly monitoring water consumption for all deep wells.	Cost saving 29,971 thb
		Depletion of the GW	2.6: Explore water saving initiatives for site to meet water usage target	Identify Water Map and review to prioritise where is main contribution of losses.	2,800 m3	Yearly	Identify water losses area and initiate water saving projects.	Cost saving 29,971 thb
		n/a	2.7: in direct water usage	To encourage them to improve water usage	To understand how they use water, and encouragement them for continuous improvement	Yearly	Continuous encourage them to improve water usage	Site started communication with Laundry service provider on indirect water use awareness. Encouraged Laundry supplier to reduce water use.
		Pollution from waste water from household and industries.	3.1: Sustainable water quality results for waste water	Concern parameters are regularly tested for waste water	Comply with Thai legal	Monthly	Monitoring has been proceeded as plan and action in case of deviation found.	Waste water management has already been conduct in 2023 to explain them how the process is and what is the factory handle it. Stakeholders responded well to this explanation.

3	Good water quality status	Pollution from waste water from household and industries.	3.2: Target zero landfill by identifying recycling and incineration with heat recovery technique.	All types of solid waste is completely transformed to go to zero landfill which ultimately can exploit underground water bodies (via lechate) as well as surface water. Scrap vendors developed to: 1. Recycle all plastic waste from site 2. Incinerated with heat recovery	Ensure on waste disposal method and monitor to comply with Zero landfill.	Completed with existing supplier	Ensure on waste disposal method and monitor to comply with Zero landfill.	n/a
		Pollution from waste water from household and industries.	3.3: Review quality status on factory discharge by monthly basis. For Deep wells, Monitoring wells and Klong Dan canal by yearly basis	Waste water and important water related areas quality test were done and regularly reviewed	Comply with Thai legal	Yearly	Monitoring has been proceeded as plan and action in case of deviation found.	n/a
4	Healthy status of Important Water-Related Areas	Salinization of the water (surface and GW)	4.1: Inspection and maintenance of IWRA	1) To conducted yearly community well water quality result by NQAC (Vittel, France laboratory) 2) To conduct yearly analysis by external party following applicable legal requirement	Yearly monitoring	Yearly	Monitoring has been proceeded as plan and action in case of deviation found.	n/a
		Surface water pollution (Kanom Jeeen canal)	4.2: Disclosure for public dissemination of AWS Audit and AWS Journey	Publicly disclosed commitment for AYF AWS Audit and AWS Journey	Yearly review	Yearly	Periodic monitoring to ensure on updated information.	n/a
		Pollution from waste water from household and industries.	4.3: Plan regular meetings with relevant stakeholders	Stakeholders are invited and joined sharing session on water saving and water quality.	Yearly Stakeholder convening meeting	Yearly	Relevant information will be shared to stakeholders and get feedback on any concened issues.	The community well quality resuly has been share in Stakeholder convening to relavant stakeholders. And get positive feedback from them.
		Pollution from waste water from household and industries.	4.4: Mitigate impact of climate change and improve livelihood	canal cleaning	Yearly cleaning	Yearly	Community engagement to raise up awareness of climate change	Cleaning Klong Dan canal was completed. Eliminate plastic waste and undesired plant in the canal. This resulted in environmental benefits/value creation to the community.
5	Safe water, sanitation and hygiene for all (WASH)	Pollution from waste water from household and industries.	5.1: Maintenance and Improvement of WASH on site	Continually improve better sanitation services to staff on site.	Yearly review	Yearly	To ensure on sanitation services	n/a
		Pollution from waste water from household and industries.	5.2: WASH Assessment for communities	Ensure community around the factory can access to clean water with UN criteria.	To review by CRP 3.0	every 3 years	Refer to information from local authority and community interview.	n/a