



Water Stewardship Plan Implementation CTC GLTP

Oct 2023



VISION

“Water for a Better Tomorrow”



MISSION

“Drive a robust water stewardship agenda through scaled up partnerships and collaboration of stakeholders”



**GOOD WATER
GOVERNANCE**



**SUSTAINABLE
WATER
BALANCE**



**GOOD WATER
QUALITY STATUS**



**IMPORTANT
WATER
RELATED AREAS**

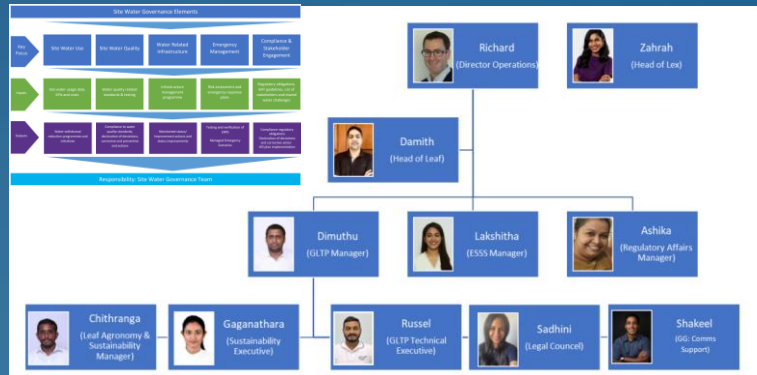


**SAFE WATER,
SANITATION
AND HYGIENE
FOR ALL (WASH)**

GOOD WATER GOVERNANCE



- Establish site water governance team with clear responsibilities
- Conduct regulatory compliance assessment and noncompliance disclose if any



- Take part in catchment water governance awareness programmes implemented by the stakeholders



Drive strong water governance at site and support catchment water governance actions



Identify emergency scenarios and develop a joint emergency response plans

Stakeholder	Name	Designation	Contact	Signature
AGC Office	Ms. Thekshila Damayanthi	Divisional Secretariat	0702741000	
	Mr. Abasinghe	Chairman, Divisional Secretariat Office	0714443707	
	Mr. Priyani	Secretary to Chairman	0719772408 / 0718113454	
National Water Supply and Drainage Board	Mr. S.U. Ekaneginghe	Manager	0777812814	
	Mr. S.S. Navaratne	Area Engineer	0716260506	
	Mr. Subasingharama	Engineer-Operations and Maintenance	0766101510	
	Mr. Asoka Jayawardena	Chief Chemist	0777176253 / 0713785411	
	Mr. Diluka Sri Kumarantha Kumara	Senior Sociologist	0773973979	
Mahaweli Authority	Mr. Kalitha Rathnayake	Chief Officer	0713076182	
	Mr. Mahi Dissanayake	Engineering Assistant	07119465443	
	Mr. Abhula Pathakumara	Enquiry Director	0745781391	
Central Environmental Authority	Mr. Lath Samaranayana	Engineer	0711488121/071251	
	Mr. Upul Dissanayake	Assistant Engineer	0718281386 / 0760513044	
Kandy Municipal Council	Mr. Wasala	Senior Environmental Officer	0704051422	
	Mr. Mahesh Perera	Development Officer	0719102111/0718	
	Mr. Theashara Jayasinghe	Engineer-Waterworks	0715102111/0718	
Environmental Police	Mr. Dinuka Seneseerane	Engineer-Wastewater	0715102111/0718	
	Mr. Samanthe Amarasekera	Customer Care	0711491418/2	
Grains Milling/ MOH/ Wastewater	Mr. Jayasinghe	Chief Inspector	0714380555	
	Mr. Abhula Weerasinghe	Senior Inspector	072511780	
Open University- Peggala	Mr. K.G.A Weerasinghe	Senior Inspector	0713781088	
	Grains Milling	Grains Milling	0713781088	
Community representative	Dr. Indul Perera	Medical Officer of Health	0718281319 / 0718732687	
	Mr. Anushka Bandara	Assistant Director	0712257670 / 0812194083	
	Mr. Sena Dissanayake	Opposition leader KMC		
	Mr. Nimal Peter	Secretary Mahaweli Ganathota Welfare Society		

Conduct stakeholder survey to obtain feedbacks



Develop water stewardship strategy, plan and negotiate with stakeholders for plan implementation

Site Water Governance Initiatives Performance 2022/2023

GOOD WATER
GOVERNANCE



*Drive strong water
governance at site
and support
catchment water
governance actions*

Target Status

- 100% compliance to water related regulatory obligations
- Zero violations to regulatory obligations
- 40 stakeholder covered in the initial engagement process
- 20+ challenges identified lined to AWS outcomes
- 02 feedback sessions & 05 one to one meetings conducted with stakeholders

- Site water related risk assessment completed
- 100% manage careful stakeholder covered (8 out of 08) endorsement of WSP
- ERP theoretical training for 22 government officials
- 03 governance programmes completed
- 30 awareness boards erected across the catchment

Benefits

- Ensure CTC GLTP's license to operate
- Eliminate the regulatory and reputational risks
- Stakeholder collaboration to drive a common AWS agenda
- Ability of identifying and prioritizing the critical risks and challenges of the catchment
- Create synergy among the stakeholders

- Stakeholder collaboration to executive Site's wastewater emergency response plan
- Quick response capability enhancement
- Water governance related awareness building across the catchment
- Reduction of catchment pollution

SUSTAINABLE WATER BALANCE



Zone wise water metering and monitoring



Old Meter Locations	New Meter Locations	Size		Size		Size		Size	
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
Waste Machine	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
Other	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0
	Hot Water	0	0	0	0	0	0	0	0

Deployment of 33 monitoring meters covering total site

Investment LKR 2.6 million

Strengthening and promoting the efficiency in water use at site and beyond

Upgrading of underground pipe network to prevent leakages



Investment LKR 1.4 million

Installation of tap mounted aerators to minimize water consumption



Expand recycled water pipe network at site to increase usage for gardening and washroom flushing





35%
Withdrawal
Reduction



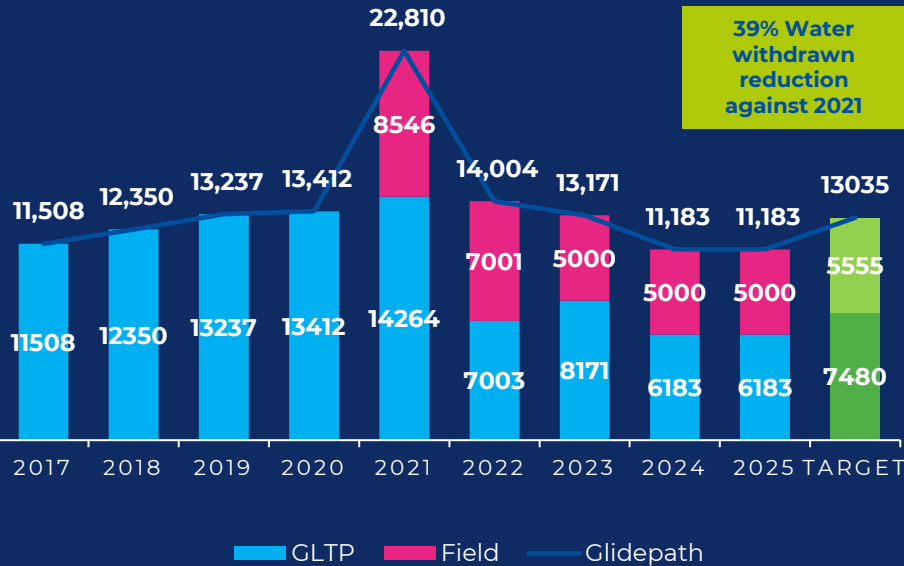
40% Water
Recycling



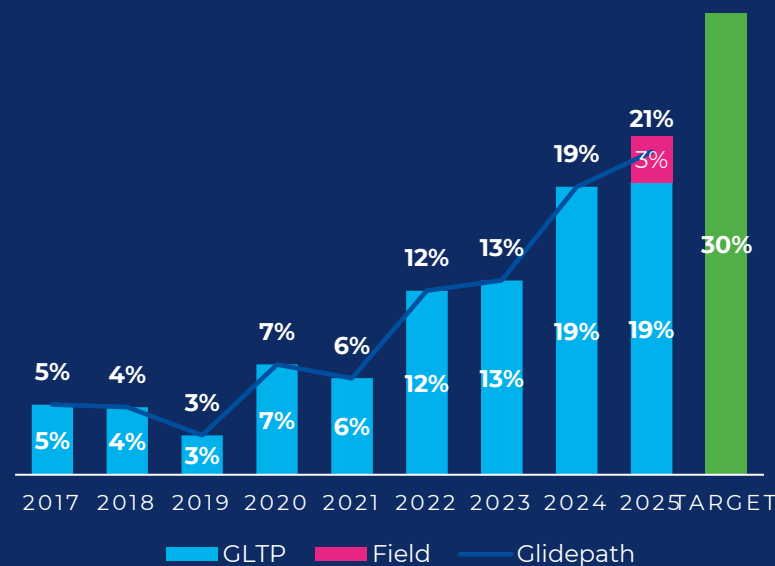
GLTP AWS
Certification



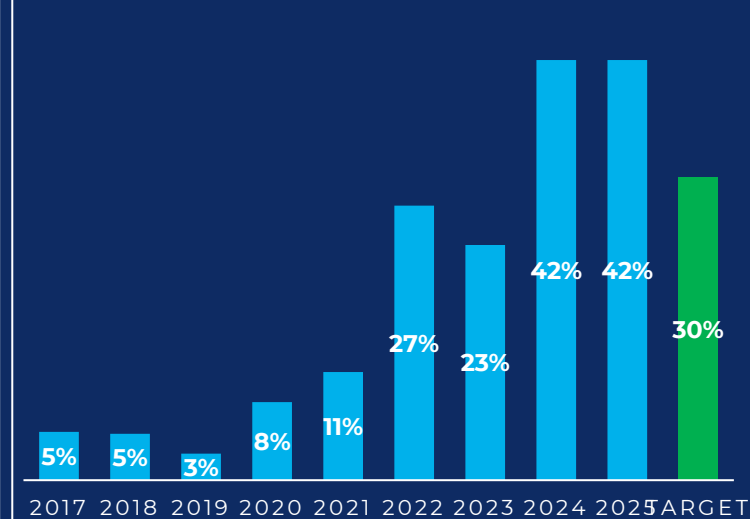
WATER WITHDRAWN (M3)



WATER RECYCLE (%)



WATER RECYCLE GLTP (%)



Initiatives

2022

- Leak detection and streamline of water distribution network in H2 2021- GLTP
- Phase 2 ETP capacity increase in GLTP
- Water metering and streamline of water distribution network – GLTP & Filed

2023

- Condensate water recovery, Increase water recycling, Water use efficiency improvements -
- Tap mount aerator installation for handwashing area
- Phase 3 ETP capacity increase in GLTP – 670 CUM

2024

- Leak detection survey

2025

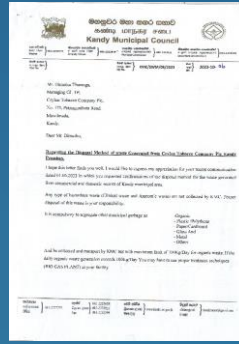
- Mini water recycling plant (1.5 Mn)- One Depot

GOOD WATER QUALITY STATUS

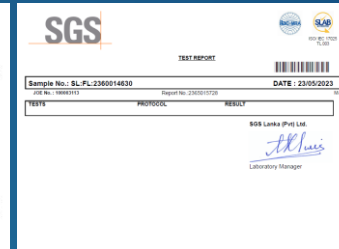


Assurance of water quality and contribution towards catchment water pollution control programmes

Site solid waste management and minimize waste to landfill

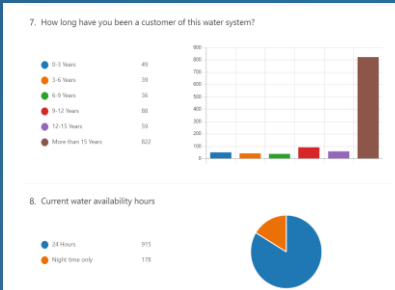


Carryout site water and wastewater quality testing



Location	Parameters	Frequency
GLTP Inlet	Physical and organoleptic, Chemical, Microbiological, Toxic substances	Annually
ETP Inlet	Physical, Chemical, Microbiological, Pesticide residues	Quarterly
ETP Outlet	Physical, Chemical, Microbiological, Pesticide residues	Quarterly
Hydrant Sump- GLTP, Hydrant Sump 2- M'wetiya, Water Storage sump, Odour Plant	pH, Total Suspended Solids, BOD, COD, Oil and grease, Total residual chlorine, dissolved phosphates, Fecal Coliform	Monthly
	Liogonella	Quarterly

Nighttime water intake raw water quality inspection at night



Conduct consumer surveys on quality of pipe water supply
1063 families covered

Village community awareness and water filter distribution

Water conservation and care for water awareness conducted covering the wider community
With the support of AGA and NWSDB



GOOD WATER QUALITY STATUS



Assurance of water quality and contribution towards catchment water pollution control programmes

Good Water Quality Performance 2022/2023

Target Status

- 1% > waste to land fill status achieved
- The endorsement on good governance of solid waste received from KMC
- Site water quality testing frequency increased beyond obligations
- ETP treated water testing frequency – quarterly vs annual

- 100% compliance BAT and obligatory requirements
- 02 water quality related projects completed with NWSDB
- Online consumer feedback survey platform established to conduct consumer surveys
- 1063 families covered in 1st survey and analysis shared with NWSDD

Benefits

- Contribution to catchment pollution reduction through good solid waste governance
- Catchment pollution reduction through discharge water quality assurance and minimizing the quantity of water discharged
- Reduction of health risk to employees and community

- Assurance of license to operate and elimination of reputational and regulatory risk
- Easy access to water quality information and analysis
- Drinking water quality concerns addressed through preventive actions
- Driving of continuous improvements towards water quality

**IMPORTANT
WATER
RELATED
AREAS**



Catchment areas and infrastructure maintenance and restoration for sustainable water resources

➤ **Support the renovation of floating barriers of important locations of the catchment**



➤ **Enable cleaning of important catchment areas through infrastructure provisions**



Re-forestation of degraded areas of the catchment's banks and catchment areas



Spring well reactivation support



Storm water retaining pond rehabilitation & capacity expansion



Natural & sensitive wetland protection

Planned

- Rehabilitation of mini water ponds of catchment areas.
- Ground water re-charge study
- Continuation of planned afforestation programmes

IMPORTANT WATER RELATED AREAS



Catchment areas and infrastructure maintenance and restoration for sustainable water resources

IWRA Actions and Performance 2022/2023

Target Status

- 02 key projects completed with SLMA on river basin protection and maintenance
- 30+ trees planted in 03 degraded land slots of riverbank
- Current status assessment survey of riverbank and water retaining ponds completed
- 10+ potential interventions for IWRA improvements identified

- Two project initiated and ongoing to reactivate sprint water sources – Will be completed by Dec 2023
- One project initiated and ongoing to reactivate spring water ponds in sensitive area of the catchment – Will be completed by Dec 2023

Benefits

- Riverbank and water contamination control through frequent cleaning of floating debris
- Eliminate hindrances to economically important power generation related water supply
- Riverbank degradation control and status improvement
- Riverbed capacity maintenance through retaining pond functionality restoration

- Reactivation and protection of the capacity of spring water sources
- Water retaining capacity improvement of important water related areas
- Water sensitive areas degradation privation through improving the forest coverage

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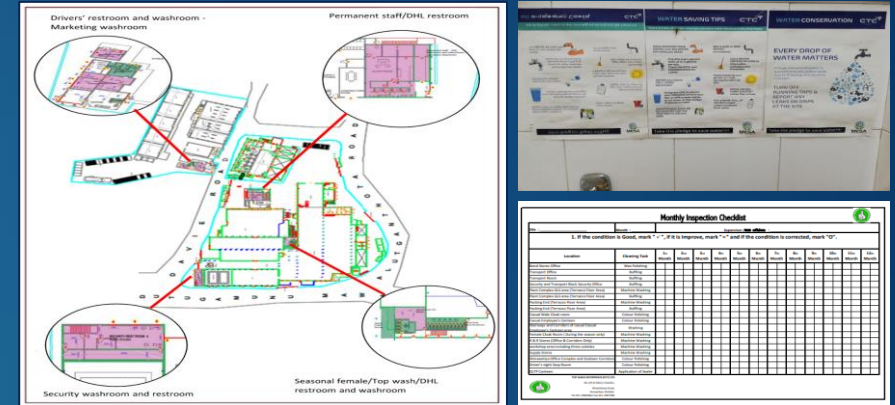


Achieve safely managed water, sanitation and hygiene for workplace and communities

➤ **Continual improvement of WASH services at site**



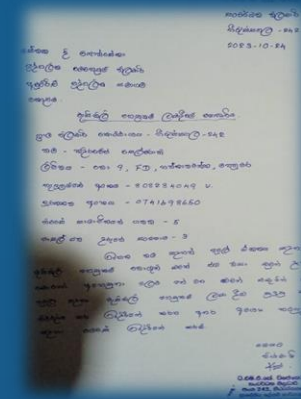
➤ **Systematic maintenance of WASH infrastructure**



Spring well re-activation and water supply connection establishment in selected vulnerable community areas



Provide water supply infrastructure for the vulnerable communities living in highlands with lack of access to pipe water/limited water supply



Uplifting Private units for families



Conduct WASH awareness for women, children and other selected vulnerable communities

**SAFE WATER,
SANITATION
AND HYGIENE
FOR ALL
(WASH)**



Achieve safely managed water, sanitation and hygiene for workplace and communities

Good Water Quality Performance 2022/2023

Target Status

- WASH services are established beyond obligatory standards
- Two new improvements to WASH facilities completed to ensure improved standard for seasonal, contractual and factory staff
- WASH awareness at site completed with 100% coverage of site staff through 03 programmes

- Two WASH awareness programmes completed focusing women and vulnerable communities (56 participants)
- One project completed with NWSDB to assure the water availability of vulnerable communities living in highlands of the catchment
- One project initiated to provide safe access to toilets facility for a 05 members family lives in the catchment

Benefits

- Employee satisfaction and elimination of complains and regulatory risks
- Improved hygiene conditions at site and better working environment
- Enabled employee support and adherence towards good hygiene starts through awareness and capability building

- Improved WASH awareness among vulnerable communities of the catchment
- Water supply assurance for 25 families located in highlands of catchment area
- Meeting the basic need of the people living in the catchment

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GOOD WATER GOVERNANCE

07 actions completed



SUSTAINABLE WATER BALANCE

05 actions Completed

04 Ongoing



GOOD WATER QUALITY STATUS

04 actions completed

04 Ongoing



IMPORTANT WATER RELATED AREAS

05 actions completed

02 ongoing



SAFE WATER, SANITATION AND HYGIENE FOR ALL (WASH)

05 actions Completed

02 ongoing

