No	Water Challenges	Relevance	Stake holders	Stakeholders who highlighted the challenge	Prioritization	Possible sollutions
1	Flooding Flooding of areas surrounding Kelani river	Disruption to livelihood of communities, transporatation and industries due to floods Degradation of Kelani river water quality due to washing away of chemicals and waste from land. Disruption to Ambatale water intake point	Villagers living in riverbanks, NWSDB, Industries	Families living near Malwana Malwana Gramasewaka division, Biyagama DS Division	1	1. Tree Planting project- Planting MEE/Kumbuk trees in the riverbank to act as a barrier against flood 2. Clearing a lake blocked with solid waste and wild plants 3.Implement waste collection system in communities 4. Support the families and local comunities affected by floods.
	Soil erosion along the Kelani river bank	Erosion of the river bank causing changes in the shape of the river and disruptions to the families living along the bank	Communities living along the Kelani river	Families living near Malwana Malwana Gramasewaka division, Biyagama DS	1	Tree planting along the river bank 1. Tree Planting project- Planting MEE/Kumbuk trees in the riverbank to reduce erosion.
2	Drought and water scarcity	Decrease in water availability	Villagers, vulnerable groups,	Not highlighted by stakehold	3	1. Aforrestation
3	Surface water pollution: Contamination due to lack of infrastructure related to sewage discharge and solid waste management	Degradation of Kelani river water quality and affecting the quality of the treated water from Ambatale.	Villagers living near the river bank, CTC	Walgama-West Gramasewwaka division, Families living near Malwana Malwana Gramasewaka division, Biyagama DS Division	1	1Installing waste collection bins in selected locations. 2.Installation of septic tanks for washrooms. 3. Extension of sewage network 4.Connection of domestic sewage to sewer line

4	Industrial pollution: Discharge of poorly treated water and other pollutants to the water body	Degradation of Kelani river water quality and affecting the quality of the treated water from Ambatale.	Villagers living near riverbanks, vulnerable groups, CEA, NWSDB, users of water from	CEA NWSDB Local community people	1	1. ETP operator training to educate factory ETP operators. 2. Random monitoring of industrial waste water dumping areas to identify unlawful waste water disposal.
5	Salt water intrusion into the rivers	Salt water intrusion to the river mainly due to sand mining activities (Current treatment at	All people receiving water from	NWSDB	2	Installation of sand bariers. Strict enforcement of legal actions for
6	Poor human behavior	Human actions causing water pollution, poor hygiene practices and excessive consumption of water at household level.	All people receiving water from Kelani river, CEA, NWSDB	NWSDB, CEA	2	Installation of segregated waste collection points. Waste reduction and segregation awareness
7	Unlawful encroachment of riverbank	Deforestation and river reservation area related	CEA, NWSDB	CEA	3	No feasible solutions identified
8	Accidental Spills including hazardous material from the industries in the catchment	Water Quality not being to the relevant required standard for Impact on aquatic life and vegetation housing in water Cost for clean ups and cost for alternative water supplies	All people receiving water from Kelani river, CEA	CEA	1	1. Emergency response plan development and training for chemical spills
9	Pollutants entering groundwater	Water Quality not being to the relevant required standard for	People obtaining	lot highlighted by stakeholder	2	Awareness sessions
10	Increasing in the water demand for industrial purpose	Decrease the water availability for livelihood	People obtaining	NWSDB	3	Awareness sessions
11	Increase of population density and increasing demand for water due to high	Decrease the water availability for livelihood Low pressure water supply	People obtaining water from	lot highlighted by stakeholder	2	Awareness sessions
12	High wastage of water due to inefficient plumbing systems	Increase of treated water (from treatment plant) wastage	People obtaining	NWSDB	2	Renovation of existing plumbing lines

13	Climatic and weather pattern changes	Decrease the water availability for livelihood and Agriculture	Local society, industries,	Common recognized challenge	2	Aforrestation
14	High cost of water	Increase of expenditures on water supply due to increase of tariff by the government authorities	People and industries obtaining water from	Not highlighted by stakeholders (Water is relatively cheap in SL)	3	Water conservation awareness Recycling of waste water
15	Water supply system breakdowns	Lack of water availability Insufficient pressure and not meeting the minimum demand to water for essential activities Deterioration of supply water	People and industries obtaining water from NWSDB	Not highlighted by stakeholder	3	Work process improvements for NWSDB
16	Poor quality of supply water	Not meeting the desirable level of water for consumption and consumption leading to water borne diseases	Pipe water consumers	Private organizations	2	Reduce pollution of water at the catchment Infrastructure improvements for NWSDB
17	Consumer misconceptions and lack of trust on quality of water supply	Unnecessary and extra steps taken by consumers causing extended environmental impacts	Pipe water consumers	NWSDB	3	Awareness sessions
18	Unavailability of established water supply systems	Lack of access to secured water supply and clean water	Poor communities	Grama Sewakas	2	Providing house connections to supply water lines
19	Social and cultural establishments leading to substandard living and	Poor hygiene and sanitation	Vulnerable communities, religious	Vissually identified	1	Hygiene and sanitation awareness sessions
20	Inadequate access to toilets and washing facilities	Improper access to substandard toilet facilities causing direct contamination of surface and	People and industries obtaining	Malwana Gramasewaka division, Biyagama DS Division	1	Construction of proper standard washroom facilities for vulnerable communities.

21	Degrading water retention capacity of water catchment areas This also leads to increase floods	Fast drop in water levels of catchments during drought causing water supply limitations	People and industries obtaining water from NWSDB	Community families	2	Restriction of construction and encroachment on marshy land areas and wetlands Awareness sessions Wetland and marshy land protection campaigns
22	Lack of data and studies conducted on catchment water inflows, peak-off-peak availability and water balance	Lack of data driven water balance and quality management strategy of the catchment	People and industries obtaining water from NWSDB, CTC	Indentified when gathering data on the catchment. IWMI	2	Conduct research to gather data on the catchment with regards to water balance, sustainability and water quality. Monitor water quality across different points along the catchment.
23	Lack of presence of WASH services in public places	Inconveniences caused to general public and unsafe acts leading to environmental pollution	Poor and vulnerable communities	Not highlighted by stakeholders but when asked many stakeholders mentioned that the available facilities are not well maintained.	3	Proper maintainace of available public washroom facilities Creative poster campaign near the public facilities to influence the people not to damage the facilities and to use them properly.
24	Garbage dumped at beaches	Pollution along the coast, affects tourism which is the main source of income for the coastal	Coastal communities	Community, Malwana Gramasewaka division, Biyagama DS Division	1	Construction of proper standard washroom facilities for vulnerable communities.

Vision								
Water for a Better Tomorrow								
Mission								
Drive a robust water stewardship agenda through scaled up partnerships and collaboration of stakeholders								
Goal								
Drive strong water governance at site and support catchment water governance actions		Source of Action	Key Performance Indicators	Target 2024/2025	Measurement and Monitoring Action	Responsible	Status	Deadline
Actions	Establish & sustain site water governance team with clear responsibilities	Risk Mitigation	The team formed with clear responsibilities	Complete team structure revision in H4 2023 & Q1 2024	Conduct annual review of status updates against responsibilities	ESS&S Manager	Done	
	Review, update and assess the regulatory compliance requirements and obligations	Risk Mitigation	Min 01 revision/ year	Maintain 100% compliance status in 2023/2024	Annual regulatory compliance assessment	Sustainability manager	Done	
	Activate & Implement the process for potential violation reporting and discloser	Risk Mitigation	Violation reporting withing 48 hrs.	Zero non reported violations in 2023/2024	Monthly incident review	Sustainability manager	Done	
	Conduct stakeholder meetings to obtain feedbacks and identify challenges	Challenges	Min 03 meetings/year	100% coverage of Managed closely & keep satisfied stakeholders in 2023 & 2024	Annual plan revision based on stakeholder feedbacks	ESS&S Manager	Done	
	Review & update water risk and opportunity assessment	Risk Mitigation	Min 01 revision/ year	Complete the risk and opportunity assessment revision in Q3 2023	Annual plan revision	ESS&S Manager	Done	
	Develop and review water stewardship strategy, plan and negotiate with stakeholders for plan implementation	Risk mitigation/Opportunity	Min 01 revision/ year	Revised plan cascade and alignment of keep satisfied stakeholders in Q3 2023	Annual plan revision	ESS&S Manager	Done	
	Identify emergency scenarios and develop and emergency response plans & testing	Risk mitigation/Opportunity	Improved knowledge and ERP plan implementation	Document ERPs and conduct at least 1 drill per year	Annual review and testing of the plan	Sustainability Executive	Done	
	Improve catchment water related data availability	Opportunity	Work together with universities to conduct researches at Kelani river	Minimum 2 water related studies done for Kelani rivers	Engagement with university	Sustainability executive/ Kelani university	In Progress	Q4 2025
	Conduct joint stakeholder meeting	Risk mitigation/Opportunity	Execute min 01 programme/year	Bring together atleast 8 stakeholders together, identify shared challenges and derive joint actions	Annual programme execution	Sustainability Executive	Not started	Sep-24
Goal								
Strengthening and promoting the efficiency in water use at site and beyond		Source of Action	Key Performance Indicators	Target	Measurement and Monitoring Action	Responsible	Status	Deadline
Actions	Zone wise water metering and monitoring	Risk mitigation/ Opportunity	35% reduction in water withdrawal by 2025	Run Enercon DMS ti track losses	Daily monitoring and monthly reporting and withdrawal trend mapping	Assistant Manager - Civil Engineering	Continued	
	Installation of RO Plant	Risk mitigation	30% recycling of waste water by 2025	Meet 30+% water recycling at Colombo site in 2025	Monthly monitoring of recycled water and biannual monitoring of treated waste water quality.	Assistant Manager - Civil Engineering	Done	Mar-24
	Conducting the leak detection survey at site	Risk mitigation	35% reduction in water withdrawal by 2025	Fixing of identified leakages	Incident based or quarterly survey	Assistant Manager - Civil Engineering	Done	
	Purchase ultrasound leak detection device and conduct survey internally	Risk mitigation/ Opportunity	35% reduction in water withdrawal by 2025	Fixing of identified leakages and eliminate leak detection service cost from 3P vendor	Incident based or quarterly survey	Assistant Manager - Civil Engineering	Done	
	Installation of tap mounted aerators to minimize water consumption	Risk mitigation	35% reduction in water withdrawal by 2025	500+ liters water saving in 2024	Monthly monitoring of water withdrawal and withdrawal reduction over time	Assistant Manager - Civil Engineering	Done	2025 Q2
	Installation of foot operated taps for kitchen and canteen	Risk mitigation	35% reduction in water withdrawal by 2025	500+ liters water saving in 2024	Monthly monitoring of water withdrawal and withdrawal reduction over time	Assistant Manager - Civil Engineering	Done	
	Expand recycled water pipe network to admin and south road area	Risk mitigation	30% recycling of waste water by 2025	Meet 30+% water recycling at Colombo site in 2025	Network expansion projects completion and recycle water quantity monitoring	Assistant Manager - Civil Engineering	Done	2025 Q3
	Expand recycled water pipe network to all chillers	Risk mitigation	30% recycling of waste water by 2025	Meet 30+% water recycling at Colombo site in 2025	Network expansion projects completion and recycle water quantity monitoring	Assistant Manager - Civil Engineering	Done	2024 Q3
	Installation of ultrasound flow meter to sewage water pipeline	Risk mitigation	Water metering and monitoring improvement	Achieve level 3+ water meriting at Colombo in Q3 2024	Daily monitoring and monthly reporting and withdrawal trend mapping	Assistant Manager - Civil Engineering	Not Started	
	Installation of ultrasound flow meter to ETP inlet to obtain accurate readings of treated water	Risk mitigation	Water metering and monitoring improvement	Achieve level 3+ water meriting at Colombo in Q3 2024	Daily monitoring and monthly reporting and withdrawal trend mapping	Assistant Manager - Civil Engineering	Done	2024 Q4
	Modification of cooling of vacuum plant at SMD by installing of a chilled water line SMD chiller	Risk mitigation	35% reduction in water withdrawal by 2025	1000+ liters of water saved in 2024	Monthly monitoring of water withdrawal and withdrawal reduction over time	Mechanical site services manager	Done	Jul-24
	Monitoring of condensate water recovery from boiler	Risk mitigation	30% recycling of waste water by 2025	Meet 30+% water recycling at Colombo site in 2025	Monthly monitoring of water withdrawal and withdrawal reduction over time	Assistant Manager - Civil Engineering	Done	Aug-24
	Catchment water balance assessment	Opportunity/Challenges	Assessment completion	Arrive with a water balance expert assessment for catchment	Water balance assessment completion and information sharing with stakeholders	CTC/SLMA	Done	Oct-24
	Afforestation projects carried out in Sri Lanka	Opportunity	Continuation of the project	Completion of new project and continuation of the existing 2 projects	Number of trees planted/ Carbon credit generation	CTC/ Forestry department	In prog/ Cont	
	Installation of sensor taps	Opportunity	35% reduction in water withdrawal by 2025	Install sensor taps covering canteen, admin and other washrooms sinks	Daily monitoring and monthly reporting and withdrawal trend mapping	Assistant Manager - Civil Engineering	Done	Q3 2025
	Installation of volume control shower heads	Opportunity	35% reduction in water withdrawal by 2025	Installation of shower heads for cloakrooms	Daily monitoring and monthly reporting and withdrawal trend mapping	Assistant Manager - Civil Engineering	Done	Q3 2025
	Installation of industrial taps for kitchen	Opportunity	35% reduction in water withdrawal by 2025	Install taps for kitchen	Daily monitoring and monthly reporting and withdrawal trend mapping	Assistant Manager - Civil Engineering	Done	Q2 2025
	Reduction of car washing frequency	Opportunity	Reduce washing frequency to twice a week	78000+ water saving annually	Ensure company car washing done only twice a week	Logistics and transport manager	Continued	Q1 2025
	Promotion of water use reduction in households and institutes	Challenge	01 identified cluster/year	Conduct the leaflet based promotional activity in two areas under KMC & NWSDB by End Dec	Selected household level water usesage monitoring and assessment	CTC/NWSDB/CMC	Not started	
Goal								
Assurance of water quality and contribution towards catchment water pollution control programmes		Source of Action	Key Performance Indicators	Target	Measurement and Monitoring Action	Responsible	Status	Deadline
Actions	Carryout site water and waste water quality testing	Risk Mitigation	Compliance to quality standards	Achieve 100% compliance to the standards in all the tests conducted	Bi annual check of compliance against standards	Assistant Manager - Civil Engineering	Cont.	Cont.
	Site waste bay revamping	Risk mitigation	Compliance to quality standards	100% compliance to BAT standard	Frequent safety walks and pulsar	Assistant Manager - Civil Engineering	Done	2024 Q1
	Solvent stores revamping	risk mitigation	Compliance to quality standards	100% compliance to BAT standard	Frequent safety walks and pulsar	Assistant Manager - Civil Engineering	Done	2024 Q1
	Spill kit installation for all site areas	risk mitigation	Compliance to quality standards	100% compliance to BAT standard	Monthly inspection	Quality compliance Manager	Done	2024 Q1
	External assessment of land contamination	risk mitigation	Compliance to EHS standard	100% compliance to BAT standard	Complete assessment and implementation of phase wise plan	Sustainability Executive	In progress	Q4 2025
	Catchment Pollution Reduction/Prevention Programme	Opportunity/Challenges	01 initiatives/year	01 initiatives/year	Participation and completion	Sustainability Executive	Done	
	Site solid waste management and minimize waste to landfill	Risk Mitigation	1% less than waste to landfill from site	Maintain zero waste to landfill status	Improved waste segregation and management at site and water to landfill quantity moni	Sustainability Executive	Cont.	Cont.
	Testing of water quality at multiple locations of Kelani river	Risk Mitigation	Completion of testing	Identify areas along Kelani river which are highly polluted	Identify the areas of high pollution and communicate to relevant stakeholders	Sustainability Executive	In-progress	2028
	Installation of waste collection bins at Malwana and Welgama area	Risk Mitigation	Completion of project	Installation of 75 bins	Installation of bins and monitor status	Sustainability Executive/ Biyagama DS division	In-progress	Sep-25
	Installation of plastic waste collection bin at town areas in Biyagama	Risk Mitigation	Completion of project	3 bins per year	Installation of bins and monitor status	Sustainability Executive/ Biyagama DS division	Not started	Dec-25
	Support plastic and polythene waste collection campaign	Risk Mitigation	Completion of project	1 campaign per year	Amount of waste plastic and polythene collected	Sustainability Executive/ Zero plastic movement	Not started	Sec 2025
	Facilitate water quality promotion campaigns & water conservation awareness	Challenge	01 campaign/year	02 sessions completed for village community	People moving to direct use of pipe water for drinking purposes	CTC/NWSDB/CMC	Planned	Jun-24
Goal								
Catchment areas and infrastructure maintenance and restoration for sustainable water resources		Source of Action	Key Performance Indicators	Target	Measurement and Monitoring Action	Responsible	Status	Deadline
Actions	Carryout water distribution and storage system inspection and maintenance	Risk Mitigation	OITF execution of maintenance plan	Zero breakdowns of water distribution system due to maintenance issues in 2023 & 2024	Maintenance plan completion and water quality compliance assessment	Assistant Manager - Civil Engineering	Cont.	Cont.
	Conduct preventive maintenance of ETP plant	Risk Mitigation	OITF execution of maintenance plan	!00% compliance of treated waste water quality status	Maintenance plan completion and waste water quality compliance assessment	Assistant Manager - Civil Engineering	Cont.	Cont.
	Tree planting projects	Challenge/Opportunity	Catchment challenges identification	Identification of minimum 5 projects	Continuous identification of challenges and prioritization	CTC/ all other stakeholders	In progress	Oct-25
	Canal cleaning and clearing project	Challenge/Opportunity	OTIF completion of the project	Completion of minimum 2 projects per year	Analysis of the improvement trend	CTC/ all other stakeholders	Planned	Nov-25
Goal								
Achieve safely managed water, sanitation and hygiene for workplace and communities		Source of Action	Key Performance Indicators	Target	Measurement and Monitoring Action	Responsible	Status	Deadline
Actions	Continual improvement of WASH services at site	Risk mitigation	Compliance WASH standards	100% compliance to WASH standards and BAT standards	Annual assessment of WASH serve provision compliance to regulatory obligations	Assistant Manager - Civil Engineering	Cont.	Cont.
	Conduct WASH awareness at site	Risk mitigation	Coverage of whole site team	Complete WASH awareness with 100% site coverage on World Water Day	Site coverage, training attendance and feedback assessment	Sustainability Executive	Cont	Cont.
	Re-installation and revamping of user feedback system for WASH services	Risk mitigation	Compliance to WASH standards	Installation in all the most used washrooms	Daily issue discussion during DDS	Assistant Manager - Civil Engineering	Planned	Q2 2026
	Systematic maintenance of WASH infrastructure	Risk mitigation	Compliance to WASH standards	100% compliance to WASH standards in 2023 & 2024	Plan completion status & user feedback and complain assessment of the status of WASH services	Assistant Manager - Civil Engineering	Cont.	Cont.
	Construction of washrooms for poor families at catchment	Challenge	completion of project	completion of project	completion of project	Assistant Manager - Civil Engineering	Done	Jun-24
	Installation of sanitary pad dispensers for female washrooms on site	Opportunity	Completion of project and signing agreement	Completion of project and signing agreement	Employee feedback and usage	Assistant Manager - Civil Engineering	In progress	Nov-25
	Construction of washroom for womes's wellness clinic	Challenges	completion of project	completion of project	completion of project	Assistant Manager - Civil Engineering/ DS offcie	In progress	
	Conduct WASH awareness for women, and other selected vulnerable communities	Challenge	02 sessions/year	Conduct the sessions focusing the women & children in the physical scope areas	Training attendance and feedback gathering	CTC/AGA/CMC/NWSDB	In-Progress	Sep-25
Goal								
Promoting the care for Water through systemic behavioral change by capability building and voluntary actions		Source of Action	Key Performance Indicators	Target	Measurement and Monitoring Action	Responsible	Status	Deadline
Actions	Onsite capability building awareness to promote the care for water	Opportunity	Coverage of whole site team (World water day, Env day)	Complete WASH awareness with 100% site coverage on World Environment Day	Training attendance and feedback gathering	Sustainability Executive	Done	June every year
	Enable catchment areas rehabilitation, cleaning and river bank maintenance through projects and tree planting initiatives	Challenge/Opportunity	01 initiatives/year	NA - Targets will be set in 2024 plan	Post project completion status assessment and monitoring of participation of voluntary a	CTC/CMC/AGA	Planned	Nov-25