# Water Stewardship Plan Implementation CTC GLTP

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Oct 2023







MISSION

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

**VISION** "Water for a Better Tomorrow"





#### GOOD WATER GOVERNANCE



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

- 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





Identify emergency scenarios and develop an joint emergency response plans

		Attendance Sheet	for Water Stewardship July 2022 Stakeholder P
I Branching Jacoby & Assess Press Marchine	Stakeholder	Name	Designation
plan instantidige perfectilitatil from your porty for un Thenk your		Ms. Thakshila Damayanthi	Divisional Secretariat
inclusion used many Please for the sciences	AGA Office	Mr. Abesinghe	Chairman- Divisional Secretariat Office
		Ms. Priyani	Secretary to Chairman
		Ms. S.U. Elangasinghe	Manager
Daniel I	National Water	Mr. S.K. Nawarathna	Area Engineer
		Mr. Subawickrama	Engineer- Operations and Maintenance
od vallete the californial (kalificar are weat	Supply and Orainage	Mr. Asoka Jayawardena	Chief Chemist
and the second sec	Board	Mr. Diluka Sri Krishantha Kumara	Senior Sociologist
Adacing in aphylican Faller (other start)		Mr. Kolitha Rathnayake	Chief Officer
		Ms. Mihiri Dissanayake	Engineering Assistant
100 C		Mr. Athula Pushpakumara	Deputy Director
# (Prosectary sectors as high, Ministry, 1941)	Mahaweli Authority	Mr. Lalith Samaraweera	Engineer
		Mr. Upul Dasanayake	Assistant Engineer
disaits, hereing ages and it takages due to excess	Central	Mr. Wasala	Senior Enviornmental Officer
And Theodog	Enviornmental Authority	Ms. Nilukshi Perera	Development Officer
ent (freeze tele sectored as high, deletary, sone)		Mr Thushara Jayasinghe	Engineer- Waterworks
i jarten	Kandy Municipal Council	Mr Dinuka Senevirathne	Engineer-Wastewater
advected (Phase talk dash dash at high, Mushan,	Council	Ms. Samanalee Amarasekara	Customer Care
an other many parts with the second many		Mr. Jayasinghe	Chief Inspector
also regards the "southhanes to second"	Enviornmental Police	Mr. Athula Weerasinghe SSEafound	Senior Inspector
	10000000000000000000000000000000000000	Mr. K G A Weerasinghe	
e Marrid addet (hallenges and to mitigate the rais)	Grama Niladari	Mr. Hapukotuwa	Grama Niladari
	MOH Wattegama	Dr. Indunil Perera	Medical Officer of Health
	Open University- Polgolla	Mr. Anushka Bandara	Assistant Director
	Community	Mr. Sena Dissanayake	Opposition leader KMC
	representative	Mr. Nenal Peter	Secretary Mahaweli Ganthota Welfare Society

Conduct stakeholder survey to obtain feedbacks



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

#### GOOD WATER GOVERNANCE

## Site Water Governance Initiatives Performance 2022/2023



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

Benefits

- 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 <u>30 awareness</u> boards erected across the catchment

- 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



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

## Zone wise water metering and monitoring









Investment LKR 2.6 million

Deployment of 33 monitoring meters covering total site

## Upgrading of underground pipe network to prevent leakages



Investment LKR 1.4 million

Installation of tap mounted aerators to minimize water consumption

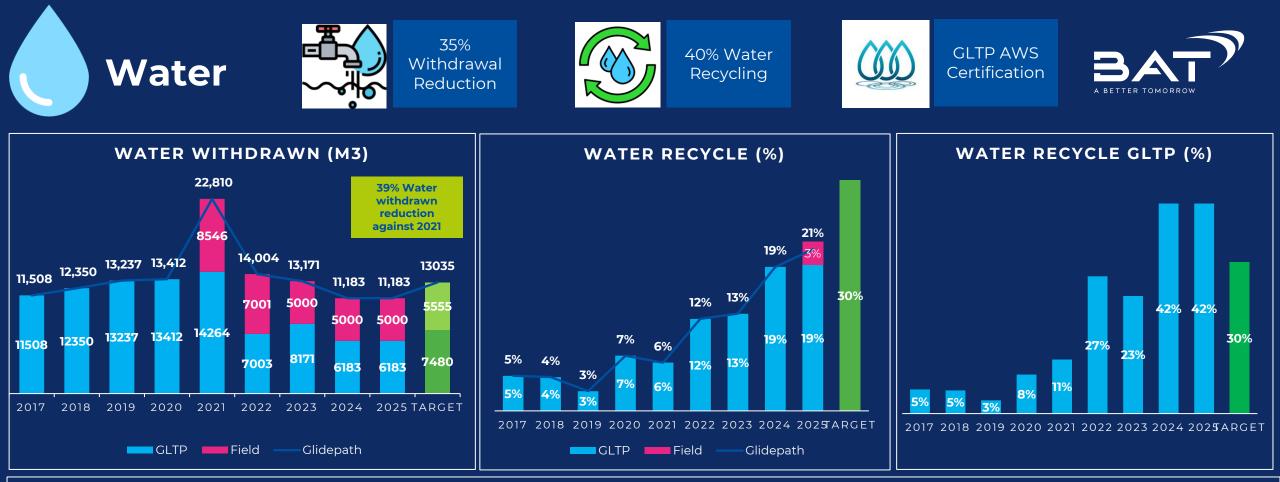


Expand recycled water pipe network at site to increase usage for gardening and washroom flushing









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 <u>survey</u>

#### 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



SGS		€	SGS	
	TEXT.REPORT		TEST	ASPORT
Sample No.: SL:FL:		DATE : 23/05/2023		
JOE No. : 100820113	SAMPLE COLLECTED BY SGS LANKA (PVT) LTD. SRI LANKA	MAL	Sample No.: SL:FL:2360014630 JOL No.: 19093113 Recent No. 22	DATE : 23/05/2023
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	Location		Parameters	Frequency
	GLTP Inlet		and organoleptic, Chemical, biological, Toxic substances	Annually
	ETP Inlet	Physical	, Chemical, Microbiological, Pesticide residues	Quarterly
		Physical	, Chemical, Microbiological, Pesticide residues	Quarterly
	ETP Outlet	Oil and g	Suspended Solids, BOD, COD, rease, Total residual chlorine, d phosphates, Fecal Coliform	Monthly
	Sump- GLTP, Hydrant Sump 2 , Water Storage sump, Odou		Liogonella	Quarterly

Carryout site water and

wastewater quality testing

#### Nighttime water intake raw water quality inspection at night



		900
0-3 Years	49	800
3-6 Years	39	700
6-9 Wears	36	500
9-12 Years	88	400
12-15 Years	59	300
More than 15 Years	822	100
8. Current water availab	ility hours	
	915	
24 Hours		

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 Performance 2022/2023

- The endorsement on good governance of solid waste received from KMC
- Stie water quality testing frequency increased beyond obligations
- ETP treated water testing frequency quarterly vs annual

- 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

100% compliance BAT and obligatory requirements

conduct consumer surveys

NWSDD

02 water guality related projects completed with NWSDB

Online consumer feedback survey platform established to

1063 families covered in 1<sup>st</sup> survey and analysis shared with

- 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 Target Status

Benefits

## IWRA Actions and Performance 2022/2023

- 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
- 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 trough retaining pond functionality restoration

- 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 – Wii be completed by Dec 2023

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



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



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

## Continual improvement of WASH services at site



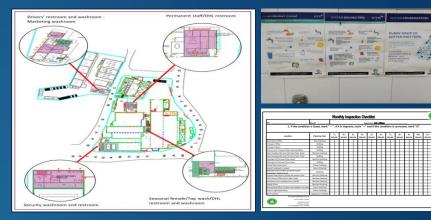


Spring well re-activation and water supply connection establishment in selected vulnerable community areas



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

# Systematic maintenance of WASH infrastructure



montes (jour lighting) in 2020 montes 202

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

- WHSH 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 stie 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



Target Status

- 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



