



Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 04/15/2025 | Report No: ESRSA04195

**I. BASIC INFORMATION****A. Basic Operation Data**

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P507588	Investment Project Financing (IPF)	SL WASH Program	2026
Operation Name	Sierra Leone Water Security and WASH Access Improvement Project		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Sierra Leone	Sierra Leone	WESTERN AND CENTRAL AFRICA	Water
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Ministry of Finance	Ministry of Water Resources and Sanitation	08-May-2025	25-Sep-2025
Total Project Cost			
60,000,000.00			

Proposed Development Objective

Strengthen sector institutions and capacity, improve operational performance of the water supply service provider and promote sanitation in the Western Area of Sierra Leone.

B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

The Project is designed to increase access to water supply and sanitation services, improve the operational performance of water service providers, and enhance water resources management in Sierra Leone. Its components are mutually reinforcing, creating a platform for both immediate service improvements and long-term capacity building that will drive water security. The proposed Project is structured in six components: Component 1: Institutional Strengthening and Capacity Building (US\$ 10 million). This component will be implemented by the MWRS. Activities supported by this component will include technical assistance, equipment and consulting services. Subcomponent 1.1: Policy, Institutions, Regulation Strengthening (US\$2.2 million) will: (i) review, complete and consolidate existing sector policies and



regulations including the draft 2021 WASH Policy; (ii) develop sanitation and Fecal Sludge Management (FSM) guidelines and design standards for energy-efficient and climate-smart WASH systems; (iii) support the MWRS in operationalizing its absorption of sanitation mandate by developing its organizational structure, responsibility-sharing arrangements and essential management systems and tools to be able to deliver on its mandates; (iv) logistical support to strengthen routine monitoring and sector data collection and consolidate sector data into a national monitoring and evaluation platform; (v) strengthen the role of the MWRS in coordinating WASH sector interventions across national and local governments; and (vi) establish a Donor coordination group involving all development partners and NGOs involved in the sector to ensure information sharing, promote coordinated approaches and ensure alignment with the government's priorities. (vii) develop sanitation and FSM guidelines and design standards for energy-efficient and climate-smart WASH systems. Subcomponent 1.2: Capacity Building and Knowledge Development (US\$2.0 million) will assess the institutional and staff capacity building needs of MWRS, NWRMA, GVWC, SALWACO, EWRC, FCC and WARD. It will develop a comprehensive institutional and staff capacity building plan and design adapted delivery mechanisms for each institution and agency involved. This sub-component will include equipping one or more existing training centers and develop training material and curriculum for entry level staff, vocational and on-the-job trainings for existing personnel and leadership and evidence-based decision-making course for executives and senior officials. It will also seek to develop or strengthen partnerships with academic institutions to design curriculum for a master's degree programs on water management with the university of Sierra Leone, to train future water professionals, including on climate change adaptation in the water sector. This component will also develop a web-based system consolidating knowledge documents and sector data. Parts of the capacity building activities may be inserted in PPPs for WASH service improvement and extension. Subcomponent 1.3: Water Quality Monitoring and Surveillance (US\$1.6 million). This sub-component will strengthen the national water quality monitoring and surveillance system. The MWRS will provide laboratory equipment to allow regular water quality measurements to detect pollutants from industrial or domestic activities. Subcomponent 1.4: Public-Private Partnerships (PPP) for WASH Service Delivery (US\$1.2 million) will review policies and regulations and advise on PPP options to leverage private sector value addition to improve the quality-of-service delivery and to extend access to WASH services in Sierra Leone. Subcomponent 1.5: Construct a WASH Administrative Center (US\$3.0 million) will procure and construct a WASH Administrative Center to host the MWRS, NWRMA and EWRC, as the previous MWRS building burnt down in 2023. This Administrative Center will seek to showcase good water and wastewater management and energy efficiency (e.g. rainwater harvesting for toilets and watering green areas), so it can act as a demonstration and learning site. Component 1 will enhance the country's resilience to climate change—exacerbated risks such as floods, droughts, extreme heat, and landslides by improving water governance, capacity building and strengthening relevant government institutions. Improved governance will contribute to watersheds and ecosystems preservation, and higher water quality. Component 2: Water Resources Management Improvement (US\$7 million). This component will be managed by the NWRMA, with support and oversight by the MWRS. It will support activities to improve water resources planning and mobilization and to protect the Western Area Peninsula National Park—the only water resource for the Western Area. This will be done through technical assistance and consultants services, based on a collaborative and consultative approach. This component will also promote data-driven decision-making, stronger regulation, and community engagement—key pillars in improving WRM in Sierra Leone. Subcomponent 2.1: National Water Resources Master Plan and Sector Knowledge Enhancement (US\$5 million). Activities under this subcomponent will develop a national Water Resources Master Plan. The process will include updating the existing national inventory of ground- and surface water abstraction points in Sierra Leone, informing the hydrological and hydrogeological characteristics, determining the water balance in the country's various River Basins, estimating the water resources and groundwater potential of each River basin, and mapping and documenting land and water use patterns of major River Basins. The masterplan will also examine concrete measures to



enforce the implementation of existing WRM Regulations, in particular the annual 'licensing to operate' for all drilling companies operating in Sierra Leone, and the need to obtain a permit and to register any new borehole into the national inventory. This activity is a prerequisite to securing the water resources necessary for the subsequent phases of the Program. Subcomponent 2.2: Raising awareness, catchment protection and rejuvenation need (US\$2 million). This subcomponent will include three main activities. First erecting billboards on the greenbelt boundary to inform that any activity beyond that point is encroaching and may be liable to prosecution. Second erecting physical fences to protect the catchment of selected water supply weirs either in the buffer zone outside the greenbelt or within it and which are under increasing encroachment pressure, for instance the Hasting Police Training Center weir located in the buffer zone. Third, to prepare a map suggesting catchment restorative nature-based solutions (e.g., afforestation, soil conservation) to be implemented to restore the forest cover of the greenbelt in places where it has been degraded. These activities will be implemented through a collaboration between MWRS, NWRMA and GVWC as well as with the MoECC, the National Protected Area Authority and NGOs active in this field such as Catholic Relief Services. By enhancing water resources planning, monitoring, and protection, Component 2 will ensure long-term water security. In addition, it will improve resilience to floods—by reducing the potential impact of floods (because water will be less contaminated) and droughts, as enough clean water will become available when and where needed, and water supply service disruptions will be significantly reduced. Component 3: Priority Investments in Urban Water Supply (US\$30 million). This component will be implemented by GVWC, with oversight by the MWRS. It will finance works, goods and consultants' services aiming at improving GVWC's operational efficiency, water supply service delivery in Greater Freetown and cost recovery and creditworthiness. It will complement an ongoing project of AfDB and other development partners to extend access to safely managed water supply in GVWC's service area. Subcomponent 3.1: Strengthening GVWC management tools and improving service efficiency (US\$11.8 million). This subcomponent focuses on updating GVWC's commercial processes, improving customer engagement, and expanding metering programs to reduce commercial losses and boost revenue. This will be achieved by: (i) upgrading the existing Engineering Design And Management Systems (EDAMS) software to address key business challenges including asset management, commercial losses and energy efficiency and providing training for GVWC staff; (ii) procuring about 42,000 smart domestic meters; (iii) implementing parallel PPPs to install smart domestic meters to generalize metering in GVWC's service area, thereby reducing commercial losses and to establish NRW baseline levels to be able to monitor and reduce physical losses (see subcomponent 3.2); (iv) update customer database and GIS mapping in the process to maximize revenue generation, which is essential for better demand management as well as increasing cost recovery and profitability; (v) purchase of water bowser trucks to improve the supply of water to water kiosks located in low-income communities in the Western Area currently using unsafe water sources, thereby increasing coverage and lowering vulnerability to water borne diseases; and (vi) financing feasibility studies, technical designs and tender documents for selected dams and priority investments, all or part of which could be implemented in phase 2 and/or 3 of the MPA, or through parallel financing. Subcomponent 3.2 Reducing NRW and Upgrading Key Infrastructure (US\$18.2 million). This subcomponent will improve service delivery through the construction or rehabilitation of selected critical infrastructure to increase the reliability of water service delivery, and through leak detection and the preparation of performance-based PPPs for NRW reduction. Activities could include: (i) replacement of pipes subject to frequent breakages; (ii) increasing raw water storage reservoir capacity to increase the reliability of supply in selected areas; (iii) increasing the treatment capacity and rehabilitating selected treated water service reservoirs and associated multistage-pumping systems; (iv) expand micro-hydropower generation at the Guma Water Treatment Plant (WTP) and inject 270kW into the national grid to offset electricity consumption in other places; (v) study the potential of micro-hydropower generation at charge breaking facilities, of energy efficiency across GVWC's distribution network and of solar power generation on water reservoirs at the existing Guma and Kongo dams and at the open-air Babadorie circular water storage reservoir; (vi) preparing four parallel performance-based PPPs for NRW



reduction, to create an emulation between the private sector firms for greater and faster impact; (vii) implementing a pilot of network zoning and District Metering for NRW reduction in a small area of Freetown; (viii) strengthening active leakage management capacity and on-the job training to reduce NRW, which conserve water and reduce emissions; and (ix) financing construction supervision of investments to ensure technical soundness and value for money. By undertaking these strategic investments—ranging from commercial process improvements and metering to infrastructure upgrades and feasibility studies—Component 3 will significantly reduce water losses, increase revenue, and improve overall service reliability, notably in low-income areas, thus making these communities more resilient to climate change—aggravated droughts. The improved water supply infrastructure is also less likely to become damaged during extreme precipitation or flooding. Component 4: Urban Sanitation Service Delivery Improvement (US\$10 million). This component will finance works, goods and consultants' services. Subcomponent 4.1: Improving Sanitation in the Freetown City Council Area (US\$4.8 million). This subcomponent will be implemented by the FCC, in partnership with the Sanitation Directorate of the MWRS. It will: (i) upgrade the existing Kingtom FSTP; (ii) build at least a second FSTP in Freetown, using a climate-efficient technology such as biogas digestion combined with biochar generation, which can be used for cooking instead of wood or charcoal, as a way to reduce the pressure on the Western Area forest cover and National Park; (iii) increase access to improved sanitation in critical points of Freetown, through the construction of about 100 improved public toilet facilities with handwashing in selected schools, hospitals/health centers without toilets and possibly in a few market places, bus stations and parks or recreational areas where people gather in their free time. Subcomponent 4.2: Improving Sanitation in the WARDC Area (US\$3.7 million). This subcomponent will be implemented by WARDC, in partnership with the Sanitation Directorate of the MWRS. It will : (i) build at least one FSTP in the WARDC area, using a climate-efficient technology such as biogas digestion combined with biochar generation, which can be used for cooking instead of wood or charcoal, which increases the pressure on the Western Area National Park forest; (ii) increase access to improved sanitation in critical points of the WARDC area, through the construction of about 100 improved public toilet facilities with handwashing in selected schools, hospitals/health centers, market places, bus stations and public institutions. Subcomponent 4.3: Preparing Nationwide Sanitation Development Campaign (US\$1.5 million). This subcomponent will be implemented by the Sanitation Directorate of the MWRS. It will be managed by the Sanitation Directorate of the MWRS. It will: (i) develop a City Wide Inclusive Sanitation (CWIS) plan to structure the sludge management value chain for the safe collection, transport and treatment of fecal sludge collected from households' domestic and public toilet facilities in the Western Area ; and (ii) prepare a national behavior change campaign called "Clean Salone" to make Sierra Leone Open-Defecation Free. These activities will enhance resilience to climate change by improving public health outcomes through reduced open defecation, reduced risk of fecal contamination and pollution of water sources, reduced fugitive GHG emissions from open latrines and/or septic tanks, as well as gains from resource efficiency and re-use of bio-digested by-products. Moreover, less contamination of surface and groundwater will reduce the potential impact of floods, which will carry less pollutants. Component 5: Project Management (US\$3 million). This component will finance fiduciary, safeguards, and technical expenditures related to Project implementation, including operations costs of the WASHIT, which will be set up within MWRS and will work in close partnership with other implementing agencies. This component will fiduciary, safeguards, and technical expenditures It will also finance a consultants and/or technical assistance support to the WASHIT, matching Ministry and agencies' staff with consultants to ensure on-the-job training for knowledge transfer and capacity building. It may also finance limited equipment. Component 6: Contingency Emergency Response Component (US\$0 million). Following an eligible crisis or emergency, the recipient may request the World Bank to reallocate Project funds to support emergency response and reconstruction consistent with the PDO. This component would draw from uncommitted grant resources under Project components and will reallocate them to cover emergency response.



D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

Sierra Leone has 3,000 to 3,500mm/year of rainfall, and a rainy season from April to October. This is the highest in the West Africa sub-region in addition to approximately 160 billion cubic meters of annual renewable water. Despite this abundance, the actual utilization highlights scarcity at a withdrawal rate of 0.1 percent amidst limited water storage capacity, poor water governance and limited investment in the Water, Sanitation and Hygiene (WASH) sector. Sierra Leone faces systemic economic water scarcity primarily due to limited water storage capacity, poor water governance and limited investment in water resource management. The situation is compounded by population growth. While Sierra Leone's population has doubled between 2000 and 2022, access to WASH has only recorded marginal increases. While Sierra Leone faces widespread challenges in water supply access (65%), maintaining existing services and expanding coverage are severely hindered by insufficient water resources. Open defecation stands at 16 percent and close to one in two Sierra Leoneans do not have access to at least basic sanitation. A key challenge is the limited collaboration between the government and its development partners, as well as within government ministries, agencies, and departments, such as the Ministry of Water Resource and Sanitation (MWRS) with a new mandate for sanitation, the recently established National Water Resource Management Authority (NWRMA) and utilities (GVWC and SALWACO). The GVWC, which is responsible for water supply in the city, reported an Non Revenue Water (NRW) of 60 percent and a collection efficiency rate of 73 percent in 2023, while SALWACO reported approximately 30 percent NRW. There is little or no facilities to collect & store surface water, which limits the country's capacity to provide clean & safe water supply. The Guma Dam which is the main source of water for Freetown was designed to service 500,000 people in the Western Area, but the current population is close to 2 million. The secondary cities and some parts of Greater Freetown and Western Area Rural District Council (WARDC) areas are either serviced by mini-dams or rivers, which barely meet their water demand. Most of the infrastructure is outdated with potential risks of getting damaged, with severe consequences on life, property or the distribution system. Sanitation & sewage across the country is poor. The only sewer system in the country is a small grid covering major offices in the central business district of the capital, Freetown. The wastewater is not treated, and raw sewage is released into the sea. A Fecal Sludge Treatment Plant (FSTP) was built in Kingtom, Freetown in 2021 and uses geobags to separate phases, and started piloting transforming the Geobag content into soil conditioning. A small pilot of biogas digestion was introduced recently to test the potential of generating methane and transforming the biodigested sludge into biochar briquettes which can be used to cook. This proposed Project intends to rehabilitate the Kingtom FSTP and to construct at least two more FSTPs. The specific Project locations are not identified. That notwithstanding, the country has made notable progress in water sector planning, demonstrated by key initiatives such as the National Water Resources Management Agency (NWRMA) Act No. 5 of 2017 and the NWRMA Strategic Development Plan. The Project may support water quality laboratory equipment for water quality monitoring. The WARDC hosts the Western Area National Park. The Project is exploring ways to improve the protection of the Western Area National Park, including through the construction of protective barriers in areas not yet encroached. The Project further plans to generalize metering in the GVWC service area and to carry out the baseline for Non-Revenue Water (NRW). It will explore implementing performance-based PPPs for NRW reduction, which may start in the first phase of the MPA. In FCC and WARDC, the Project will design and construct 200 climate resilience toilet facilities, preferring technical options such as the biogas toilet, in selected places such as schools (link to education, especially for girls), hospitals (link to health, especially maternal health), market places (link to nutrition), and possibly including major bus stations (link to gender), but also public parks, fish landing sites, touristic and recreational areas for environmental cleanliness.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts



MWRS will be responsible for Project implementation, including ESF. It will directly implement component one on institutional strengthening and integrating the Sanitation mandate and capacity building. MWRS will collaborate with other institutions such as the National Water Resources Management Agency (NWRMA), the Guma Valley Water Company (GVWC), Freetown City Council (FCC) and Western Area Rural Development Council (WARD C) to implement components relevant to their mandates. The MWRS does not have a track record for implementing Bank-financed projects, but GVWC was partly involved in the implementation of the Freetown Emergency Recovery Project (FERP), P166075, with an experience in E&S risk management under the Operational Policies (OPs). GVWC has E&S experience as part of compliance requirements of development partners, such as the implementation of the ongoing AfDB WASH and Aquatic Environment Revamping Project, and the Millennium Challenge Corporation's Threshold Project (2018-2019), by which it developed an Environmental Management System (EMS). FERP was implemented by a Project Fiduciary Management Unit (Unit), a unit within Ministry of Finance. It comprised E&S specialists, amongst others, that supervised consultants, contractors and all parties involved in project implementation. Some of the institutions involved in Project implementation have knowledge of the Bank's E&S risk management, benefiting from the Freetown Emergency Recovery Project (FERP). FCC and EPASL are partially involved in the on-going Resilience Urban Sierra Leone Project, processed under the ESF. These institutions will require training on the ESF. MWRS is involved in the preparation of the Bank-supported WASH Poverty Diagnostic and National WASH Access Development Program. Environmental conservation and risk management is the responsibility of Environment Protection Agency Sierra Leone (EPASL). Activities having an environmental footprint shall obtain an Environmental Impact Assessment (EIA) license to start work. There are mechanisms in place to ensure compliance. The National Protected Area Authority (NPAA) is responsible for all protected areas, parks and wet lands. EPASL has developed an environmental regulation through the Bank's support, and has benefitted from training on the ESF. There is familiarity with the Bank's ESF by EPASL. The MWRS requested E&S HEIS support from the Bank to help with Project preparation and train MWRS staff on E&S requirements. MoWRS has designated from existing staff and recruited specialists that have worked on other Bank-financed projects to serve as environmental (one), social (one), and GBV/SEA/SH specialists (one). The MoWRS has assigned specialists in environmental, social, and GBV/SEA/SH areas, with one specialist for each field sourced from different sectors within the existing staff. These Project staff shall benefit from capacity building support by the Bank, starting with the OHS and GBV training planned for April, 2025. Some of the specialists also received technical guidance from the HEIS consultants, recruited to support the project, during the just concluded Stakeholder Consultation workshops in Waterloo and Freetown (9 and 10 April, 2025) town.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

A.1 Environmental Risk Rating

Substantial

The Project's Environmental risk is rated as Substantial, due to the nature and scale of the activities, the sensitivity of the environmental factors and weak institutional capacity of the client to manage associated environmental risks. Much of the risks relate to construction activities and civil works under components 2, 3 & 4. In Component 2, erecting physical barriers along the greenbelt to protect the Guma dam catchment the Western Area Peninsula National Park (WAPNP), a known biodiversity hotspot, may cut off biodiversity corridors thereby isolating species and populations, and modifying ecosystems, and leaving mobile populations stranded. The construction or rehabilitation of critical water supply infrastructure, such as pipes, reservoirs and treatment systems, and the upgrade and



construction of FSTP in Freetown and Western Area Rural District Council (WARDC), and 100 improved public toilet facilities under components 3 and 4 could have significant occupational health and safety (OHS), community health and safety (CHS), hygiene and pollution-related risks. Any form of civil works in built-up areas typically associated with low-income communities in Freetown and its environs would expose workers and the community to accidents from trenches, unattended pits and transport of construction materials and wastes. For the upgrade of water supply infrastructure, additional risks are inconveniences relating to road traffic obstruction and occasional water shortage during construction. Perhaps the most significant risk of the project relates to the operation of sanitary works from the construction of FSTP and a large number of toilet facilities in public spaces. If improperly designed and run, these facilities could expose the community to disease transmission as people come in contact with infectious materials. Hence, while this initiative is conceived to solve a health and hygiene problem from open defecation or poor sanitation through improved access to water and sanitary facilities, the risk of infectious disease transmission does exist from poor design and execution. The client's E&S risk management capacity should be strengthened in anticipation of these risks, by recruitment of competent specialists and establishment of an E&S risk management and monitoring plan. Given the weak capacity of the client, experienced consultants that have worked on Bank-financed projects of at least similar risk magnitude are key to developing a sustainable system. Nationally, MWRS is assisted by institutions established by Acts of Parliament; namely, EPA Sierra Leone (EPASL), Ministry of Environment and Climate Change (MoECC) and the National Protected Area Authority (NPAA). EPASL requires MWRS to obtain an environmental impact assessment (EIA) license to be allowed to commence work, and has a rigorous risk assessment process from screening to scoping, with a full scale study or ESMP depending on the risk level. A stakeholder consultation and disclosure process is prioritized, with an effective mechanism for grievance redress. The license is valid for a year, and renewable only on satisfactory performance from observations made during quarterly site visits and a satisfactory grievance redress system. For the FSTP, the Freetown City Council has a solid and faecal wastes management department, with decades of work on sanitation both solely, and as part of successful public-private partnerships seen in recent years. For work along the greenbelt, guidance will be provided by MoECC and NPAA, the latter having the mandate to protect the National Park. The Bank will provide further guidance to the client using the new 'Interim Guidance Notes: Managing the risks of projects involving protected areas'. The client could also benefit from the Bank E&S training program delivered annually to help project implementation units (PIUs) build their capacity. The Bank E&S team also has in place regular project-specific clinics for update and guidance.

Substantial

A.2 Social Risk Rating

The social risk is rated substantial. In Sierra Leone 20.2% of people have access to safe drinking water. Poor and vulnerable people are unlikely to afford last-mile meter connections. There is a risk of social exclusion regarding access to water supply and sanitation services. This issue arises partly due to technical limitations, which prevent approximately 40% of the population from being reached by desludging vacuum trucks or proper pipe connections for water supply. This potential exclusion of disadvantaged and vulnerable groups in consultation and decision-making processes could be managed through systematic and continuous stakeholder engagement. Critical watersheds of the WANP are increasingly threatened by encroachment, illegal mining, and logging for wood or charcoal production. These activities degrade watersheds that supply water to FCC and WARDC. The project will support the erection of billboards and prepare maps with catchment restorative nature-based solutions in the buffer zones of the WANP without redefining its boundaries. It also includes erecting physical fences to protect these areas but does not plan to resettle people who have encroached on these watersheds. The Project's support to create awareness by erecting billboard and catchment restoration work along threatened watersheds may cause economic impacts. There is a potential for conflict between the WANP and GVWC on the one side and the communities on the other due to either



potential displacement or restriction of access to artisanal mining sites, natural and livelihoods resources. The Project Resettlement Framework will guide engagement with Protected Area Authorities (PAA) to manage resource access restrictions. The Bank will carry out a due diligence assessment on the institutional capacity of PAA in managing and protecting the WAMP to help understand the implications for the project and design proportionate risk mitigation measures. The Project's civil works could lead to labor influx and potential SEA/SH risks when interacting with the community. The support to increasing access to WASH services, construction of FSTPs or public toilets may induce temporary and permanent land acquisition with economic and physical displacement. The scope of land required for project activities is not known. The lack of experience and weak capacity at MWRS's requires a strategic institutional assessment and a capacity building plan. The Project will support technical assistance towards design and feasibility studies and preparation of national water resources master plan. Type 2 and 3 technical assistance will include a gender-specific capacity gap assessment, analysis, and an action plan with monitoring indicators and reporting arrangements. Additionally, suitable design and standards for WASH facilities and infrastructure will address the needs of girls, women, boys, and people with disabilities. The Project risk mitigation measures will rely on carefully crafted environmental and social risk management (ESRM) instruments, assessment and tailored capacity building including staffing and logistics. The ESRMs include an Environmental and Social Management Framework (ESMF) covering the technical assistance aspects and understand the vulnerability and disadvantaged communities overall sociocultural dynamics in water access, use, sanitation. Resettlement (with a Process) Framework outlining principles for economic, and physical displacement and restriction of access. SEA/SH assessment and action plan, labor management procedure. The ToRs for TAs will be reviewed by the Bank for its no objection. The Project stakeholder engagement design will focus on inclusive participation, information disclosure using appropriate language and media.

B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts

Relevant

The current risk level is rated at Substantial, but will be revised as Project details become available at appraisal or implementation. The management and mitigation of E&S risks of project activities will be proportionate to the nature and magnitude of risks and will be activity and site-specific. An Environmental and Social Management Framework (ESMF) and Resettlement Framework (RF), and Stakeholder Engagement Plan (SEP) are being prepared at this stage ahead of Project Appraisal as specific project details are not yet known. Once these details become available as project development unfolds, site-specific risk management instruments will be prepared, including an update of the SEP. All site-specific instruments will be prepared prior to commencement of works. Activities will be screened to determine the level of risk. For substantial and high risk activities, an environmental and social impact assessment (ESIA) will be done. An Environmental and Social Management Plan (ESMP) will address moderate risk activities. For all construction and civil works under components 2 to 4, there are associated noise, water, soil and air pollution issues, and occupational health and safety (OHS) and community health and safety (CHS) risks, but there are established risk mitigation and management measures to be covered in the ESMP. These include the construction or rehabilitation of critical water supply infrastructure in Freetown, under components 3 and 4. However, there are activity-specific risks that would require specific risk management instruments prepared either as standalone documents or as part of the ESMP. For the rehabilitation of old pipe infrastructure run by GVWC, the Project may not



replace asbestos pipes. If, however, works uncover such pipes, there could be significant potential impact on the health of workers and the community, including from mismanaging waste disposal, the Project will prepare an Asbestos Management Plan (AMP), and engage EPA on asbestos management. The country does not currently have systems in place for handling asbestos wastes, but GVWC does have experience replacing and stockpiling such pipes for over a decade. The erection of physical barriers along the greenbelt of the WAPNP to protect the Guma dam catchment under Component 2 may have an impact on biodiversity and conflict over erecting a barrier around sensitive ecologies in water catchment areas. It could cut off biodiversity corridors thereby isolating species and populations, modifying ecosystems, and leaving mobile populations stranded. The choice of barriers should consider infrastructure that would not impede the movement of wildlife across ecological corridors. A Biodiversity Management Plan (BMP) will be prepared as part of the ESMP to address these risks. For conflict with individuals over access to the protected area, the RF will address such risks. The mitigation and management of occupational health and safety (OHS), community health and safety (CHS), hygiene and pollution-related risks associated with the will be covered in the ESMP. The infectious disease transmission, and water and soil pollution risks associated with the operation of the FSTP will be addressed at the design and feasibility study stage. The study will be informed by the E&S risk management and vice versa. Hence, the consultant recruited to prepare the E&S instruments will work collaboratively with the design engineer and feasibility study team. An ESIA may be required to address these risks, given the significance of the risk. The FSTP will use the most recent technology to increase fecal sludge management (FSM) treatment and re-use capacity within the capital city. Social risks involve community exclusion, particularly in vulnerable and disadvantaged areas will be managed through a systematic and continuous stakeholders engagement. The construction activities may lead to moderate influx of labor labor which could be managed through the Project's Labour management Procedure. It is not possible at this stage to to estimate the scope of land take for various activities, including for Fecal Sludge Treatment Plant, the WASH facilities. The support for awareness raising and the physical fencing of the protected areas may induce conflict between communities, park management authorities and economic impacts due to restriction of access to livelihoods and natural resources. There may be conflict between communities and WANP authorities due to erecting billboards, physical fencing and delineating catchment restorative nature-based solutions areas that may induce restriction of access to artisanal mining, natural and livelihoods resources. These potential risks and impacts will be managed through the project resettlement and process framework. Given the high incidence of gender-based and sexual violence in the country, the project may encounter significant risks of sexual abuse and harassment due to the moderate influx of workers. These risks will be mitigated through the implementation of the comprehensive GBV Prevention Action Plan across the portfolio.

ESS10 - Stakeholder Engagement and Information Disclosure

Relevant

The Project will support the building of a Water Administrative Center, improving water supply, performing targeted network rehabilitation and provision of household connections, design and construction of FSTPs and WASH facilities in schools, hospitals and health centers and selected public places. These activities will require the mobilization direct workers who will work for MoWRS and its implementing agencies, skilled and unskilled contracted workers in construction, water line improvement, FSTPs, and primary supplier workers for the water system improvement supplies. The Project may engage community workers for the rehabilitation of watersheds. The potential risks include, occupational health and safety, slips, trips and falls from excavated soils and dug-out trenches, and working in confined spaces, and road accidents. The potential risks due to presence of different types of workers and local community interaction, include SEA/SH in an already prevalent SEA/SH context. The Project footprint will be limited to the Western Area Urban and Rural Districts (FCC and Western Area Rural Ward-C). It is important that the Project



prioritizes sourcing skilled and unskilled labor from local areas to minimize the potential risks of for labor influx. Workers' camps are not expected to be necessary, but will be determined once the menu of future investment priorities are defined. MWRS, as the Project implementing entity, will be required to establish a comprehensive Labor Management Procedure (LMP), including guidance to develop Health, Safety and Environmental (HSE) plan to protect workers health and safety during construction and operation of water and sanitation facilities, raise grievances, procedures for incident investigation and reporting, emergency preparedness and response. The LMP will be prepared one month after Project effective date.

ESS2 - Labor and Working Conditions

Relevant

The Project will support the building of a Water Administrative Center, improving water supply, performing targeted network rehabilitation and provision of household connections, design and construction of FSTPs and WASH facilities in schools, hospitals and health centers and selected public places. These activities will require the mobilization direct workers who will work for MoWRS and its implementing agencies, skilled and unskilled contracted workers in construction, water line improvement, FSTPs, and primary supplier workers for the water system improvement supplies. The Project may engage community workers for the rehabilitation of watersheds. The potential risks include, occupational health and safety, slips, trips and falls from excavated soils and dug-out trenches, and working in confined spaces, and road accidents. The potential risks due to presence of different types of workers and local community interaction, include SEA/SH in an already prevalent SEA/SH context. The Project footprint will be limited to the Western Area Urban and Rural Districts (FCC and Western Area Rural WardD-C). It is important that the Project prioritizes sourcing skilled and unskilled labor from local areas to minimize the potential risks of for labor influx. Workers' camps are not expected to be necessary, but will be determined once the menu of future investment priorities are defined. MWRS, as the Project implementing entity, will be required to establish a comprehensive Labor Management Procedure (LMP), including guidance to develop Health, Safety and Environmental (HSE) plan to protect workers health and safety during construction and operation of water and sanitation facilities, raise grievances, procedures for incident investigation and reporting, emergency preparedness and response. The LMP will be prepared one month after Project effective date.

ESS3 - Resource Efficiency and Pollution Prevention and Management

Relevant

The Project will require various construction materials like cement, granite aggregates, steel rods, stones, sand, concrete blocks, timber, water, with a preference for locally sourced, sustainably harvested materials. Suppliers of materials must have EIA permits or related certification. The Project will minimize pollution risk through improved hygiene practices, but handling and treating sewage and operating septic tanks or sewers pose significant hygiene risks. Overflows or leaks from the FSTP and ancillary facility could pollute water or soil, but this will be factored into project design. GHG estimation will be done to help identify fugitive emission sources from the sewage management stream for targeted reduction. Moderate risks include air and noise pollution. Non-hazardous and hazardous waste from oil leaks & replaced equipment pose pollution risks. Pollution prevention and management will be covered in the ESMP. A Waste Management Plan will be prepared to address these. If asbestos is found in pipes, as it risks exposing workers and the community to respiratory hazards, an Asbestos Management Plan would be prepared. Drought and sporadic rain could affect the availability of good quality water and impair the timely progress of the works.

ESS4 - Community Health and Safety

Relevant



Since some civil work will take place on right of Ways (ROW) along public roads, school and health facilities, the health and safety of students, school staff, health workers, health service visitors, and vulnerable and disadvantaged households and the public will be prioritized. Vehicular accidents, dust emission, noise, trips and falls into excavated sites & trenches, hygiene risk associated with solid waste and sludge treatment, temporary disruption of water distribution systems are potential impacts. All relevant mitigation measures will be taken upfront including robust consultation with key stakeholders surrounding the fecal sludge treatment plant. Children and young people shall be protected from the risk of SEA/SH by contractors workers. The universal access concept (access for everyone) shall be considered in the provision of safe and clean water access at schools, health facilities, and community level, including individuals with disabilities. Assess and implement measures to manage the security risks of the Project, including the risks of engaging security personnel to safeguard Project workers, sites, assets including the Guma catchment and the Western Area National Park. The proposed Project aims to support a dam safety assessment/inspection to better understand the overall behavior and safety level of the Guma Dam. There are no planned supports for rehabilitation or construction of dam. This may lead to conflicts between communities and law enforcement personnel. The risk mitigation measures shall be reflected, as needed as part of an ESMP or Security Risk Assessment and Management Plan.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

Relevant

The Project will target facilities on public land to avoid land acquisition and displacement of people. FSTPs are supposed to be developed on public land, preferably FCC- or WARDC-owned waste management property. If the FSTP is developed in publicly owned or managed property, the Bank will conduct due diligence to ascertain any legacy issues. Land may be acquired for public toilets in schools and health facilities in locations are not yet determined. The creation of physical barriers to protect against encroachment of the Western Area National Park in areas not yet encroached may lead to economic displacement of people. At this stage of the Project, the specific sites are unknown, hence the nature and extent of involuntary resettlement impacts remain unclear. To address these uncertainties, the Project will prepare, consult upon, and disclose a Project Resettlement Framework (RF) before the Project appraisal. The RF will include a process that will guide the engagement of the protected area authorities to manage the restriction to access natural and livelihoods resources in national parks and protected areas. The Project will prepare and implement appropriate mitigation measures defined in a resettlement and livelihoods support plan tailored to the actual impacts of physical or economic displacement and restriction of access to natural resources and protected areas in accordance with the principles and process outlined in the RF.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

Relevant

Building protective barriers to prevent encroachment on protected sensitive ecologies in the threatened watershed would have profound benefits for the forest ecosystems. However, depending on the type of barrier, ecological corridors might be impacted, but it is not likely that habitat fragmentation or loss of ecosystem services will result from a small scale of activities along existing pipeline corridors, even within protected forest reserve or community forest. As such, the Project will implement nature-based solutions (e.g., afforestation, soil conservation) to protect the Western Area watershed and reduce encroachment. Transmission routes typically fall within designated ROW. There is potential for temporary disturbance to nature and biodiversity from human activity and noise generated by excavation, pipe laying, metal work etc. ESMF will address consistency with ESS6 requirement including an exclusion



criterion of activities that may cause significant risk on biodiversity conservation and apply the mitigation hierarchy and specific measures that will constitute a section on Biodiversity Management under the ESIAs/ESMPs.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Not Currently Relevant

The Bank has conducted a screening of indigenous peoples and sub-Saharan Africans historically underserved traditional local communities in Sierra Leone. At this stage, no people meet the policy requirements and the application of this standard to the Project is not relevant. Future assessments will determine if this needs to be changed.

ESS8 - Cultural Heritage

Relevant

The proposed Project will involve moderate civil works, such as excavations and pipe laying or replacement, construction and concrete works. No works is expected to be carried out in cultural heritage areas. Nevertheless, this ESS is conservatively deemed relevant. However, the degree of relevance of this ESS will be further assessed during Project preparation as part of the risk management process. Should the Project affect cultural heritage, appropriate steps will be taken to ensure conservation of cultural heritage during all phases of the Project. The ESMF to be prepared for the Project will also include a chance find procedure and outline the steps to be taken if and when an item/s of cultural significance is discovered.

ESS9 - Financial Intermediaries

Not Currently Relevant

This standard is not relevant at this stage.

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways

Yes

OP 7.60 Operations in Disputed Areas

No

B.3 Other Salient Features

Use of Borrower Framework

No

The Bank has not conducted an assessment of the Borrower's policy, legal and institutional framework for the implementation of this project.

Use of Common Approach

No

Not applicable at this stage.

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?



The Environmental and Social risk management, potential risk and impacts assessment and instruments will be sequenced to meet minimum requirements by or post-appraisal and subsequently later by Project effectiveness.

Part one: Environmental and social risk management instruments that shall be prepared prior to Project appraisal

1. Environmental and Social Commitment Plan.
2. Stakeholder Engagement Plan.
3. Environmental and Social Management Framework.
4. Social Assessment (including covering the TA aspect) (as part of ESMF).
5. Resettlement Framework (with a process framework as an annex).

Part two: Environmental and social risk management instruments that shall be prepared post appraisal.

1. Institutional Capacity Assessment of Protected Area Authorities.
2. Labor Management Procedure.
3. SEA/SH Assessment and Action Plan.

III. CONTACT POINT

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