



MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA



TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

TERMS OF REFERENCE FOR ENVIRONMENTAL IMPACT STATEMENT WASTE WATER TREATMENT PLANT (PHASE 1)



MCA – TIMOR-LESTE

TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

**TERMS OF REFERENCE FOR ENVIRONMENTAL IMPACT STATEMENT WASTE WATER
TREATMENT PLANT (PHASE 1)**

20960.240301.NOD.REP.015

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March 2024

PROJECT NO. 20960					
Revision	Reason for Revision	Prepared by	Reviewed by	Approved by	Issue Date
-	First Issue	B. Lammers	C. Young	T. O’Flanagan	22 Jan 2024
A	Client’s comments	B. Lammers	C. Young	T. O’Flanagan	23 Feb 2024
B	Client’s comments	B. Lammers	M. Hickey	T. O’Flanagan	06 Mar 2024
C					
D					

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym/ Abbreviation	Definition
ADB	Asian Development Bank
ANLA	Autoridade Nacional de Licenciamento Ambiental
BFP	Belt Filter Press
BOD	Biochemical Oxygen Demand
BTL	BTL, E.P Bee Timor-Leste Empresa Publica
CDT	Compact Development Team
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DAF	Design Average Flow
DBR	Disease Burden Reduction
DDIUP	Dili Drainage Infrastructure Upgrading Project
DL	Decree Law
E&S	Environmental and Social
EIF	Entry into Force
EIS	Environmental Impact Statement
ESIA	Environmental and Social Impact Assessment
EMP	Environmental Management Plan
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
CED	Compact End Date
CESMP	Contractor's Environmental and Social Management Plan
ESCAP	Environmental and Social Commission for Asia and the Pacific
FIDIC	International Federation of Consulting Engineers (acronym in French)
FS	Feasibility Study
FSC	Feasibility Study Consultant
GAC	Granular Activated Carbon
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GoTL	Government of Timor-Leste
ha	Hectare
HSMP	Health and Safety Management Plan
HDPE	High Density Polyethylene
HEC-RAS	Hydrologic Engineering Center's River Analysis System
HSE	Health, Safety, and Environmental
IDR	Investment Decision Report
IFC	International Finance Corporation

Acronym/ Abbreviation	Definition
IFC PS	International Finance Corporation Performance Standard
IFC ESBS	International Finance Corporation Environmental & Social Baseline Study
ILO	International Labor Organization
ITR	Independent Technical Review
IUCN	International Union for Conservation of Nature
kg	Kilogram
km	Kilometre
l	Liter
LOE	Level of Effort
m	Meter
m ²	Square meter
m ³	Cubic meter
m ³ /day	Meters cubed (or cubic meters) per day
MCA-TL	Millennium Challenge Account-Timor-Leste
MCC	Millennium Challenge Corporation
MCDA	Multi Criteria Decision Analysis
mg/l	Milligrams per litre
NAG	Net acid generating
NATA	National Association of Testing Authorities (Australia)
NOD	Nicholas O'Dwyer, Ltd.
OSHG	On-site Sodium Hypochlorite Generation
NGO	Non-government organization
PESA	Preliminary Environmental and Social Assessment
PAP	Project-Affected Person
ppm	Parts per million
ppt	Parts per thousand
PVC	Polyvinyl chloride
QA	Quality Assurance
QC	Quality Control
RAP	Resettlement Action Plan
RFI	Request for Information
RPF	Resettlement Policy Framework
SWMM	Storm Water Management Model
t	Tonne (metric ton)
TIP	Trafficking in Persons
TDS	Total dissolved solids
ToR	Terms of Reference

Acronym/ Abbreviation	Definition
TSS	Total suspended solids
UASB	Upflow anaerobic sludge blanket
UN	United Nations
USCS	Unified Soil Classification System
WHO	World Health Organization
WSD	Water, Sanitation and Drainage
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

1.1 Purpose of the Terms of Reference

MCA-TL has appointed a Consultant, Nicholas O'Dwyer Consulting Engineers, to undertake the *Preparation of Designs, Tender Documents, Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP)* for the WSD Project. This document was prepared pursuant to National Environmental Licensing Authority, I.P. (ANLA) regulations and consultation and contains the Terms of Reference (ToR) for the Environmental Impact Statement (EIS) for the wastewater treatment plant, onsite sodium hypochlorite generation facility and outfall. This document provides the Government of Timor-Leste (GoTL) and ANLA with a project description, study area delineation, a summary of existing and missing baseline data, a summary of studies completed to date, and a preliminary discussion of impacts.

The Project is for the **Water, Sanitation, and Drainage** (WSD) Project of the Millennium Challenge Corporation (MCC) Compact between the United States of America acting through the MCC and the GoTL, which was executed in July 2022 (MCC, 2022), after a three-year Compact Development process. Through the Compact, GoTL has established the Millennium Challenge Account–Timor-Leste (MCA-TL), which is the Timor-Leste government entity that executes and manages the Compact.

This ToR provides

- Project background, context, and purpose;
- Project description;
- Summary of applicable laws, legislation, regulations and policies of Timor-Leste as well as MCC and other applicable international standards;
- The methodology for additional studies required to fill baseline data gaps;
- Enumeration of activities that may affect receptors;
- Discussion of alternatives, including "do nothing"/"no action";
- Preliminary enumeration and assessment of impacts and benefits, including those impacts that have been previously identified and documented;
- Impact Assessment Methodology; and
- Discussion of the approach to avoidance, minimization and mitigation of significant impacts.

2 BACKGROUND INFORMATION

2.1 Objective and Scope of Program

The MCC Compact defined the objective of the WSD project as “**reduce faecal pathogens in piped and stored drinking water and groundwater**” (MCC, 2022). To this end, MCC and GoTL determined that a wastewater collection and treatment system, serving key areas of Dili would;

- i. largely eliminate the source of contamination to surface water and groundwater currently caused by on-site sanitation systems and to some extent, other contributing practices and
- ii. result in a reduction in water-borne disease and other impacts of poor sanitation.

In addition, the Compact will provide an On-site Sodium Hypochlorite Generation (OSHG) Facility that will provide bulk disinfectant to ensure appropriate treatment both for ocean disposal of wastewater effluent and for the Dili water distribution system (proposed under a separate project).

2.1.1 Larger Context

The WSD Project is one part of the MCC Compact program and is the result of approximately three years of negotiations, economic studies, policy studies, scoping, alternatives analysis, engineering studies, environmental studies, and social studies (pre-Compact) conducted in consultation and cooperation with the GoTL. The MCC Compact is a fixed, five-year period that begins at Entry into Force (EIF) of the Compact. This work is being conducted prior to EIF to ensure that the construction can be completed within the five-year Compact term.

The MCC Compact is also part of a wider national program that includes other funding sources and other project proponents that are not constrained by the MCC Compact funding and schedule. As part of the Compact, the GoTL established a new government agency: MCA-TL, which is responsible for executing and managing the Compact.

The Compact program is designed to achieve its objective of health and skills improvement in Timor-Leste through two primary projects:

- Water, Sanitation, and Drainage (WSD) Project and
- Teaching and Leading the Next Generation of Timorese (TALENT) Project.

Figure 2-1 shows the Compact Program. This ToR addresses the WSD Project, Sanitation Activity, which has been further subdivided into two phases that have concurrent schedules:

- **Waster Water Treatment Plant Phase 1:** includes the WWTP, ocean outfall and an OSHG facility, which is part of the WWTP site and will also service the Water Disinfection Activity, which is a separate Compact workstream. Phase 1 also includes for the operation of the WWTP and ancillary facilities by a private operator as well as training for the BTL staff so that BTL can assume operations following completion of the Compact.
- **Waste Water Collection System Phase 2:** includes the sewer network, which comprises a conventional sewer system, a simplified gravity sewer system, pump stations, and associated drainage activities. House and business connections are also assessed in the EIS as well as if required toilet facilities and the decommissioning / bypassing of existing septic tanks.

The division into the two phases is required because;

- The tendering for the WWTP construction must begin earlier than the sewers to ensure both are complete before the Compact End Date (CED);
- The impact assessment of the sewer network can only begin once the designs are further advanced, which has a longer schedule due to 1) the size of the service area and 2) the schedule of the studies needed before design; and
- Because of the two points above, ANLA requires two separate environmental licenses.

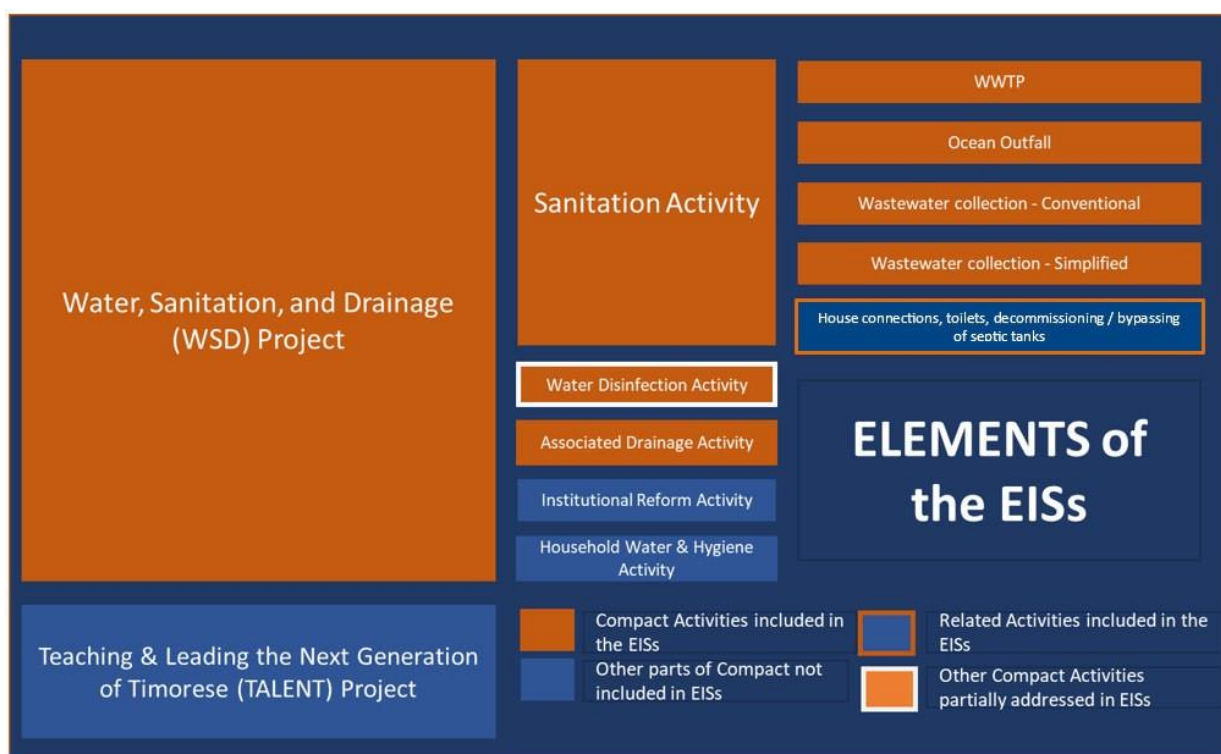


Figure 2-1. Scope of EISs relative to MCC Compact

2.1.2 Previous studies and documentation

Since initiation of the Compact development, many studies have been completed including field studies, desktop studies, engineering studies, environmental studies, social studies and economic studies. Building on the overall program documentation, the primary investigations and reports include:

Consulting Services for Preparation of the Feasibility Study, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for a Water Disinfection, Sanitation and Drainage Program, Tetra Tech, June 2022. This report includes the following annexes and companion reports:

- Annex A: Disinfection Feasibility Report - Tetra Tech, June 2022
- Annex B: Wastewater Treatment Plant (WWTP) Feasibility
- Annex C: Ocean Outfall Feasibility Report
- Annex D: Wastewater Collection System Feasibility Report
- Annex E: Key Conventional Gravity Sewer Feasibility Drawings
- Annex F: Cost Estimate Report
- Annex G: Risk Register
- Annex H: Monitoring & Evaluation Report
- Draft Environmental and Social Impact Assessment
- Resettlement Policy Framework (RPF)
- Social and Gender Assessment.

Data studies and resources that informed this report include:

- Bathymetric Surveys
- Oceanic Data – Monthly Reports
- Sewer Network GIS Data
- Dili Contour Lines
- Cadastral Map Drawings
- CORMIX hydraulic model files

- Satellite Imagery
- Implementation of the Dili Sanitation and Drainage Masterplan – Phase 2 D8-D11, D17 & D19 reports and drawings
- Dili Collection System Hydraulic Model
- Operation & Maintenance Costs
- WWTP Hydraulic Profile Drawings
- WWTP Boundary Survey Drawings

Draft Final Report - *Consulting Services for Detailed Engineering Design of Dili Urban Water Supply*, Donsung Engineering, December 2021. This report includes the following annexes:

- *Initial Environmental Examination* – Timor-Leste Dili West Water Supply Project. Ministry of Public Works for ADB
- *Resettlement Action Plan* – Timor-Leste Dili West Water Supply Project. Ministry of Public Works for ADB
- *Stakeholder Engagement Plan* – Timor-Leste Dili West Water Supply Project. Ministry of Public Works for ADB

2.1.3 Context of this Scope

The people of Timor-Leste have a high incidence of waterborne illness driven by poor sanitation. High rates of disease, coupled with a growing urban population, further highlight the need for improved wastewater management in Timor-Leste.

The **primary** objective of the WSD Project is to reduce fecal pathogens in piped and stored drinking water, and groundwater. The project proposes to achieve this by providing access to a wastewater collection, treatment and disposal system to the majority of buildings in Area 106 (population 106,165) and the priority expansion areas of: Hallibur, Lorio, Moris Ba Dame, Terra Santa, Golgota, and 12 de Outubro. Note: these priority expansion areas will only be developed if funding is available. They are, however, included in the EISs to ensure that an environmental license is available, should funding become available.

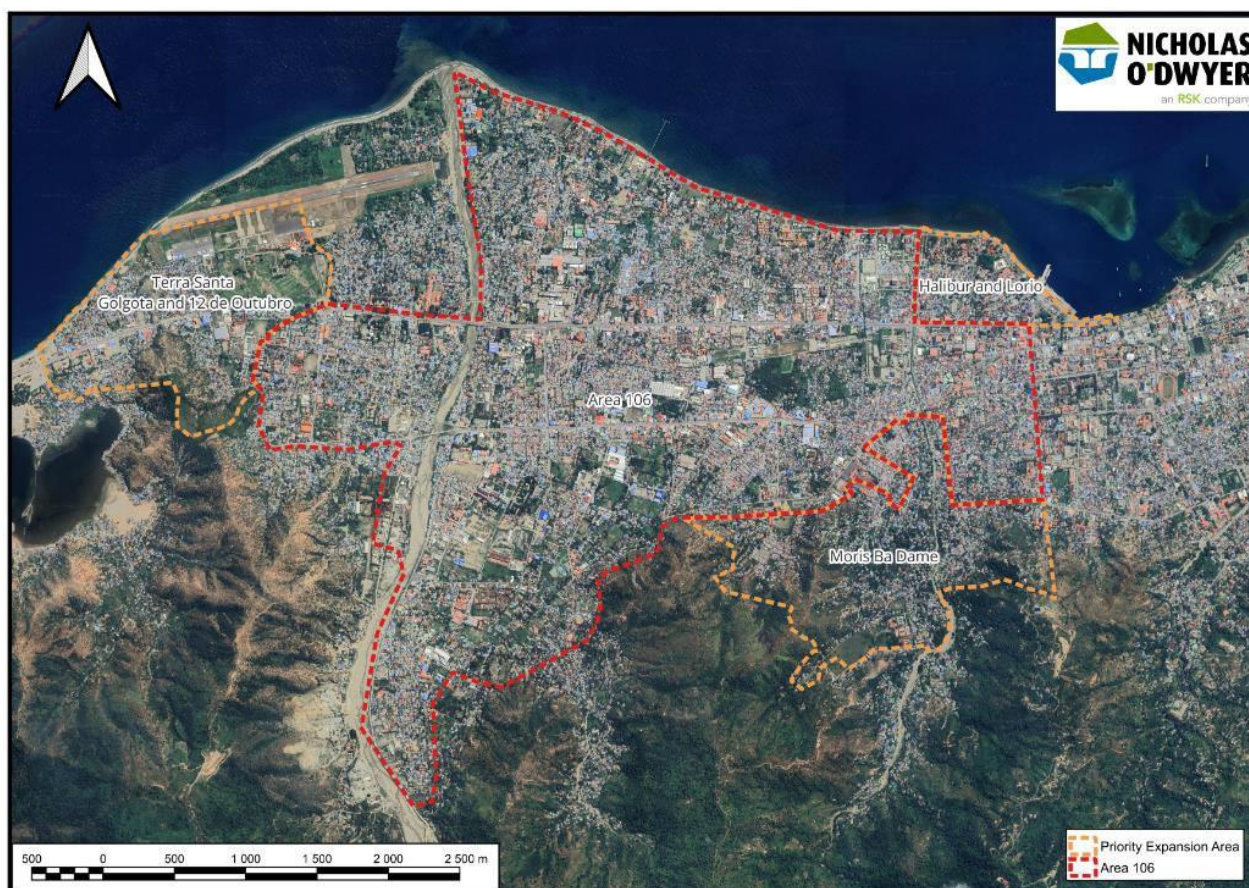


Figure 2-2: Area 106 and three priority expansion areas

In doing so, the project has a number of **secondary** objectives including:

- Improved public health due to reduced incidents of waterborne disease;
- Overall improvement in living conditions including, but not limited to **reducing**: waste, odour, contamination of surface water and groundwater, and mosquito breeding habitat;
- Protection of water supplies from contamination from pit latrines;
- Protection of the environment through the safe discharge of treated wastewater and safe management of process sludge; and
- Benefit to local economy through job creation and increase in economic activity because of improved conditions from the wastewater management amenity.

This ToR is for the EIS and EMP for **Phase 1** of the WSD Project, Sanitation Activity. Originally, the Project was to be done as a single EIS that included the 1) WWTP, 2) OSHG facility, 3) ocean outfall, 4) pump stations, 5) wastewater collection network, 6) building connections, and 7) associated drainage. During consultation with MCA-TL, it was decided that the Project needed to be done in two phases because of schedule constraints driven by the strict five-year Compact limit (beginning from the Entry into Force (EIF) date).

The current construction contracting plan has two components that will be contracted according to International Federation of Consulting Engineers (FIDIC) Design-Build (Yellow Book) Contract and Design-Bid-Build (Red Book) Contract. The Consultants services contract will produce design documentation sufficient for construction contract bidders to respond to tenders. The two Phases are:

- **Phase 1 (FIDIC Yellow Book)**. Wastewater treatment plant, on-site sodium hypochlorite generation facility, and ocean outfall, and
- **Phase 2 (FIDIC Red Book)**. Wastewater collection network (sewers, pump stations, building connections, and associated drainage).

As the tendering and construction of Phase 1 must start earlier than Phase 2, the Project Proponent, Bee Timor-Leste, Empresa Publica (BTL) has submitted two separate project documents to ANLA. As a result, ANLA requires a separate ToR, EIS, EMP and a separate approval process for each phase. However, these two Phases are not separate projects and are also connected to other overall program activities. It is important to retain this context of the Phasing throughout this process because:

- The severing of the Project into two EISs/EMPs (and two RAPs) is necessary for administrative purposes but not indicative of separate physical projects;
- Communicating the separate Phases as separate projects could confuse stakeholders and the community at large; and
- Severing a large project into small units is against International Best Practices including International Finance Corporation (IFC) Performance Standard 1 (IFC PS1).

Table 2-1 below summarizes the constructed elements of the overall project and

Figure 2-3 shows the overall program and responsibilities.

It will be important during stakeholder engagement and community communications to clearly describe how this Phase and the two EISs relate to the overall program to avoid misunderstandings about the limitations of this Phase.

Table 2-1: Construction components of the overall program and scope of the Phase 1 and Phase 2

Construction Element	Sanitation Activity Phase 1 EIS (FIDIC Yellow Book)	Sanitation Activity Phase 2 EIS (FIDIC Red Book)	Other MCC funded workstreams
WWTP	Yes		
Ocean outfall	Yes		
Pump Stations		Yes	
Collection network		Yes	
Individual building connections to wastewater system		Assessment and discussion in EIS, construction implementation included in the Phase 2 construction, but funded separately from MCC Compact.	
Water disinfection	Yes - On-site Sodium hypochlorite (disinfectant) facility and delivery tanker trucks		
Associated drainage	Partial	Yes	
Household water and hygiene			Separate process

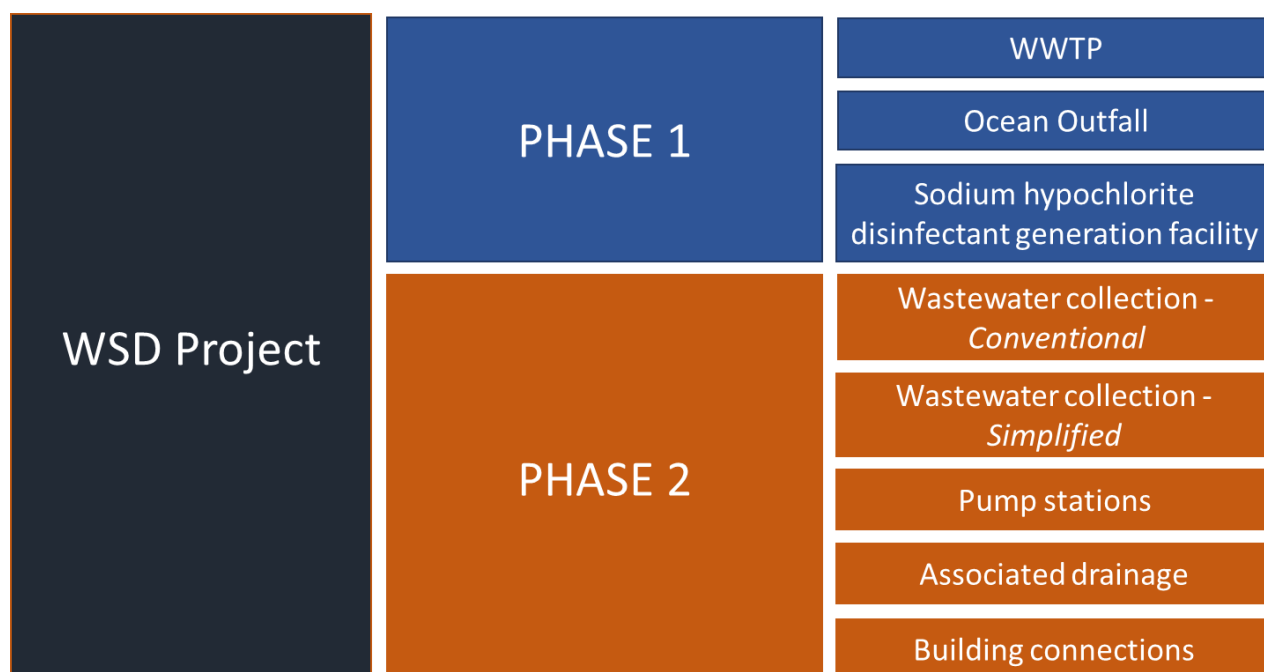


Figure 2-3: WSD Project elements

2.2 Need for the Environmental Study

The Project Documents (PD) were submitted by BTL to ANLA on 18 July 2023, ANLA provided technical comments of the PD on 16 August 2023, BTL re-submitted the PD to ANLA on 15 September 2023. **Following this process, all components of the Water, Sanitation and Drainage Project were classified as Category A project on 2 October 2023 in accordance with Article 4 and Annex 1 of Decree-Law No. 39/2022** (1st amendment to Decree-Law No. 5/2011 on the Environmental Authorization Act) (see **Annex 2**) and are subject to the EIS procedures established in Ministerial Diploma No. 44-47/2017. The Class A designation indicates that nature and characteristics of the proposed project tend to have significant impacts on the physical, biological and/or human environment that require avoidance, minimization and/or mitigation and management measures specific to the impact. The EIS will document impacts as well as these avoidance and control measures.

3 PROJECT PROPONENT

The Ministry of Public Works (MPW), through Bee Timor-Leste, Empresa Publica (BTL) is the proponent of the Water, Sanitation and Drainage (WSD) project). Meanwhile, the Management, Supervision and the Implementation (Project Management) of the WSD project will be the responsibility of MCA-TL. Table 3-1 shows the project proponent and representative contact details.

Table 3-1: Project Proponent and Project Management

Contact data	Proponent	Project Management
Entity name	Bee Timor-Leste (BTL)	Millennium Challenge Account-Timor-Leste
Responsible person	Mr. Carlos dos Reis	President Ambassador Constâncio da Conceição Pinto
Address 1	BTL Compound Level 5	CBD 3, Timor Plaza
Address 2	Avenida 20 de Maio	Avenida Presidente Nicolau Lobato
Address 3	Caicoli, Dili, Timor-Leste	Comoro, Dili, Timor-Leste
Telephone number	Telephone: +670 780010	Telephone: +670 77045017
Email address	email: cdosreis@gmail.com	email: constanciopinto@gmail.com

4 PROJECT TEAM

Table 4-1 shows the Consultant's core team.

Table 4-1: Environmental and Social Project Team

Name	Position
Sean Cleary	Team Lead & Design Manager
Carol Young	Environmental and Engineering Lead
Dr. George Krallis	ESIA Specialist
Liza Van De Merwe	GSI Lead Specialist, Social and Resettlement
Marta Patallo	TIP Lead Specialist
Britta Lammers	RAP Lead Specialist, Deputy Team Leader ESIA, ESMP, RAP
Marcio Da Piedade	TIP Expert
Benedita Ximenes Pereira	ESP Specialist Social/Gender
Francisco Neto	RAP Specialist
Marciano Borges Ximenes	Environmental Specialist

5 LEGAL AND ADMINISTRATIVE FRAMEWORK

5.1 National Policy and Administrative Framework

The Constitution of Timor-Leste declares the importance of protecting the environment and that a healthy environment is a constitutional right of the people. The Constitution stipulates that:

- Everyone has the right to a humane, healthy, and ecologically balanced environment and the duty to protect it and improve it for the benefit of the future generations;
- The State shall recognize the need to preserve and rationalize natural resources; and
- The State should promote actions aimed at protecting the environment and safeguarding the sustainable development of the economy.

Table 5-1: Laws and Regulations regarding the execution of environmental studies

Laws	Summary of Core Requirements
Decree 5-2011 Environmental licensing Decree-Law No. 39/2022 1st amendment to Decree-Law No. 5/2011 on Environmental Licensing	<p>This Decree-Law created the environmental licensing system for public or private projects. Environmental licensing is based on environmental assessments that provide a Certificate of Environmental Impact (EIS) and an Environmental Management Plan (EMP). The EIA is used to determine the category of the project: A, B, or C, based on the severity of the potential environmental impact. A Certificate of Environmental Impact is prepared by the Applicant and is based on technical studies and consultations with stakeholders.</p> <p>The Decree is supported by the following Ministerial Diplomas:</p> <ul style="list-style-type: none"> • Ministerial Diploma no. 44/2017, of 2nd August - Regulation on Impact and Benefits Agreement • Ministerial Diploma no. 45/2017, of 2nd August - Regulation on the Statute and Rules of procedure for the Evaluation Committee for the Management of the Environmental Assessment Process for Category A projects • Ministerial Diploma no. 46/2017, of 2nd August - Regulation on the Detailed Requirements for Screening (Project Document [PD]), Scoping and the Terms of Reference (TOR), Environmental Impact Statements (EIS), Simplified Environmental Impact Statements (SEIS) and Environmental Management Plan (EMP) for Environmental Assessment. English translations of the relevant Annexes to this diploma are included in Appendix B of this document. • Ministerial Diploma no. 47/2017, of 2nd August - Regulation on the Public Participation Procedures and Requirements During the Environmental Assessment Process.
Law No. 3/2012 on the legal authorization for Environmental Basic Legislation	This Law established the legal authorization for the production of the Environmental Basic Legislation.
Decree 26-2012 basic environmental law	<p>This Decree-Law established the Environmental Basic Legislation in conjunction with 3/2012. Pursuant to Article regarding pollution prevention and control technologies and practices, the GoTL has yet to implement their National Standards (for Air, Water, Noise, etc.) and therefore, under the legal requirements of the Base Law for Environment, these minimum requirements are safeguarded by the use of WHO guidelines. The following are relevant to the project:</p> <ul style="list-style-type: none"> • WHO Guidelines 1999 - Community Noise. • WHO Guidelines 2005 - Air Quality guidelines for particulate matter, ozone, nitrogen dioxide, and Sulphur dioxide. • WHO Guidelines 2003 - Water Quality – Guidelines for safe recreational water environments: Volume 1 - Coastal and Fresh Waters.

Laws	Summary of Core Requirements
	<ul style="list-style-type: none"> WHO Guidelines 2017 – Surface and/or Groundwater Sources for Water Consumption Use: WHO 2017 Guidelines for drinking-water quality: fourth edition incorporating the first addendum. Used in conjunction with DL 31/2020 – Water Quality Control for Human Consumption.
Decree Law 41/2022 that Creates the National Environmental Licensing Authority, I.P., and approves the respective statutes	States that "the National Environmental Licensing Agency, abbreviated to ANLA, is part of the State's indirect administration. ANLA ensures "the implementation of legislation on environmental licensing", and is responsible for "evaluating projects, classifying, issuing environmental licenses and monitoring the activities of public and private entities in general, thus becoming the main environmental regulator in the country. Environmental licensing is an essential process to ensure the principle of prevention laid down in the Basic Law on the Environment (Decree-Law no. 26/2012, of July 4). In turn, the creation of a specialized authority, endowed with technical, administrative and financial autonomy and its own assets, ensures the transparency of environmental licensing procedures, as well as the necessary technical capacity.

Table 5-2: Other project relevant laws and regulations

Laws	Summary of Core Requirements
Law No. 6/2017 on Basic Law of Land Use Planning	<p>Sets targets and objectives for Municipalities to present their respective urban mobility plans in order to facilitate and coordinate city growth in a sustained and planned manner, with improvement of living conditions for citizens. Establishes the different soil uses (Article 8) and the Municipal Territory Plan and the Land Use Plan (Article 17).</p> <p>Land use planning is subject to the following general principles:</p> <ul style="list-style-type: none"> Coordination of the various public interventions with a territorial impact and a fair balance between public and private interests; Sustainability of the solutions contained in the instruments of territorial planning, with due attention given to the economic, social, cultural, and environmental dimensions.
Decree-Law no. 3/2016 – Municipal Administration Statutes	The DL gives local government the functions, duties and powers to, among others: (i) conserve and protect their local environment and natural resources; (ii) plan, implement and/or operate and maintain local water supply projects; (iii) implement or arrange for implementation local sanitation/sewerage/solid waste and drainage projects; (iv) protect cultural heritage and religious sites; and/or (v) monitor project activities within their jurisdictions.
Law 01/2003 - Land Law (the Juridical Regime of Real Estate)	This first Land Law of Timor-Leste was designed to serve as an umbrella law for the rest of the land and property regime. The law established the National Directorate for Land and Property Cadastral Survey (NDLPCS) as a legal entity and defined its jurisdiction and articulated general rules concerning land tenure and property rights to be further developed by ensuing legislation. Moreover, this law established a one-year period for both nationals and non-nationals to register their land claims. The Land Law 2003 vests all land that belonged to the Portuguese state, and all state property acquired or built by the Indonesian regime, in the new state of Timor-Leste.
Law 10/2011 approves the Civil Code	Regulates the legal relations among private entities across a variety of categories, including real estate and the principles governing the ownership, management, and transactions thereof. Chapter II, Section I, Article 3 states that "the rights over real estate shall be governed by the provisions of the Civil Code after recognition or issuance of the first legal deeds by the Democratic Republic of Timor-Leste over such property". Because the article implies that the Civil Code governs real estate rights

Laws	Summary of Core Requirements
	after the issuance of a legal deed to the real estate in question, this has the potential to introduce some discrepancy over the Civil Code's applicability in certain situations where land may be disputed due to overlaps in titles issued by Portugal and Indonesia for the same land. This same issue is further complicated due to the fact that Law 13/2017 (Special Scheme for Defining the Holding of Real Estate)
Decree Law No. 6/2011 - Compensation for Evacuating State Land	This Law deals with State property that is illegitimately or unlawfully occupied. It allows for compensation for relocation of unlawful occupants who have remained on the land for a certain period of time and where their humanitarian condition justifies granting compensation. The Law also specifies the criteria used to establish the compensation.
Decree Law No. 27/2011 - Regime to Regulate Ownership of Real Estate in Undisputed Cases	This law specifies that, since October 2008, the National Directorate of Land, Property and Cadastral Services of the Ministry of Justice has collected information on ownership of real estate with the objective of establishing the National Register of Property ²¹ and clarifying the factual and legal situation of real estate in Timor-Leste. In April 2011, after surveying more than 35,000 pieces of real estate – the Government was able to verify that 92% of cases had no disputes regarding ownership. This law describes the National Property Cadastre database and the property registry database. It also establishes the equality of rights – right of ownership is assured equally to men and women. For undisputed cases, the law states that ownership certificates shall be regulated by Ministerial Order.
Law No. 8/2017 on Land Expropriation for Public Utility:	This Law sets out the rules and procedures for the expropriation of private property for public utility (i.e., acquisition of property for use in the public interest) by public entities under direct administration of the State. The law is consistent with international laws that Timor-Leste are a party to, including the Universal Declaration of Human Rights, and the International Covenant on the Elimination of All Forms of Discrimination Against Women. The law includes the rights of affected people to fair compensation, which is based on market value of the land and the cost of replacing any buildings or plantations. The law prescribes that during the planning phase of the expropriation of property, a social impact assessment must be conducted, and a resettlement plan must be developed, if the property being expropriated is currently being used for residential purposes.
Decree Law 13/2017 - Special Scheme for Defining the Holding of Real Estate	<p>Defines the rules on land ownership, provides avenue for legal clarification of ownership and promotion of distribution and access to land, as well as being the figure of community property/land. Relevant to the negotiation procedure of the parcels of land under conflict, related to resettlement and/or compensation.</p> <p>This law includes the definition of what is Public Domain, which is particularly important for Rights of Way (ROW) (marine, water, sanitation, roads, drainage, etc.), which has relevance to drainage and sanitation ROWs but also in determining what other installations that are considered Public Domain (e.g., public cemeteries, monuments, buildings, etc.). The types of public domain of particular relevance for the project (Article 8, number 3) are:</p> <ul style="list-style-type: none"> a) Coastal and territorial waters, inland waters, as well as their beds, and banks, observing an adequate protection strip and the continental shelf. d) The beaches and the strip of the seafront and the contour of islands, islets, bays and estuaries, measured from the line of the maximum high tides, observing a protection strip of 50 meters towards the interior of the territory. e) River and lacustrine waters, lakes and lagoons and related land, with the exception of waters considered private or community under the terms of the Civil Code.

Laws	Summary of Core Requirements
	<p>j) Artificial ports and docks of public interest, observing an adequate confining protection strip.</p> <p>l) The road network, which includes, namely, roads, streets, public paths, squares, green spaces, as well as its accessories and works of art, observing an adequate bordering protection strip.</p> <p>m) Public cemeteries and the Gardens of Heroes.</p> <p>More importantly, the identification, determination of tracts/strips/etc. of and the regime for using the State's public domain are to be regulated by subsequent laws that have yet to be drafted and enacted, leaving a legal hole regarding regulatory compliance for drainage, sanitation, and/or water distribution ROW protection strips.</p>
Decree Law 14/2022 - Approves the Land Registry Code	The law regulating the registration of the legal status of real estate is necessary, since any real estate investment depends on a secure and credible land registry system. It is clear that the land registry in East Timor not only has the function of publicizing the legal status of properties with a view to securing the legal trade in real estate, but also, and at the same time, albeit incidentally, has the function of protecting these properties from the pressure that the real estate market may exert on them.
Decree Law 65/2022 – Cadastral Information Code	Knowledge of the identification and composition of immovable property, as well as the holders of rights over it, is essential for planning, management and decision-making on land use and occupation policies, as well as for the control, protection and management of natural resources, protected areas and properties of economic interest to local communities. Cadastral data and the definition of ownership of property rights are an indispensable tool for political decision-making on land use planning, the environment, the economy, public works and traditional livelihood mechanisms for local communities.
Decree Law 5/2016 - National System of Protected Areas	It is the legal instruments for the protection of sensitive ecological areas in Timor-Leste and their categorization. It establishes the legal instruments for the protection of declared sensitive ecological areas in Timor-Leste (Article 11) and their allowed and prohibited activities. It provides for a List of Established Protected Areas (Article 50 and Annex I), their typology (Article 12) and geographical demarcation (Article 17)
Decree No. 14/2017 Procedures on Submitting Proposals for the Classification of Protected Area:	This Decree Law established the applicable procedures for submitting a proposal for the classification of protected areas.
Decree Law 6/2020 on Protection and Conservation of Biodiversity	This Decree-Law establishes the components to be considered in the Environmental Evaluation, namely the identification and description of adverse effects for the conservation of biodiversity and appropriate measures proposed to prevent, minimize and mitigate the identified impacts. It Includes the List of Protected (Annex I) and Exotic/Invasive Species (Annex II) and the rules and prohibited activities for their management. It also establishes the considerations to be taken in Environmental Impact Evaluations, namely identification and description of adverse effects and appropriate measures proposed to prevent, minimize and mitigate the identified impacts, directly relevant to the present Project.
Law no. 14/2017 – General Framework for Forestry	Defines the fundamental principles and norms regarding management, protection, conservation and sustainable use of forests and watersheds (Article 1), Forest Classification [State, Community and Private] (Article 8) and Forest (Article 14) and River Basin (Article 17) Management Plans and Forbidden Activities in these areas (Article 24). It also includes Climate Change requirements for Forest development (Article 28), for emissions reduction and conservation of carbon stocks.

Laws	Summary of Core Requirements
Regulation UNTAET no.17/2000 – Prohibition of Logging operations and Export of Wood	Provided for in Law 14/2017, establishes the prohibition for felling, burning or destroying trees or forests (Article 2) and the activities exempt of these prohibitions (Article 3).
Government Resolution 33/2011 - National Adaptation Plan of Action (NAPA) for Climate Change	Climate Change is one of the compulsory components of this resolution and deals directly with its variations and adaptation requirements, especially regarding infrastructure durability. Annex 2 adopts trans-sectoral measures to reduce Climate Change vulnerability in essential sectors in Timor-Leste (Agro-forestry, Water supply, Biodiversity, Health, Infrastructure, Natural Disasters), all related to the Project, and defines and prioritizes Proposed Adaptation measures for said sectors (NAPA Table 13). Also relevant is its Project Profile 7 – Review and revise legislation, regulations and standards to enhance climate change resilient infrastructure.
Decree Law 08/2021 - Legal Framework for Classification and Qualification of the Soil	Establishes soil classification and qualification criteria and the rural and urban soil qualification categories. It may be relevant to the soil classification and qualification or land associated with the project components and their consequent classification and inclusion into any Municipal plan as administrative easements and restrictions of public utility.
Government Resolution 16/2016 - National Policy on Urban Mobility	Defines the principles for regional and municipal planning, defining the scope for each of these two terms. The law further establishes the responsibilities for drafting a National Plan and for drafting Municipal Plans and sets the rules within these plans to guarantee the promotion of prosperity, progress, liability, and the just partition of the national product. While Urban Plans for Dili have yet to be defined/regulated in Dili (have been drafted but never approved in Council of Ministers), they are relevant for the Sanitation Sector, in regard to definition of the types of wastewater (domestic versus industrial, etc.).
Decree Law 4/2012 - Labour Code	<p>The Labour Code establishes the legal regime for individual employment contracts and collective employment agreements. The code is based on the fundamental principles of equality, prohibition of harassment and the prohibition of forced labour.</p> <p>This law defines requirements of the Environmental Management Plan. The law also establishes duties and obligations of the private contractors, employers and employees while exercising a project’s scope of work, or within the bounds of a work contract, with the aim of creating good working conditions via the implementation of Health and Safety requirements in the working environment.</p>
Decree Law 33/2008 on Hygiene and Public Order	Establishes the local administrative measures in terms of public hygiene and order, setting the conditions and regulations to avoid interference with public land or infrastructure, namely the disposal of solid wastes in public spaces and prohibition of domestic animals circulating in public places. This law is relevant for the control of construction on drainage infrastructure and water and sanitation easements.
Decree Law 4/2004 on Water Supply for Public Consumption	The Water Supply for Public Consumption Law establishes the conditions for water distribution for public use in Timor-Leste. It places the responsibility on the State to provide Timorese communities with access to water for public consumption and provides for the creation of water management groups. The Water and Sanitation Service is responsible for managing the water supply system in urban areas and sets the standards and guidelines for water supply pipelines. The Water Supply for Public Consumption Law also provides for the setting of fees and charges for water supply services.

Laws	Summary of Core Requirements
Decree Law 31/2020 – Water Quality for Human Consumption	This law establishes the concentration limits for controlled parameters in water sources for human consumption
Government Resolution 8/2012 - Sanitation Policy	<p>Clarifies responsibilities for the provision of sanitation services, stipulating, for example, that each family and institution is responsible for the construction, use, and maintenance of its own hygienic and sanitary facilities.</p> <p>This policy defines responsibilities for strengthening, planning, developing, and managing urban sanitation services to collect sludge from septic tanks and operate centralized / decentralized sewer systems.</p>
Decree Law 38/2020 - Creation of the National Authority for Water and Sanitation	The law creates and approves the National Authority for Water and Sanitation (ANAS) related Statute. It establishes composition, duties and responsibilities of ANAS that are aimed at proposing, monitoring and ensuring the implementation of national policy in the field of water resources, in order to guarantee its sustainable and integrated management, supervision and inspection of the sectors of public water supply, sanitation of urban wastewater and urban solid waste.
Decree Law 2/2017 - Urban Solid Waste Management System	This law defines the Municipal Authority as the responsible entity for municipal solid waste management (collection, treatment and final destination) and defines the “do’s” and “don’ts” regarding solid waste management and directs the project in the mitigation and operational procedures regarding generated waste during the construction and operation phases of the Project.
Government Resolution 24/2009 - National Policy for Culture	This Resolution defines the concept of culture, heritage, identifies types of each, describes how these should be identified, classified and communicated to the public; and establishes how such cultural resources should be registered to foster a dynamic sector for the development of the identity and citizenship of Timor-Leste.
Decree Law 33/2017 - Legal Framework for Cultural Heritage	<p>This law defines the concept of cultural heritage and the measures for its support, protection, preservation and conservation and the typology of cultural heritage in Timor-Leste (Article 1) and its different cultural classification (Article 21). It also defines and regulates a 50 m Protection Zone around immovable Heritage (Article 23) and the rules and licensing requirements for general work within these Zones (Article 26). This law is particularly relevant to the project in regard to the intangible cultural components related to some sacred sites in the project area of influence.</p> <p>Furthermore, this law is relevant regarding project Work Camps, construction ROWs, and easements. When Heritage site Protection Zones cannot be avoided, EMP implementation is the overall measure to mitigate adverse impacts.</p>

5.2 Interactions and Consultation with other Agencies

Table 5-3: Relevant Agencies and Organisations

Entity	Function for this Activity
Agência Nacional de Licenciamento Ambiental (ANLA)	Environmental Licensing Authority was created in 2022, ANLA is the national environmental regulator. ANLA's mission is to ensure the implementation of the legislation on environmental licensing, being responsible for the assessment of projects, classification and issuance of environmental licenses and monitoring of the activities of public and private entities in general, proponents and holders of environmental licenses, in accordance with national and international environmental legislation. ANLA is responsible for the issuance and monitoring of the environmental licenses for the WSD project.

Entity	Function for this Activity
Ministry of Public Works	Before the formation of BTL, E.P., the Ministry of Public Works (MoPW) was the entity responsible for water supply and sanitation in Timor-Leste. MoPW will continue to be responsible for the maintenance of drainage canals and will be responsible for the public roadways that will be used for wastewater network construction during the Compact.
BTL as Part of the MOPW	In 2020, GoTL created an independent, publicly owned water utility company, Bee Timor-Leste, Empresa Publica (BTL, E.P.). BTL, E.P. assumed responsibilities for the operations and maintenance of water supply and sanitation assets in Timor-Leste. BTL, E.P. will serve as the implementing entity in the Compact and will provide input to the Consultant during this contract. BTL, E.P. will own and operate the assets funded through the WSD project.
MCA-TL	MCA-TL will be the accountable GoTL entity that will execute and manage all contracts under the Compact. MCA-TL will coordinate communications between the GoTL and all consultants and contractors. MCC and the GoTL are currently in the process of appointing MCA-TL. MCA-TL will ultimately serve as the Employer for this contract, and as such, will provide approval for and accept all of the Consultant's deliverables, and issue all Payment Certificates for the Consultant under this Contract.

At a national level, in addition to ANLA and BTL, other organizations play a vital role in environmental protection and management, particularly the Secretary of State for Electricity, Water, and Sanitation (SWES), Ministry of Agriculture, Forestry and Fisheries (MAFF), Secretary of State for Local Development, Secretary of Land and Properties, Minister of Social Solidarity and Inclusion, Ministry of Health, Ministry of Transport and Communications as well as the Municipality and the administrative setup of Dili.

5.3 International Standards and Guidelines

5.3.1 IFC Performance Standards

The IFC Sustainability Framework (IFC, 2012) comprises both IFC policy and established Performance Standards (PSs) for environmental and social (E&S) sustainability. The IFC PSs 1) define key responsibilities for managing projects' E&S risks, 2) provide risk and impact guidance 3) provide guidance to avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, and 4) provides guidance on best practices including stakeholder engagement and disclosure obligations. MCC-funded projects must address the IFC PSs.

The Performance Standards provide 1) a framework for the design, construction and operations of projects so that they are environmentally and socially acceptable and 2) guide measures to prevent, mitigate or compensate adverse E&S impacts of projects. The Performance Standards focus on outcomes rather than processes, and require the implementation of a robust Environmental and Social Management System (ESMS).

In addition to the fundamental eight PSs, IFC has published more detailed technical guidance under *Environmental, Health, and Safety Guidelines*. These guidelines also include sector-specific technical guidance. The applicable document for this project is *Environmental, Health, and Safety Guidelines for Water and Sanitation* (IFC, 2007).

Table 5-4 presents a summary of each of the eight PSs including their applicability and specific actions to address the impacts and measures to minimize, mitigate and compensate impacts as far as possible.

Table 5-4: Applicability of IFC Performance Standards

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
1. Assessment and Management of E&S Risks and Impacts	Identify and evaluate E&S risks and impacts of the project and adopt measures to anticipate, avoid, and, when avoidance is not possible, minimize and/or compensate PAP and communities and environmental area of influence. To achieve this, an effective ESMS should be established that ensures public participation and grievance redress mechanisms.	Applicable	An ESIA will be carried out for Water, Sanitation and Drainage (WSD) Project and a general Environmental and Social Management Plan (ESMP) will be developed, which should function as basis for the contractor's site specific ESMP (CESMP). The contractor will implement an Environmental and Social Management System including monitoring, training, record keeping and reporting, etc.
2. Labour and Working Conditions of Workers	Management of projects should ensure worker safety, promote fair treatment, non-discriminatory and equal opportunity for workers; establish, maintain and improve the worker-management relationship; and comply with national employment and labour laws of the host country.	Applicable	Impacts and Mitigation measures will be assessed and an ESMP developed containing OHS and labour conditions, taking into account WB General and Water and Sanitation specific EHS Guidelines and the ILO fundamental conventions. The contractor will develop a site specific ESMP (CESMP), including a code of ethic and business conduct; TIP, OHS requirements (PPE, safety induction, task specific training, emergency preparedness, documentation, reporting, grievances redress mechanism, etc.).
3. Resource Efficiency and Pollution Prevention	Avoid or minimize adverse impacts on human health and the environment through avoidance or minimization of pollution, including release of greenhouse gases, and promote sustainable use of resources such as energy and water. Ensure the use of efficient pollution abatement machinery.	Applicable	Possible impacts have and will be further assessed and mitigation measures developed, which will be described in the EMP and will be made an obligation to be included into the CESMP. The most important impacts and mitigation measures will be managed by several sub-plans as the waste management plan, Hazmat management plan, equipment maintenance management plan, emergency preparedness, oil spill contingency plan, traffic management plan, etc..
4. Community Health, Safety and Security	Evaluate the risks and impacts to the H&S of the affected communities during the project lifecycle and establish preventive and control measures consistent with best international practices and commensurate	Applicable	The main risks are associated with the traffic changes and congestions during construction, therefore a traffic management plan will be developed and enforced. Other aspects will be the dust creation during dry season to

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
	with the nature and magnitude of impacts.		be mitigated by frequent sprinkling of construction sites and roads. Excavation and trenches will be marked and temporarily fenced. A TIP and GSI plan will be developed, HIV/Aids campaigns conducted to raise awareness as well as appropriate measures for preventing malaria and dengue. A Code of Conduct will be enforced. A stakeholder engagement plan will be developed to disseminate the information required for the local population including frequent meetings with the communities to raise advantages and disadvantages. Additionally, grievance mechanism will be put in place which should cover all aspects from compensation issues over, claims related to unsocial driving behaviour, etc.
5. Land Acquisition and Involuntary Resettlement	Where avoidance is not possible, displacement should be minimized by alternative project design considerations. No forced eviction should be undertaken. Land acquisition should be done in a manner that minimizes adverse social and economic impacts through the provision of compensation packages and that ensures a humane resettlement procedure, disclosure of information, consultation and participation of affected persons. It should be the project proponent's duty to ensure the physical and economic well-being of displaced people are not worse off than their pre-displaced lives.	Applicable	The core mitigation measure is to avoid any physical resettlement and there will not be any physical resettlement for the sewer network, only inconveniences and short to medium term economic displaced (business disruption). In case a house cannot be connected there are alternative solutions by either providing them with toilet facilities at a different location in the property where it can be connected or other options need to be thought of (alternative assessment). The Right of Way of the sewer system will be optimized during the detailed design in a way that the impacts are as small as possible and as many houses as possible can be connected. A Resettlement Action Plan is under preparation as part of the required Safeguard documents for the project.
6. Biodiversity Conservation and Sustainable Management of	All project proponents should identify both direct and indirect project-related impacts that could	Applicable	Main impact on biodiversity will be caused by the ocean outfall on aquatic biodiversity short-term caused by the in-

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
Living Natural Resources	potentially threaten biodiversity and ecosystem services. The following indicators should be used as a guide: habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, and pollution.		water construction through increased solid particles in the surrounding and long-term by the discharge of treated effluents. To mitigate the long term impacts Hydrodynamic modelling is essential to simulate the performance of the proposed outfall with respect to the potential zone of influence and the level of impact associated with the effluent discharge plume. The impact caused by the treated effluent will be further assessed and the design of the ocean outfall further optimized to minimize the effect on the surrounding marine environment. Periodic monitoring of the effluent will be included to be able to react on any incidents. Other impacts will be related to construction activities and waste disposal which will be minimized by implementing the ESMP.
7. Indigenous People	Project proponents should ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture and natural resource-based livelihoods of Indigenous Peoples. Project proponents should promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner, respecting and preserving the culture, knowledge and practices. Adverse impacts on communities should be anticipated and avoided. When avoidance is not possible, such impacts should be minimized and/or compensated for.	TBD	Indigenous people as defined in the IFC guideline are social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population. The population living in the surroundings of the project area are not distinct from the mainstream groups. This will be further assessed during the RAP survey and general mitigation measures as the code of conduct will be implemented, impacts will be mitigated where possible and compensation payments will be made for all assets PAPs will lose. In Timor-Leste "indigenous" is defined by language. We expect some of the community will meet the definition. We ensure PS compliance through census, stakeholder engagement, public process, etc.

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
8. Preservation of Cultural Heritage	Project proponents must protect cultural heritage from the adverse impacts of project activities and support its preservation. Project proponents should also promote the equitable sharing of benefits from the use of cultural heritage.	TBD	There are several locations in the immediate vicinity of the future construction sites. Detailed protective measures and construction monitoring measures, e.g. monitoring of vibrations in the surrounding area, are being developed. We expect graves in the project area, which will be included in the detailed planning. Procedures for chance finds are also being developed.

5.4 MCC Environmental Guidelines

5.4.1 Statement of Principles

MCC recognizes that the pursuit of sustainable economic growth and a healthy environment are necessarily related. MCC has established a process for the review of environmental and social impacts to ensure that the projects undertaken as part of programs funded under Millennium Challenge Compacts with eligible countries are environmentally sound, are designed to operate in compliance with applicable regulatory requirements, and, as required by the legislation establishing MCC, are not likely to cause a significant environmental, health, or safety hazard.

MCC is committed to program design that reflects the results of public participation in host countries during all phases of the program, integrating governmental interests with those of private business and civil society. In this spirit, MCC will work to ensure that the preparation of Environmental and Social Impact Assessments will include consultation with affected parties and public disclosure of the associated documents.

Finally, MCC is committed to the principle of host-country ownership of a Compact, including host-country responsibility for measures to mitigate adverse environmental and social impacts. A Compact project is expected to comply with host-country laws, regulations and standards, as well as requirements by which the host country is bound under international agreements.

5.4.2 Sources of Policy; Applicability of Guidelines

The policies reflected in these guidelines are based, broadly speaking, on sound sustainable development project design principles and international best practices in this field, including, but not limited to the following:

- the "Principles of Environmental Impact Assessment Best Practices" of the International Association for Impact Assessment;
- the environmental policies and guidelines of other United States government development assistance and financing entities;
- the environmental and social policies and guidelines of the multilateral development banks, the Common Approaches developed by export credit agencies through the Organization for Economic Cooperation and Development (OECD); and
- the Equator Principles in use by international commercial banks.

In addition, these guidelines reflect the following:

- Section 605(e)(3) of the Millennium Challenge Act of 2003 prohibits MCC from providing assistance for any project that is "likely to cause a significant environmental, health, or safety hazard." Consequently, the presence of such a project in a host country's proposal will preclude MCC funding (or continued funding)

of that project. (See the discussion of “environmental, health or safety hazard” in Appendix A.)

- Executive Order 12114, January 4, 1979, 44 Fed. Reg. 1957 (January 9, 1979) requires every federal agency taking actions encompassed by that Executive Order to establish procedures to implement it with respect to certain major federal actions having significant effects on the environment outside the geographical borders of the United States and its territories and possessions. It is expected that the Executive Order will have limited applicability to MCC programs, but where the terms of the Executive Order apply, the procedures described in Appendix B will be used.

In those instances where MCC's actions or a project undertaken or funded under a Compact may significantly affect the quality of the environment of the United States, including its territories or possessions, MCC will require adherence to the environmental review procedures established by the Council on Environmental Quality under the National Environmental Policy Act (NEPA), 40 CFR Part 1500, in lieu of these guidelines.

In addition to the foregoing, and to the extent consistent with these guidelines and any applicable additional guidance issued by MCC from time to time, the projects MCC finances under a compact will be developed and implemented in a manner consistent with the environmental and social performance standards set forth in the Performance Standards on Environmental and Social Sustainability of the International Finance Corporation, as amended from time to time (IFC Performance Standards). Consistent with MCC's principle of country ownership, the host country is responsible for managing environmental and social risks and impacts consistent with the requirements of the IFC Performance Standards.

MCC seeks to ensure, through its due diligence and implementation oversight efforts, that Compact activities it finances are implemented in accordance with the requirements of the IFC Performance Standards. MCC will only support Compact activities that are expected to meet the requirements of the IFC Performance Standards within a prescribed timeframe.

These guidelines are primarily intended to describe the principles of environmental and social impact assessment that Compact-eligible countries will be expected to apply in the context of a Compact. These guidelines are not intended to describe MCC's internal implementation procedures, which MCC will develop to reflect experience with these guidelines.

MCC revises these guidelines from time to time to reflect lessons learned in their application as well as relevant changes in international standards and norms of practice. In addition, MCC may provide such additional guidance to a host country during the implementation of a program as may be advisable in light of host-country norms and international standards, such as the *Environmental, Health, and Safety Guidelines of the World Bank Group* (2007, or as amended from time to time) or World Health Organization guidelines and standards.

5.4.3 Environmental and Social Review

These guidelines apply to the review of each project described in a Compact or proposed Compact. The application of these guidelines to specific projects and the breadth, depth, and type of environmental and social impact review to be completed will depend on the nature, scale, and potential environmental and social impact of proposed projects.

MCC's process of environmental and social review considers specific host-country conditions, the findings of host-country environmental studies, National Environmental Action Plans (NEAPs), the host country's overall policy framework and national legislation, the capabilities of the entities implementing the project and managing its environmental and social impacts, and obligations of the host country under relevant international agreements.

5.4.4 Environmental and Social Screening

As early as possible in the Compact proposal review process, MCC screens each project as described in these guidelines. As part of its review of Compact proposals, MCC funding decisions will be informed by the results of screening and, where needed, an Environmental and Social Impact Assessment (ESIA) or other environmental and social impact analysis. To

that end, MCC will not fund a project unless there is provision for appropriate screening and appropriate environmental and social impact analysis.

While the completion of the requisite environmental and social impact analysis is the responsibility, either directly or indirectly, of the host country, MCC will advise and consult on the requirements of an ESIA. MCC will review the findings and recommendations of the Environmental and Social Impact Assessment to ensure their consistency with these guidelines, and where appropriate, may require additional assessment work, including public consultation and information disclosure.

5.4.4.1 Categorical Prohibition

As stated above, MCC may not provide assistance for any project that is “likely to cause a significant environmental, health, or safety hazard.” Accordingly, as part of its environmental and social screening, MCC will identify and exclude such a project from MCC funding. Such a project will be classified as a Categorical Prohibition.

5.4.5 Determination of Project Category

MCC screens all Compact proposals to identify projects that require further review due to their potential adverse environmental and social impacts, and projects that are in sensitive sectors or in or near sensitive locations. The result of this screening process will be an environmental classification following the recommendations contained in the Organisation for Economic Co-operation and Development Common Approaches and the practices of the World Bank, classifying in accordance with the potential environmental and social impact, and the extent of the environmental and social review required.

Based on the environmental and social impacts and the extent of the Project area, the Timor-Leste WSD Project was classified as MCC Category A and is consistent with the analogous ANLA classification. It requires that an ESIA be developed defining the environmental and social risks that need to be taken into account in the construction and operation of the WSD Project. The Draft ESIA was completed in 2022.

Table 5-5: MCC project categories

Category	Criteria	Requirements
A	A project is classified as Category A if it has the potential to have significant adverse environmental and social impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Category A, in principle, includes projects in sensitive sectors or located in or near sensitive areas. An illustrative list of sensitive sectors and sensitive locations is set out in Appendix C.	<p>For Category A projects, MCC will require an Environmental and Social Impact Assessment in accordance with these guidelines. An Environmental and Social Impact Assessment evaluates the potential environmental and social risks and impacts of a specific project in its area of influence; examines alternatives to the project, including ways of improving project selection, siting, planning, design, and implementation in order to prevent, minimize, mitigate, or compensate for adverse environmental and social impacts and enhance positive impacts; and includes an Environmental and Social Management Plan, which describes the process of mitigating and managing adverse environmental and social impacts during the implementation of a project. The recommended contents of an Environmental and Social Impact Assessment report are included in Appendix D.</p> <p>An Environmental and Social Impact Assessment should be initiated as early as possible in project development and be integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project. An Environmental and Social Impact Assessment should take into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous</p>

Category	Criteria	Requirements
		<p>peoples and cultural property); natural disaster risk and vulnerability assessment; and transboundary and global environmental aspects.</p> <p>For a Category A project, disbursement of some or all of the MCC funding for that project will be contingent upon completion of an Environmental and Social Impact Assessment. In deciding whether to provide some MCC funding for the project in advance of completion of the Environmental and Social Impact Assessment, MCC may consider funding costs of the assessment itself as well as costs of some other project elements (e.g., initial project administration) that can be prudently undertaken before the Environmental and Social Impact Assessment is completed. In the event that it is not possible to complete the Environmental and Social Impact Assessment, MCC will define procedures for addressing such a case on a Compact-specific basis. In any event, the project will be subject to the other requirements of these guidelines.</p>
B	<p>A project is classified as Category B if its potential environmental and social impacts are less adverse than those of Category A projects. Typically, these impacts are site-specific, few if any of them are irreversible, and mitigation measures are more readily available.</p>	<p>For a Category B project, MCC will require specific environmental and social impact analyses, including Environmental and Social Management Plans, as appropriate. Such analyses may be a condition for disbursement of some or all of the MCC funding for the project. The scope and format of the analyses will depend on the project and its potential environmental and social impacts. Like an Environmental and Social Impact Assessment for a Category A project, the analysis for a Category B project must examine the potential negative and positive environmental and social impacts of the project and recommend any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and enhance positive impacts. Generally, the scope of such work will be narrower than for Category A projects.</p>
C	<p>A project is classified as Category C if it is unlikely to have adverse environmental and social impacts.</p>	<p>While MCC generally will not require environmental and social impact analysis for a Category C project, MCC reserves the right to require specific environmental and social impact studies, reporting, or training where relevant or where positive environmental and social impacts may be enhanced.</p>
D	<p>A proposed project is classified as Category D, if it will involve an intermediate facility (such as a municipal public grant fund) that will use MCC funding to finance subprojects that may potentially result in adverse environmental and social impacts.</p>	<p>The host country must require that subprojects under a Category D project comply, at a minimum, with the environmental and social impact analysis standards, as well as relevant laws and regulations, of the host country. MCC reserves the right to set additional environmental and social performance standards and monitoring requirements for subprojects on a case-by-case basis, depending on the nature of the intermediate facility. For all subprojects, the intermediate facility will ensure that environmental and social impact analyses and associated documents are developed with public consultation and made available in a public place accessible to potentially affected parties.</p> <p>The host country must require the intermediate facility to monitor the environmental and social</p>

Category	Criteria	Requirements
		<p>performance of its subprojects and submit to MCC periodic (usually annual) reports on the implementation of its environmental and social procedures and the environmental and social performance of its portfolio.</p> <p>In addition to or in lieu of the determinations described above, MCC will determine during the environmental screening whether Appendix B of these guidelines, the National Environmental Policy Act, or other requirements or procedures must apply to the proposed project.</p>

5.4.6 Public Consultation and Disclosure

Consistent with MCC's principle of host-country ownership of the projects implemented under a Compact, implementing entities will be expected to incorporate timely, participatory, and meaningful public consultation in the development of Compact-related ESIA's, analyses, and associated Management Plans. They will also be expected to make these documents publicly available and easily accessible.

5.4.7 Monitoring

The host country will be responsible for appropriate monitoring of project mitigation plans (e.g., Environmental and Social Management Plan) during the term of the Compact. Recognizing that not all Compact-eligible countries may have this capacity, MCC can, where appropriate, provide funds within the Compact to help ensure proper oversight and implementation of mitigation measures. MCC will monitor compliance through the review of information provided by the implementing entity and through site visits.

In addition, MCC may require, where appropriate, an environmental audit in order to assess the impact of prior or existing activities not funded with MCC funds or of an MCC-funded project to determine the status of regulatory compliance and environmental performance, as well as potential environmental and health and safety risks, liabilities, and opportunities associated with the activities or project.

5.5 Multilateral Agreements

Table 5-6: Multilateral Agreements

Ratification or signing	Conventions and Objectives
Environment	
2020	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Cooperation among the signatory countries for protection of certain endangered species of wild animals and plants to prevent their over exploration.
2017	Paris Agreement is an agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future
2013	Convention of the Law of Seas (preservation and protection of the marine environment)
2012	Plant Protection Agreement for the Asia and Pacific Region
2009	Montreal Protocol on Ozone Layer Depleting Substances.
2009	Coral Triangle Initiative (CTI) defines five main components namely Sea Scapes, Ecological Approach for Fisheries Management, Marine Protected Areas, Threatened Species and Climate Chang
2008	Kyoto Protocol UNFCCC. Mitigation of climate change furthermore it promoted the carbon sequestration and credits (Credit Emission Reduction trading)
2007	The Rio Declaration. The Convention on Biological Diversity (UNCBD contains principles which address such important issues as; sustainable development to integrate

Ratification or signing	Conventions and Objectives
	environmental protection into the development process (ESIA); common but differentiated responsibilities to conserve, protect and restore the earth's ecosystems; public participation and information access at the national level, reduce and eliminate unsustainable patterns of production and consumption.
2007	International Plant Protection Convention (IPPC)
2006	UN Framework Convention on Climate Change (UNFCCC). Stabilization of greenhouse gas concentrations in the atmosphere.
2005	International Convention for the Prevention of Pollution from Ships (MARPOL Convention)
2005	Convention on the International Maritime Organization
2004	Vienna Convention on the Protection of the Ozone Layer.
2003	Convention to Combat Desertification (UNCCD)
Cultural Heritage	
2016	Convention for the Safeguarding of the Intangible Cultural Heritage (2003).
2016	Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005)
2016	Convention concerning the Protection of the World Cultural and Natural Heritage (1972)
Human Rights	
2003	Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment
2003	International Covenant on Civil and Political Rights
2003	Second Optional Protocol to the International Covenant on Civil and Political Rights aiming to the abolition of the death penalty
2003	Convention on the Elimination of all forms of Discrimination against Woman
2003	Convention on the Elimination of all forms of Racial Discrimination
2003	International Covenant on Economic, Social and Cultural Rights
2003	International Convention on the rights of the Child including Optional Protocols (on the involvement of Children in armed conflicts, 2004; on the sale of children child prostitution and child pornography, 2003)
2004	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
2023	Convention on the Right of Persons with Disabilities
2002	Constitution of the World Health Organization
International Labour Standards	
2009	Forced Labour Convention
2009	Freedom of Association and Protection of the right to Organise Convention
2009	Right to Organise and Collective Bargaining Convention
2016	Equal Remuneration Convention
2016	Discrimination Convention
2009	Worst Forms of Child Labour Convention

6 STUDY AREA

While this Activity involves two Phases and two EISs, for continuity and compliance with IFC PS1, the EISs study areas are only partially segregated and will have some overlap to ensure that the combined and cumulative impacts are accurately characterized. Figure 6-1 shows the Phase 1 and Phase 2 main study area. Phase 1 is the plant site and outfall area at the far north outlined in cyan and the Phase 2 study area is the remainder of the hatched area.

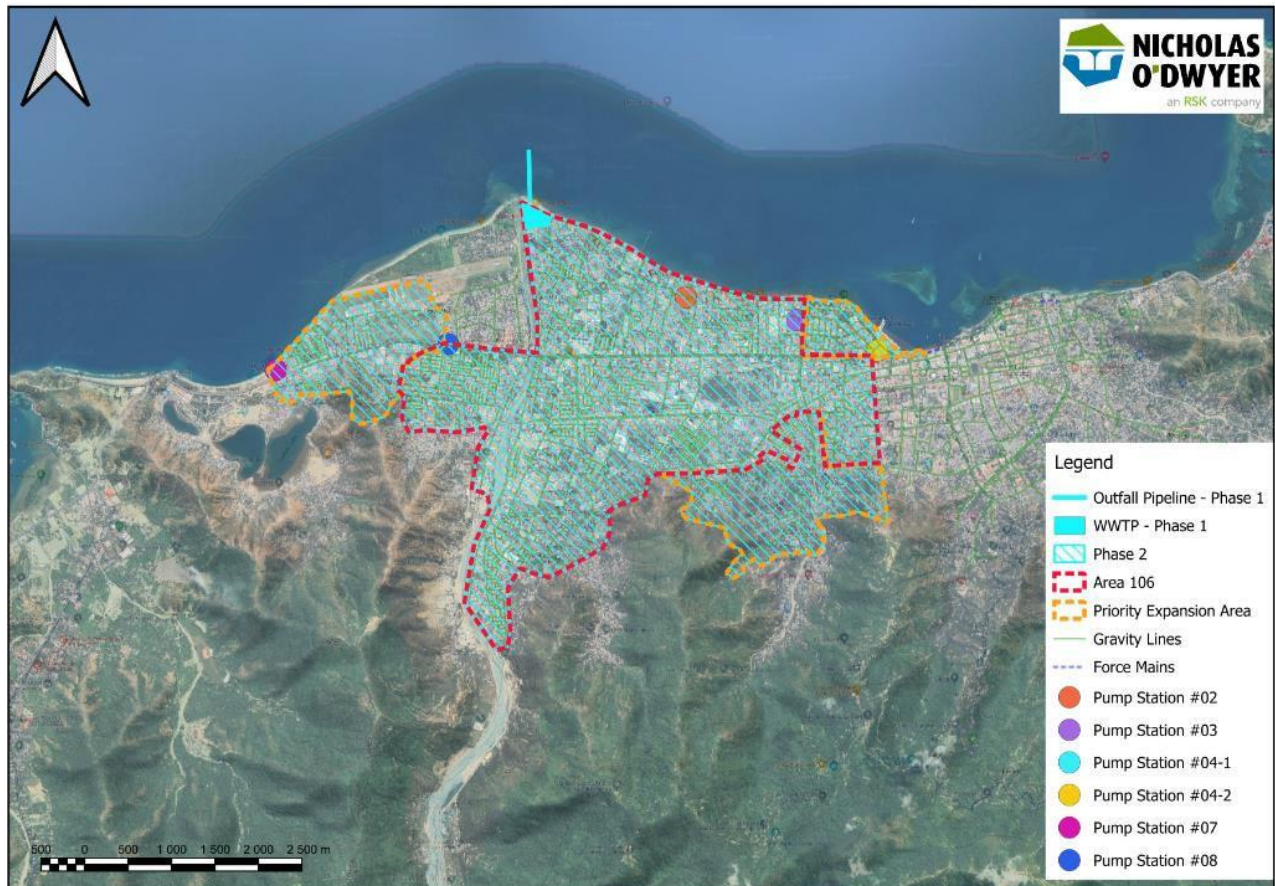


Figure 6-1: Phase 1 and Phase 2 main study area

6.1 Phase 1 study area

The primary study area for Phase 1 consists of 1) the WWTP and OSHG site that lies on the east side of the mouth of the Comoro River, adjacent land parcels and land uses, and 2) offshore areas where the discharge structure/diffuser will be installed, and the mixing zone for the diffuser effluent. Some impacts will consider a wider area, primarily for the construction phase, such as impacts from construction activities such as noise, dust, traffic, lighting, sediment plumes, and safety. WWTP and OSHG site

6.1.1 WWTP and OSHG site

The WWTP and OSHG site lies on the east side of the mouth of the Comoro River in the Suco Bebonuk. It is bounded to the north by beach along the east end of the Ombai Strait, to the east and south by developed lands, and the west by the Comoro River. The site is slightly less than 6 hectares (ha) and is to be acquired by BTL, EP on behalf of GoTL. As shown on the satellite image, the site has multiple structures, including: workshops, storage buildings, stockpiles, equipment staging. Figure 6-3 shows the site as of November 2023.

The site is relatively flat and ranges in elevation from approximately 4 m above sea level along the north side up to about 6 m above sea level along the south side. It may be necessary to bring fill into the site to raise the elevation for flood protection. The beach area along the north side of the site is not part of the land parcel.

While the details and scope of the study area varies by topic, the main Phase 1 Study Area coordinates are provided below.

WWTP and on-side sodium hypochlorite facility, approximate centre of the site:

- Latitude: 8°32'24.12"S
- Longitude: 125°32'11.63"E

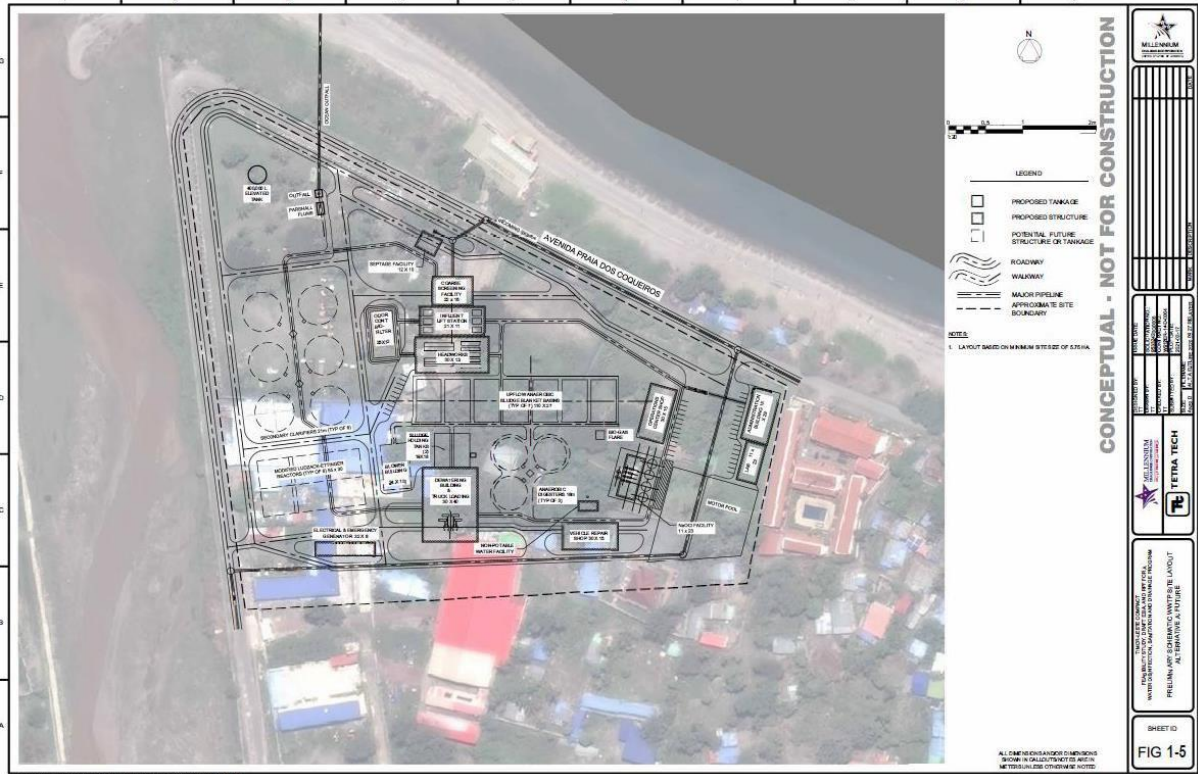


Figure 6-2: Indicative WWTP Layout





Figure 6-3: WWTP site, November 2023 (photo credit: B. Lammers)

6.1.2 Ocean areas

The outfall study area consists of three sub-areas:

- 1) the pipe from the WWTP that crosses the shore zone (refer to Figure 6-4 for details of sub-area 1);
- 2) the submerged portion of the pipe that will lie along the bottom through the 300m Contact Protection Zone (State Water Resources Control Board, 2015);
- 3) the mixing zone area at the end of the outfall. As with the main plant site, some study areas will extend further, such as the general marine habitat and benthic zones and human use areas, such as fishing and swimming in proximity to the outfall structure.

Sub-area 1 ranges in elevation 4 m above sea level to sea level, sub-area 2 ranges from sea level to a depth of approximately 60 m, and sub-area 3 lies at a depth of approximately 60 m.

While the details and scope of the study area varies by topic, the main Phase 1 Study Area coordinates are provided below.

Ocean outfall, approximate seaward end of the outfall/diffuser

- Latitude: 8°32'4.78"S
- Longitude: 125°32'10.12"E



Figure 6-4: Ocean Outfall site, November 2023 (photo credit: B. Lammers)

7 SCOPE OF THE WORK

7.1 Project Description

As discussed in Section 2, Phase 1 of the project includes the construction and delivery of the wastewater treatment plant (WWTP), onsite sodium hypochlorite generation (OSHG) plant and ocean outfall. Phase 1 also includes for the operation and maintenance of the WWTP and ancillary facilities by a private operator as well as training for the BTL staff so that BTL can assume operations following completion of the Compact.

As part of the Phase 2 proposals, the untreated wastewater (sewage) will be collected from the properties in Area 106, and potentially the three priority expansion areas, and conveyed to the proposed Phase 1 WWTP via a series of gravity pipes, pumping stations and force mains.

Through a series of treatment processes, the WWTP will treat the sewage to an acceptable level before discharging the treated effluent to the Banda Sea.

The OSHG plant is proposed to provide disinfectant (sodium hypochlorite) for use in disinfection of drinking water, serving the needs of the capital city of Dili and certain surrounding municipal districts.

Figure 7-1 provides a simplified overview of the Phase 1 and Phase 2 elements while the remainder of this section provides additional information on the Phase 1 Project Elements as well as the Project Activities and a high-level Project Schedule.

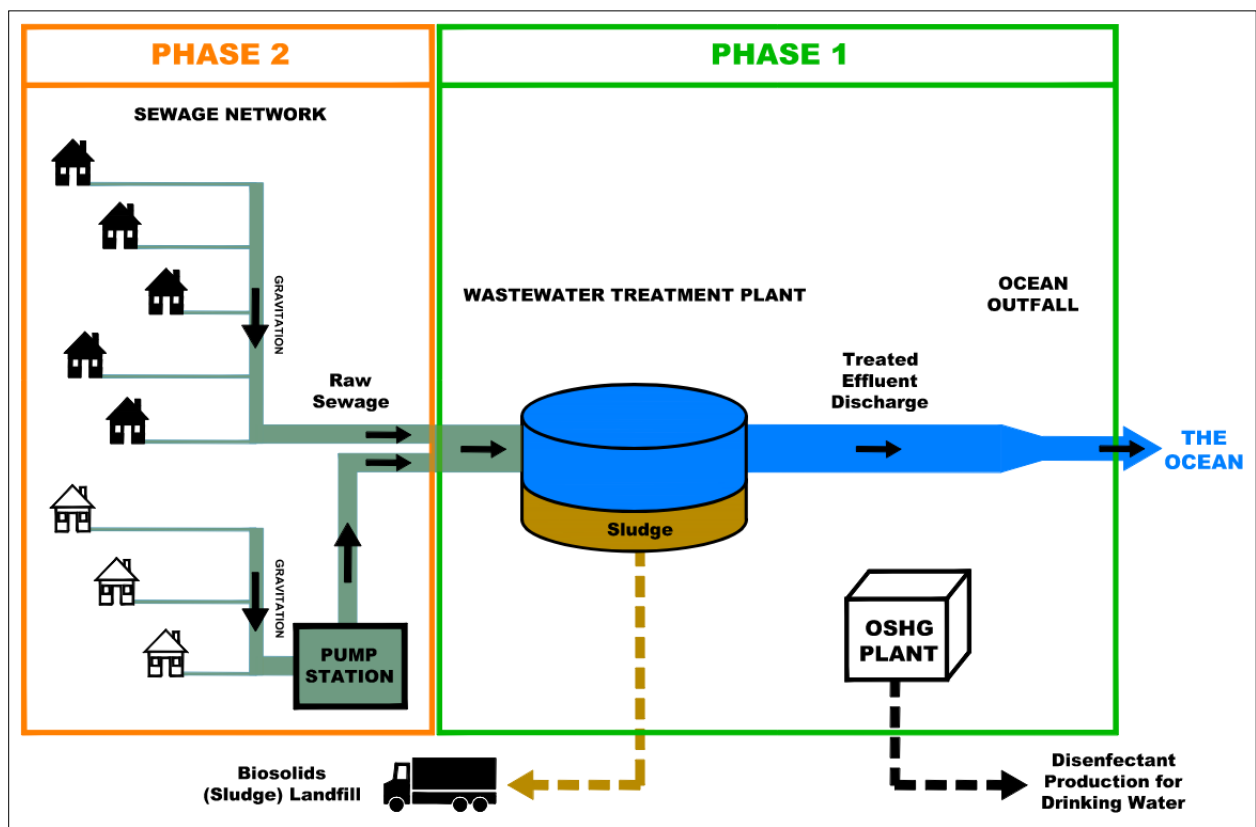


Figure 7-1: Simplified sketch of sanitation system including Phase 1: WWTP, OSHG and ocean outfall, and Phase 2: network, pumping stations,

7.1.1 Phase 1: Project Elements

Wastewater Treatment Plant

The WWTP is required to treat wastewater from two main sources;

1. The sewage transported by the proposed Phase 2 sewers.

2. Septage from existing septic tanks from areas of Dili not served by the proposed sewer system developed under the WSD Project.

The exact processes to be used at the WWTP for the treatment of sewage is still being evaluated, refer to Section Analysis of Alternatives 7.3 for a list of the technologies being considered. For each of the processes being considered there will be similarities in terms of how the plant will operate, a general description of the plant process is as follows;

- Initially, large objects like rags and sticks will be removed to prevent blockages in pipes and damage to equipment.
- The sewage will then pass through a stage where non-organic particles, such as sand and grit, will settle out.
- Subsequently, additional organic suspended solids will be removed, resulting in the formation of a treated liquid effluent and a biosolid waste (sludge). The sludge will be removed from the system while the liquid treated effluent, treated to acceptable standard, will be discharged via the outfall pipeline.
- The WWTP will generate waste associated with the rags, sand, grit and biosolids (sludge). The waste from the WWTP is expected to be disposed of to a Dili municipal landfill.

On-Site Sodium Hypochlorite Generation (OSHG) Plant

The OSHG plant will supply disinfectant for Water Treatment Plants in and around Dili that are being developed under **separate projects** to the WSD Project.

The OSHG process produces a diluted sodium hypochlorite solution, which can be used as a disinfectant or oxidizing agent in water treatment applications. Sodium hypochlorite (NaClO) is a dilute solution form of household chlorine bleach.

Ocean Outfall

The purpose of the ocean outfall is to discharge the treated liquid effluent from the WWTP to the ocean, where it meets the water quality goals through dilution and dispersion. The outfall will consist of a pipeline from the WWTP that runs across the beach zone that lies between the WWTP site and the ocean. At this time, the pipe is planned to be buried until it reaches the ocean, where it will then be laid on seabed. The outfall is expected to extend beyond the 300m Contact Protection Zone (State Water Resources Control Board, 2015).

7.1.2 Phase 1 Project Activities

The primary activities associated with Phase 1 of the Project include:

Functional Design: This design will be conducted by the Consultant and inform the requirements to be adhered to by the Design-Build Contractor. To inform the functional design stage a series of intrusive and non-intrusive surveys will be carried out, as described under section 7.2.1.2. This stage of design will also include the preparation of the FIDIC Yellow contract documents that will guide the activities of the Design-Build Contractor.

Detailed Design: This will be the final design prepared by the Design-Build Contractor, which will guide the construction activities detailed below.

Construction: general construction activities;

- Site preparation and preliminary earthworks;
- Establish site compound including temporary site offices and parking areas;
- Set up including designation of material and equipment lay down areas (aggregates, pipes, fittings, mechanical and electrical equipment, chemical storage in banded tanks, material stockpile prior to disposal);
- Construction yard set up (concrete batching, plant refuelling facilities, steel fixing for reinforced concrete structures, pipe welding facilities, mechanical and electrical assembly points, wash-down areas etc.);
- Excavation/trenching and construction of pipelines and ducting;
- Excavation for tanks and pumping station structures;

- Management and disposal of surplus material;
- Construction of reinforced concrete tanks and pumping stations;
- Construction of inlet works including installation of channels, screens and grit chambers;
- Mechanical and electrical fit out of the facility (including pumps, motors, and control systems);
- Construction of control buildings and ancillary facilities;
- Installation of odour control systems;
- Construction of access roads and parking facilities;
- Excavation and trenching for the outfall pipeline (section extending under the beachfront to a point at a suitable depth beneath the sea level);
- Installation of the sea outfall pipeline;
- Placement of backfill material;
- Landscaping and aesthetic enhancements.

Operation: sludge management, rags, sand, grit and biosolids (sludge) hauling, disinfectant hauling, salt delivery and storage for OSHG plant, material storage and containment as needed, office space and activities, maintenance activities, periodic clean-out and manhole clearing and pump house generator refuelling.

7.1.3 Phase 1 Schedule

The schedule for the delivery of all aspects of the Phase 1 is expected to extend across the full Compact Term i.e. 5years. Preliminary estimations indicate the following;

- Detailed Design: 6months
- Construction: 38months
- Operation, maintenance and training: 24months.

Note, it is anticipated that there will be periods of overlap between the phases described above.

7.2 Description of the Environment (Baseline data)

The WSD project was subject to an intensive three-year, pre-Compact development period that included engineering, economic, environmental, and social studies and analyses. During those studies, a wide array of previous studies and data were also collected and used in the analyses. All studies done during the MCC Compact Development period (2019 – 2022) were scoped and conducted in close consultation with GoTL. Table 7-2, Table 7-4, and Table 7-5 summarize the primary source studies and data for those resource areas. Table 7-1 lists some other relevant studies that are otherwise classified.

Table 7-1: Summary of previous studies for the WSD Project

Study	Date(s)	Field Study	Desktop Study	Analysis	Data and Scope
Legislative and Policy Analysis	2022	n/a	•	•	Discussion of applicability of various Timor-Leste laws, International performance standards and policy, and applicable treaties and conventions
Economic Analysis	2019, 2021	n/a	•	•	Economic analysis of various alternatives and benefits beginning with initial Compact Scoping and proceeding through sequential layers of detail to define the Compact scope and budget
Stakeholder engagement	2020 - 2022	•		•	Stakeholder Engagement has been an ongoing process since 2020 to obtain information to

Study	Date(s)	Field Study	Desktop Study	Analysis	Data and Scope
					inform Compact Development and identify concerns and issues from GoTL ministries, NGOs, community groups and Suco Chiefs.
Alternatives analysis	2020, 2021, 2022		•	•	Alternatives analysis has been conducted throughout the Compact development process. Section 7.3 provides details of the alternatives analysis to date, as well as the alternatives addressed in this stage of the work.

In addition to the four years of previous studies and data, there are studies that will be conducted during Phase 1 and 2 of this project. Some of these studies are new and some will supplement the previous studies.

Table 7-3 and Table 7-6 list these new and enhanced studies. More detail on these studies is provided in the appropriate Physical environment (Section 7.2.1), Biological environment (Section 7.2.2), and Human environment (Section 7.4.3) sections.

Some of the studies are multidisciplinary and provide data and information for the physical, biological and human environment, namely the LiDAR and 360-imaging and the Census. The imaging informs the design as well as the residence and asset inventory for the Census and all roadside vegetation (trees, shrubs, etc.) is automatically documented in the LiDAR and 360 imagery. The Census also informs the building connection analysis. Figure 7-2 shows how these activities interconnect, while Sections 7.2.1.2.1, 7.2.1.2.2, and 7.2.3.2.1 provide details of the LiDAR, 360-imaging, and Census, respectively.

7.2.1 Physical environment

The physical environment includes climate including climate change, air emissions, water resources (surface waters, ground waters, coastal waters and marine waters), noise, geology, soils, topography, and landforms.

For all these recipients, a comprehensive description of the prevailing situation will be given on the basis of secondary and primary data. It should be noted that most of the secondary data used is very recent (within the last five years), as the studies were carried out as preparatory assessments for the Dili Drainage Project and the WSD Project.

7.2.1.1 Physical environment: Currently available data and baseline studies

Table 7-2: Physical environment, currently available baseline data summary

Aspect	Available data	Date
Air resources	Particulate matter (PM10), Particulate matter (PM2.5, Nitrogen dioxide (NO2), Sulphur dioxide (SO2)	2008 – 2019, 2020
Geology and soils	Geotechnical and groundwater investigations, boreholes, lab analyses	2016
Surface water quality – fresh systems	pH, total dissolved solids, total suspended solids (TSS), turbidity, ammonia, nitrate, nitrite + nitrate as N, total nitrogen as N, total phosphorus as P, iron, manganese, total hardness, oil & grease, dissolved oxygen, biochemical oxygen demand (BOD), sulphate, total coliform bacteria, Escherichia coli bacteria	Four locations as part of the Dili Drainage Infrastructure Upgrading Project EIA (National Directorate for Basic Sanitation, 2020) Two locations in the Comoro River as part of the Presidente Nicolau Lobato International Airport Expansion Project (Ministry of Transport and Communications and Asian Development Bank, 2021)
Surface water quality – marine systems	Temperature, salinity, conductivity, dissolved oxygen, oil and grease, pH, ammonia, nitrate/nitrite, total Kjeldahl nitrogen (TKN), total nitrogen, orthophosphates, total phosphorus, TSS,	Microbiological water quality of the nearshore was assessed in a single marine water sampling event in June 2019 as part of the DDUIP EIA (National Directorate for Basic Sanitation, 2020) During October 2021, a field team collected marine water quality samples from nine locations along north-south transects, centred on the proposed outfall alignment at 500 m intervals at three depths within the water column – 2 m, 25 m and 60 m below the surface.
Groundwater quality	Bacteria, metals	Draft Final Pre-Feasibility Study of a Groundwater Resource Development Project for the Water Supply of Dili Metropolitan Area by TEAM, ATT & CQ2 (2020)
Marine hydrodynamics and mixing zones	Currents, tides, waves, seasonal data Bathymetric	Installation of tide gauge at Port of Dili took place in September 2021. A dataset of global oceanographic information from Mercator Ocean International Daily Global Physical Bulletin, which includes daily updated 10-day forecasts on currents, was used by Tetra Tech (2020a) Analysis of data from the Centre for Australian Weather and Climate Research for seasonal wave patterns found (Tetra Tech, 2020b) A bathymetric survey of the proposed ocean outfall construction corridor took place during September 2021 using a Hydrographic Echosounder ECHOTRAC and Transducer. The results of the bathymetric survey were used to inform

Aspect	Available data	Date
		modelling for the ocean outfall (Tetra Tech 2022b)
Topography, surface hydrology, and landforms	Digital terrain models, satellite imaging	Most recent
Noise	Data from nine monitoring stations, five of which are in, or very near the project area	2019

7.2.1.2 Physical environment: New studies

Table 7-3: Physical environment: Summary of new and enhanced studies for this Activity

Study	New Supplemental	or Field Study	Desktop Study	Analysis	Notes
LIDAR, Photography and Infill Topographical Surveys	New	•	•	•	See Section 7.2.1.2.1
360 Imagery	New	•	•	•	See Section 7.2.1.2.2
Geotechnical	New	•	•	•	See Section 7.2.1.2.4
Acid sulphate soils	New	•	•	•	See Section 7.2.1.2.5
Mixing zone	New, supplemental		•	•	See Section 7.2.1.2.6
Climate change	New, supplemental		•	•	See Section 7.2.1.2.7
Waste management	New		•	•	See Section 7.2.1.2.8

7.2.1.2.1 Field Survey: LIDAR, Photography and Infill Topographical Surveys

Initial data gathering activities have started and will continue throughout 2024. The following technologies are being planned:

- *Aerial LiDAR and Photogrammetry:*
 - High Resolution Digital Terrain Models (DTM) / Digital Elevation Model (DEM) – for clarity this is considered to be the “Bare Earth Model” throughout. These aerial surveys were conducted employing a drone or unmanned aerial vehicle (UAV);
 - High Resolution Digital Surface Models (DSM);
 - High Resolution aerial photography.
- *Topographic survey/Terrestrial Surveys:*
 - Terrestrial surveys will be carried out to infill areas that will need more detail such as the Wastewater Treatment plant site and other areas that are where the aerial survey information proves insufficient.
- Figure 7-2 shows how the field imaging surveys integrate with the census activities (See Sections 7.2.1.2.2 (360 imaging) and 7.2.3.2.1 (census)).

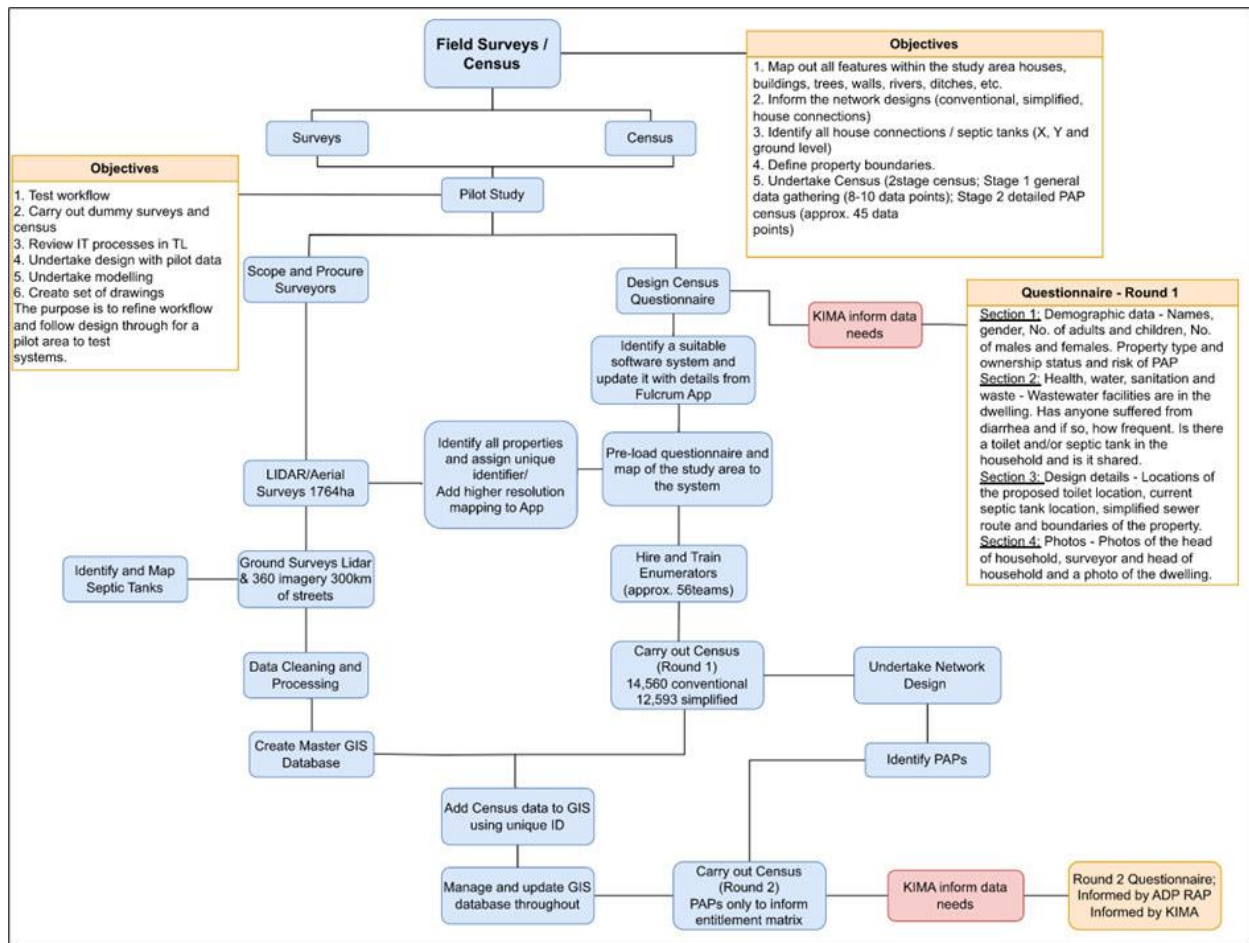


Figure 7-2: Indicative census and field imaging flow chart

7.2.1.2.2 Field Survey: 360 Imagery

In addition to the aerial survey, 360° imagery (similar to Google Streetview) will be taken of all project locations. This survey will include the surroundings of the WWTP site and outfall route. The survey will provide a useful database of existing conditions at the commencement of the project. This includes besides physical structures (homesteads, business stands, etc.) also any kind of vegetation like trees and bushes.

7.2.1.2.3 Bathymetric survey (potential, supplemental)

As part of the feasibility study a detailed bathymetric survey was conducted in 2021. An initial assessment of the available data and the sedimentation risk was undertaken. Based on the quality and coverage of the available data, we do not anticipate a need for additional bathymetric data. If, after the design and modelling is nearing completion, additional data are needed, a supplemental bathymetric data survey will be mobilized.

7.2.1.2.4 Geotechnical Investigations

The geotechnical surveys are of critical importance to the development of the functional design for WWTP and OSHG plant. Accurate geotechnical information will allow for the development of better design solutions and more precise quantification of material quantities, groundwater management considerations, acid soils and rock excavation. Similarly, obtaining accurate information of sufficient quantity to characterise conditions within the project area is important to inform the preliminary design of these components and to inform the designers of the geotechnical and hydrogeological risks to be considered in their works.

The survey will involve extensive investigations which will comprise of a combination of boreholes, trial pits, and laboratory sampling and testing which will be implemented across the project area.

Boreholes are typically drilled using specialized equipment, such as a drilling rig (truck), to extract soil and rock samples from the ground at various depths. Trial pits will involve the mobilisation of excavation machinery to carry out trial digs in order to prove the ground conditions.

All investigation points will be assigned with a unique identifier. The target depths of investigation will be selected according to the depth of planned excavation, type of structure and the associated loading, the types of foundations to be constructed, and the anticipated subsurface conditions. The conditions encountered in the boreholes and trial pits will be logged in accordance with an accepted soil classification system (USCS, AUS Code or similar).

Laboratory testing will also be undertaken. These tests will be performed in accordance with recognised standards/industry norms to allow for soil classification, development of the geological and hydrogeological model and derivation of engineering properties.

7.2.1.2.5 Acid Sulphate (AS) Soils Investigation

Acid soils were identified in the coastal areas of Dili and such soils are identified as an environmental risk during excavation for structures and pipelines.

AS Soil forms naturally in both coastal and inland settings under highly reducing conditions in saturated, organic-rich sediments where there is a source of sulphate and iron. From a preliminary assessment, the geology of Dili comprises Holocene age flood plain alluvium that is expected to contain organic carbon material and iron within silicate and carbonate minerals. The most significant source of sulphate is seawater.

AS Soils investigation includes:

- Detailed desktop study to inform the basis for development of the sampling and analyses processes and distribution of sampling locations;
- A preliminary sampling and analytical program considering industry standard documentation, inclusive of the Australian National Acid Sulphate Soil Guidance documentation on AS Soils identification, sampling and laboratory methods, and the Queensland Laboratory Method Guidelines. These documents will be relied upon to inform the sample density, sample preservation methodology, and analytical requirements;
- Field verification of assumptions made in the development of the sampling and analyses process to this point;
- Collection of samples for out-of-country testing at a Australian National Association of Testing Authorities (NATA) certified lab;
- Assessment of the data by the AS Soils specialist team, preparation of the AS Soils Management Plan documentation, and generation of spatial maps for the sites.

Data assessment will be undertaken and an AS Soils Management report will be developed. The report will outline the presence or absence of AS Soils at each sample site and extrapolate the findings spatially across the study area according to the nature and distribution of materials observed. The plan will include the following:

- Details of how acid sulphate soils will be identified, segregated, stored and managed to remove potential of contaminating other soils, and acid drainage into surface water and groundwater.
- An appropriate inspection and monitoring program commensurate with risks and areas that are identified as requiring further management during the detailed design phase.
- Appropriate management strategies based on the findings of the investigation will be outlined in the AS Soils Management Plan, which will be aligned with published AS Soils Management Principles.

7.2.1.2.6 Hydrodynamic modelling and mixing zone

Hydrodynamic modelling is essential to simulate the performance of the proposed outfall with respect to the potential zone of influence (mixing zone) and the level of impact associated with the treated effluent discharge plume.

A near-field numerical model and a three dimensional (3D) far field dispersion numerical model will be used to simulate the out-fall effluent along the study area and to predict the dispersion of the effluent in the ambient sea water transported far from the outfall area. Both near and far field simulation have been prepared based on the outfall alignment proposed in the previous Feasibility Study (FS). As part of the functional design, a thorough peer review of the model prepared to date was undertaken, verified its suitability, and identified further updates, refinements and/or simulations required for both near- and far-field models.

As part of the validation of the work to be undertaken during the functional design of the outfall, the same two types of numerical models used in the Feasibility Study will be used (TetraTech, 2022b). The first is a near-field mixing zone model using CORMIX software to simulate diffuser line with multiple ports and calculate the advection and dilution by and with the ambient flow. The second numerical model is the three-dimensional hydrodynamic numerical model (3DH) using Delft3D software developed by Deltares.

As part of the assessment, model simulations were reviewed using the mixing zone model CORMIX to find the dilution and concentration of the effluent discharge in the immediate vicinity of the diffuser ports and assess the impacts on the receiving environment. The outputs of the CORMIX model, based on near-field dilution and resultant concentrations, will then be taken as the initial boundary conditions for the far field Delft3D model.

7.2.1.2.7 Climate change

The Draft ESIA completed by TetraTech for MCC in 2022 included a high-level summary of climate change issues. Because climate change is a complex issue and has direct bearing on project design as well as global impacts and localized vulnerability, the EIS will contain a more detailed analysis of climate change. The analysis will include:

- A summary of the IPCC Assessment Report (AR) 6 (IPCC, 2023);
- A summary of regional and Timor-Leste specific impacts and vulnerabilities;
- A discussion of project emissions in a global context, including tradeoffs (e.g., in situ emissions from waste (baseline) vs WWTP emissions (with project));
- A summary of precipitation issues, to the extent that data allow, that could affect design issues such as stormwater management and flooding;
- Sea level rise issues that could affect project design, with focus on the WWTP site; and
- A general discussion of extreme event frequency that may affect project design.

7.2.1.2.8 Waste management

Waste management was raised during Stakeholder consultation as an issue of concern for the project. Waste from the project falls into several categories:

- Liquid waste.
This includes treated effluent from the WWTP.
- Solid and semi-solid waste.
This includes sludge from the WWTP, sewage pumped from decommissioned latrines and other on-site septic systems.
- Incidental process waste.
This includes smaller waste streams from the WWTP and sodium hypochlorite facility.
- Maintenance waste.
This includes periodic manhole clean out, office waste (such as non-hazardous trash), and normal plant waste, such as containers and wash water.

Each of these waste streams will be discussed in terms of:

- Volume
- Disposal practices
- Disposal facilities (Dili municipal landfill)

Each of the waste streams will be further discussed in the EMP including management best practices and reporting requirements.

7.2.2 Biological environment

The biological environment includes vegetation, terrestrial fauna and flora, wetlands and mangroves, aquatic fauna and flora, corals, endangered species (IUCN and regional and national listed) protected areas and national parks.

For all these recipients, a comprehensive description of the prevailing situation will be given on the basis of secondary data. It should be noted that especially the LiDAR and 360-imagery will provide primary data on vegetation and flora in the directly affected areas (project footprint).

7.2.2.1 Biological environment: Currently available data and baseline studies

Timor-Leste and neighbouring islands in eastern Indonesia are geographically positioned in one of only 34 'biodiversity hotspots' in the world. Between 2010 and today extensive efforts were taken to assess and protect the biodiversity within Timor-Leste. A National Biodiversity Strategy and Action Plan was developed and the sixth National Report to the UN Convention on Biological Diversity was published. The Timor-Leste plan of work for Protected Areas includes 46 protected areas of which two are national Parks and three marine natural reserves.

Besides the above-mentioned the following reports contain extensive data including extensive field studies specific to the WSD Project. Some of the main references for baseline data include:

- TetraTech, 2022a. Draft Environmental and Social Impact Assessment. Consulting Services for Preparation of the Feasibility Project, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for Water Disinfection, Sanitation and Drainage Program, Timor-Leste Compact. Prepared for Millennium Challenge Corporation.
- Dili Drainage Infrastructure Upgrading Project (DDIUP) EIS, NDBS 2020
- Timor-Leste Plan of Work for Protected Areas – PoWPA;
- Timor Port: Tibar Bay – Environmental Impact Statement;
- State of the coral triangle: Timor-Leste - ADB, 2014

The WSD project is located in the same area as the Dili Drainage Infrastructure Upgrading Project (National Directorate for Basic Sanitation, 2020), for which an assessment of terrestrial vegetation along the road corridors and drainage channels was carried out as part of the environmental impact assessment (in May 2019 and February 2020). In addition, the field investigations carried out by Tetra Tech's in-country subconsultant, Oasis Sustainable Projects, will be used.

Table 7-4. Biological environment, currently available baseline data

Aspect	Available data	Sources/Dates
Terrestrial biodiversity		
Vegetation	General species of vegetation types in Timor-Leste as well as species lists flora, fauna and endangered species,	TetraTech, 2022a; DDIUP- EIS, NDBS 2020
Flora	Flora in the project affected area,	DDIUP- EIS, NDBS 2020;
Fauna	Fauna in the project affected area	TetraTech, 2022a;
Aquatic biodiversity		
microbiological water quality	Nearshore microbiological water quality	DDIUP- EIS, NDBS 2020

Aspect	Available data	Sources/Dates
Mangroves	Wetlands and Mangroves including species.	DDIUP- EIS, NDBS 2020; TetraTech, 2022a;
Marine Fauna	Marine Megafauna Surveys in Timor-Leste A Marine Rapid Assessment (MRAP) of Timor-Leste	Dethmers K, Chatto R, Meekan M, Amaral A, de Cunha C, de Carvalho N, Edyvane K (2009). Conservation International, 2019
Corals	State of the coral triangle: Timor-Leste Drivers of coral reef composition, cryptic marine biodiversity, and coral health along the north coast of Timor-Leste	ADB, 2014 Cathrine Jung Shim Kim, A thesis submitted for the degree of Doctor of Philosophy at The University of Queensland in 2021
Benthic habitat	United States National Oceanic and Atmospheric Administration (NOAA) Pacific Islands Fisheries Science Centre (PIFSC) fisheries and marine resource research in Timor-Leste, including Dili, from 2012 to 2016 (Pacific Islands Fisheries Science Centre, 2017). Observations from field surveys undertaken during September through to December 2021 found that the seabed aggrades in some places near the mouth of the Comoro River as a result of the fine sediment accumulation. Observed aggradation in this area was between 3 to 5 m between this period (Costa, pers com 2022).	NOAA, 2017 October 2021 field campaign TetraTech
Endangered species	List of species aquatic and terrestrial fauna and flora	National Biodiversity Strategy and Action Plan, 2011-2020 IUCN, 2020 country lists TetraTech, 2022a;
Protected areas	Maps and locations, distance to the project area	PoWPA 2011 TetraTech, 2022a;

7.2.2.2 Biological environment: New studies

As described in Section 7.2.2.1 extensive baseline surveys were conducted for the MCC Draft ESIA between 2020 and 2022 which also relied on many of the studies cited in Table 7-4. Specifically, the Dili Drainage Infrastructure Upgrading Project is located in the same area as the WSD Project. During the reconnaissance mission it was recognized that in relation to flora no changes have occurred in the Dili metropolitan area. It is composed of broad-leaf trees such as Devil's tree (*Alstonia scholaris*), Persian silk tree (*Albizia julibrissin*) and curtain fig tree (*Ficus macrocarpa*) and various fruit trees (banana, coconut, mango, papaya, etc.). As expected in a metropolitan area the vegetation is highly degraded with scattered trees. Most of them occurring on private land and in the public parts as well as along the rivers.

A general description of terrestrial and aquatic fauna and flora for Timor-Leste will be provided as part of the EIS the possibility of any effects of the project in relation to terrestrial and marine protected areas will be assessed taking any waste streams, quarries and disposal areas into account. Wild terrestrial animals within the metropolitan area will be composed of smaller

animals and those who are very opportunistic and try to find food within the waste deposit areas.

Considering the already available information and the study area, no new terrestrial or aquatic baseline studies are required. The assessment will be based on the existing information. No field work will be needed. We will, however, pursue and refine specific issues through a thorough literature review and consultation with and through:

- Conservation International
- Birdlife international
- Stakeholder engagement (Universities and other entities)

As the design develops, an assessment of any design impacts on protected or trees of cultural importance will be undertaken and either propose appropriate design modifications, directives for construction and EMP items, or mitigation measures.

7.2.3 Human environment

Human Environment: this is presumably the most important part of the environment to be analysed. The main points are population, socio-economy, land tenure and ownership, land use, employment and economic activities, infrastructure with the focus on sensitive infrastructure (communication, energy, water supply, public buildings, health and education services, etc.), town parks, recreational areas and tourism, public health, cultural sites and objects (like archaeological sites but also cemeteries, graves, shrines, places of worship, churches etc.).

For all these recipients, a comprehensive description of the prevailing situation will be given on the basis of secondary data and primary data e.g. LiDAR and 360-imagery, census, stakeholder engagement, RAP survey.

7.2.3.1 Human environment: Currently available data and baseline studies

Table 7-5: Human environment, currently available baseline data

Aspect	Studies/Date
Demographics	Draft ESIA, TetraTech, 2022. Gender and Social Assessment, TetraTech, 2022 Timor-Leste Population and Housing Census INETL, 2022
Education	Draft ESIA, TetraTech, 2022. Timor-Leste Population and Housing Census INETL, 2022
Employment	Draft ESIA, TetraTech, 2022.
Workforce	Draft ESIA, TetraTech, 2022.
Gender	Draft ESIA, TetraTech, 2022. Gender and Social Assessment, TetraTech, 2022 Timor-Leste Population and Housing Census INETL, 2022
Trafficking in persons (TIP) risk	Draft ESIA, TetraTech, 2022.
Grave sites	Draft ESIA, TetraTech, 2022.
Community safety	Draft ESIA, TetraTech, 2022.
Waste management	Draft ESIA, TetraTech, 2022.
Cultural resources	Draft ESIA, TetraTech, 2022.
Waterborne diseases	Draft ESIA, TetraTech, 2022.
Traffic management	Draft ESIA, TetraTech, 2022.

7.2.3.2 Human environment: New studies

Table 7-6: Human environment, new studies

Study	New or Supplemental	Field Study	Desktop Study	Analysis	Notes
Stakeholder engagement	Supplemental	•		•	See Stakeholder Engagement Plan (December 2023) for more detail
Large Scale Census	New	•	•	•	See Section 7.2.3.2.1
Resettlement and economic displacement survey	New	•	•	•	See Section 7.2.3.2.2
Gender and Social Assessment	New and Supplemental		•	•	See Section 7.2.3.2.1, Section 7.2.3.2.2 and Section 7.2.3.2.3
TIP risk management	New and Supplemental		•	•	See Section 7.2.3.2.4
Grave sites	New		•	•	EIS will outline Unanticipated Discoveries procedures
Waste management	New		•	•	See Section 7.2.1.2.8

7.2.3.2.1 Field survey – Census

The census will be undertaken using a mobile application that will be completed by enumerators on a tablet or mobile phone. Specific QA measures will be pre-loaded onto the app to ensure accurate data is being obtained from the field. Where possible, questions will be crafted such that they can be answered by selecting pre-entered responses from a list to improve QA.

Preparatory work for the large-scale census will consist of the following:

- Suco/ Aldeia level consultations;
- Preparation of the questionnaire and database structure;
- Training of census enumerators; and
- Pilot surveys and data processing of pilot data.

Following the completion of the preparatory work and the aerial surveys, the Census will proceed with the following stages:

- Mobilization of enumerators;
- Census of the Outfall Area;
- Census focused on areas to be served by simplified sewers (area covered under Phase 2);
- Census focused on areas to be served by conventional sewers (area covered under Phase 2);
- Overall census data processing.

It is estimated that just under 26,000 properties will be census surveyed. This data has been obtained via a detailed review of the Open Street Map and 2022 Census information on properties and property types within Dili. Table 7-7 below shows the distribution of census estimated to be carried out in Area 106 and the three priority expansion areas (Terra Santa, Golgota and 12 de Outubro, Halibur and Lorio, and Moris Ba Dame).

Table 7-7: Preliminary estimate of buildings to be included in the Census.

Area	Estimated Properties		
	Total per area	Structured areas	Unstructured areas
Area 106	22,925	11,463 (50%)	11,462 (50%)
Terra Santa, Golgota and 12 de Outubro	1,364	1091 (80%)	273 (20%)
Halibur and Lorio	613	613 (100%)	0
Moris Ba Dame	1,074	644 (60%)	430 (40%)
Total Surveys	25,976		

Note: (i) These estimates have been obtained using the available GIS information to identify the existing buildings and disregard gated communities and other institutions that are not included in the compact for household connections. (ii) Only unstructured areas within Area 106 are to be included in the survey.

Before starting the census work itself, we will conduct community outreach sessions through Suco/ Aldeia level consultations to ensure the population is aware of the project and the importance of the surveys. We will then perform a round of pilot surveys in areas to be served by conventional and simplified surveys. The pilot surveys will be carried out by the Consultant's team in Timor-Leste, accompanied by local partners. The pilot is aimed at testing the survey in terms of the questions and the time that it takes to be carried out by the enumerators.

Given that some questions may be sensitive in some contexts, it is possible that private interviews may be necessary – most prominently with women. The intention will be that survey teams will be made up of a minimum 25% women.

The enumerators will be trained by international and local social specialists and monitored throughout the data gathering exercise. Training will include identifying potentially sensitive situations and how to handle them for the comfort and safety of both the interviewees and the teams.

This census will focus on gathering data in four primary aspects – note this questionnaire below is aimed toward domestic residences a separate set of questions will be developed for commercial buildings:

- Section 1: Demographic data
 - a) Property type and ownership status.
 - b) Domestic residences: Names, contact details, sex and number of people living in a household.
 - c) Commercial/Institutional buildings: Name, contact details, sex, number of staff and estimate of customers/users per day.
- Section 2: Water and sanitation
 - a) Primary source of domestic water.
 - b) Wastewater facilities (toilet and other plumbing).
 - c) Is there a toilet in the household and is it shared.
 - d) Is there a septic tank in the household and is it shared.
- Section 3: Design details
 - a) Current discharge point (geo-referenced).
 - b) Location of septic tank
 - c) Property boundary
 - d) Number and location of graves in the property and immediate surroundings
- Section 4: Photos / QA
 - a) Photo of respondent's proof of identification.
 - b) Photo of the structure(s) from the outside.
 - c) Photo of septic tank.

All survey data will be uploaded to a secure server and the data can be extracted to be processed separately. All survey data can be uploaded to a server and the data can be extracted to be processed separately. The Consultant has engaged with the Fulcrum development team and new features such as lines and polygons can now be added to the surveys. This will allow for the enumerators to clearly mark georeferenced locations of each septic tanks.

7.2.3.2.2 Resettlement and economic displacement

“Resettlement” in the context of this project is expected to include: temporary use of private land, and removal and replacement of minor features such as fences. **In compliance with MCC policy, the project as currently designed, will involve no forced displacement and resettlement of residents.** Economic displacement is another consideration in resettlement analysis. For this project, this could include such things as temporary impairment of access to businesses during trenching and pipe installation. It may include temporary and permanent easements across property that will restrict use.

The 6ha for the WWTP and the OSHG describe in this TOR and the Pumping Stations described in the Phase 2 TOR, are to be acquired by BTL on behalf of GoTL.

A Resettlement Policy Framework (RPF) for the project was prepared in 2022 (TetraTech, 2022a). Table 7-8 provides a summary of the resettlement scoping. A Resettlement Action Plan (RAP) is being prepared under the Consultant contract.

Table 7-8: Project activities with potential resettlement and economic displacement impacts.

Project component	Impact	Comments
The OSHG plant is contained within the WWTP site which is being acquired by the GoTL	Land: 5.5 Ha (~3.9 Ha is privately owned; 1.6 Ha is government owned); Structures: business on the site; apartment complex; hotel / dive shop / restaurant; large iron fence around site; others; Others: loss of business income; loss of rental income; loss of tenancy; trees; others.	GoTL will provide land and be responsible for any structure takings and other impacts as applicable. Resettlement issues on the OSHG /WWTP site are being addressed by the GoTL.
The Ocean Outfall will be placed underground across the beach area to avoid conflicts with access across the public domain lands	The Consultant will ensure that the outfall will be buried from the WWTP to a point approximately 10-15m below the mean water level. After this the pipeline would be placed on the seabed but well below the level that could cause a visual nuisance or impact the navigation of ship	Because (per Law 13/2017) the beaches and strip of seafront measured 50m inland from the highest high tide, as well as the roadways, are considered public domain, no land acquisition impacts are expected. However, it will have to be verified if any structures could be impacted during construction

The RAP will provide guidance for Red Book/Yellow Book procurements, so that they are aware of the required procedures for implementation and documentation of the RAP process and how Red Book/Yellow Book procedures differ and how those differences affect RAP implementation.

An important aspect of the RAP that requires up-front management is that 1) negotiating compensation agreements and 2) executing the compensation process that cannot begin until EIF of the Compact (estimated to be 2026) and when detailed designs are complete. The smooth timing and execution of compensation is critical. To that end, some compensation templates will be included, and it will be ensured that the central database contains essential data or fields for that data when it becomes available.

The proposed compensation packages will be assessed in comparison to those formulated for the Water Supply Projects. Whenever feasible, comparable compensation levels should be implemented to prevent any perception of unfairness among the involved parties. Due to the potential multitude of people affected differently in magnitude and significance, the resettlement assessment will be carried out in several stages and is closely tied to the Census study (Section 7.2.3.2.1):

- Identification and training of survey enumerators;
- Screening/preliminary assessment of all potentially affected homesteads / businesses inside or immediately adjacent to the proposed conventional as well as simplified sewer collection systems. The preliminary assessment (Census) will only collect salient data per house / structure / property e.g., Name of landowner/user/tenant, Number of people living in the house, preliminary identification of structure use and improvements to land that may be impacted, with particular focus on the availability of a toilet and the kind of the toilet. The main purpose of the preliminary assessment is to get an overview of potential impacts and a notional understanding of whether homesteads / businesses will be economically displaced or whether they will only be inconvenienced temporarily.
- The assessment of potentially affected persons and assets will pay careful attention to gender and social inclusion dynamics in the household to ensure that women or other possibly marginalized individuals (including the elderly, chronically ill, children, etc.) are captured appropriately in ways so as not to marginalize or exclude them from potential compensation and project benefits, but rather actively ensure their inclusion to compensation and benefits. This information is also critical to the GSI and TIP activities and the ESIA socioeconomic analysis.
- Key Informant Interviews (e.g., local authorities, health sector, education sector, business owners, vulnerable people, land ownership and land tenure and other) and Focus Group Discussions (Allows a smaller group of between 8 and 15 people to provide their views and opinions of targeted baseline information e.g. TIP and GSI) will be carried out to get further insides to sensitive receptors (schools, kindergartens, health services, cultural monuments, etc.), concerns, risks, impacts and benefits and possible training opportunities. Analysis of preliminary assessment data according to those homesteads / businesses who will be inconvenienced temporarily (e.g., trenching across driveways, destruction of fencing / walls along property boundaries) versus homesteads / businesses who will be temporarily impacted.
- Distinguishing between a direct significant impact which could have a long-term effect on the livelihood of a HH and a temporary inconvenience which will have a short-term effect (easy to reinstate and/or compensate in cash) but will not impact the livelihood in the long-term.
- A detailed socio-economic survey (RAP-Census) and asset inventory and valuation will only be conducted for those homesteads / businesses who may potentially face a significant permanent or long-term temporary effect, (e.g., long-term disruption of business enterprises, guest houses, severe loss of fixed and moveable assets e.g., tree plantations). The detailed survey, asset inventory and valuation process will include collecting information on household demography, socio-economic information, gender and social inclusion aspects (e.g., identification of vulnerable groups), land rights (including valuation of affected assets and livelihoods), livelihood activities and income sources and proposals on training and support requirements from the affected households or businesses.
- Development of monitoring indicators based on the preliminary and detailed assessments
- Development of a project affected person (PAP) file (hard copy and electronic) containing all relevant information including photographs, survey and asset inventory documents, signed-off Compensation or Re-instatement agreements, proof of payment in case of compensation etc.

- Structural Reinstatement works (replacement of a fence, wall, etc.) will be made as far as possible the responsibility of the Contractor with process facilitation and oversight by the RAP Implementation Specialist (RAP documentation e.g., kind of restoration required, start of disturbance, end of disturbance pictures before and after, signing off after restoration).

7.2.3.2.3 Gender and Social Analysis

There are four broad stages undertaken in the Gender Equality and Social Inclusion (GESI) assessment for this project, all of which variously rely on 1) past and new Stakeholder Engagement, 2) planned Census, 3) past GESI data analysis for the WSD project, and 4) TIP assessment.

- The first stage analyses secondary data sources such as census data to describe GESI statistics, policies, plans, and local and academic research. The purpose of the first stage is to provide the social, cultural, and economic context to the underlying causes of inequality and exclusion in Timor-Leste generally and Dili specifically.
- The second stage identifies the potential GESI constraints that may be relevant to the project in Dili.
- The third stage involves stakeholder engagement and analysis of the outcomes of the stakeholder engagement that was undertaken to identify the water, sanitation and drainage issues, needs, priorities and recommendations from the stakeholders' perspectives.
- The fourth and final stage determines the strategic recommendations for gender equality and social inclusion and presents these as an Integration Plan with goals and practices to be integrated into the stages of the project to enhance gender equality and social inclusion of otherwise marginalized groups.

7.2.3.2.4 TIP Analysis

Although domestic violence in Timor-Leste is the most common form of violence against women, Timorese women also experience non-partner rape and sexual assault, sexual harassment and trafficking.

The United Nations recognizes Timor-Leste as a source, transit and destination country of trafficking in persons. There are three types of TIP prevalent in Timor-Leste: outward trafficking (70%), inward trafficking from other countries (20%), and internal trafficking (10%), mainly for the purposes of forced labour, domestic servitude and sexual exploitation. In 2018, for example, the International Organization of Migration found 64 victims of trafficking in 7 confirmed TIP cases.

Poor economic conditions and limited educational opportunities create trafficking vulnerabilities for Timorese, in particular women, girls and members of the LGBTQI+ community from rural areas who are often forcibly involved in domestic servitude and sex-trafficking. TIP is also prevalent among men who are forced to work in labour-intensive and physically demanding jobs such as forced labour in agriculture, construction, and mining.

In 2023, Timor-Leste has been classified as Tier 2 by the U.S. Office to monitor and combat trafficking in persons. This classification means that the Government of Timor-Leste does not fully meet the minimum standards for the elimination of trafficking, but is making significant efforts to do so. During the last years, these efforts included the promulgation of the Komisaun Luta Kontra Trafiku Umanu (Anti-Trafficking Commission, KLATU) that developed the Anti-Trafficking National Action Plan (NAP) 2023-2028; the adoption and funding of a training on Standard Operating Procedures (SOPs) to identify trafficking victims and refer them to care; and initiating investigations into suspected labour and sex-traffickers.

In this context, any infrastructure project brings with it risks of trafficking, especially inward and internal trafficking, for men, women and children, that need to be proactively mitigated against.

The trafficking in person (TIP) assessment will identify and assess potential risks related to trafficking in persons during the construction, implementation and maintenance of the Timor-Leste WSD Project on populations engaged in, affected by, or benefitting from it. It will also propose recommendations to prevent and mitigate trafficking risks and enhance protection measures. Based on this information, the project will be categorized as "high" or "low" TIP risk.

The TIP risk assessment will be guided by the MCC Policies, the United Nations (UN) Guiding Principles on Business and Human Rights, international human rights standards, and other International Labour Organization (ILO) Conventions. This assessment will consider in particular the MCC's Gender Policy as a key factor to MCC's approach to countering trafficking in persons. Gender integration in this assessment will be the incorporation of social and gender analyses throughout the whole process for the TIP risk analysis. Every task carried out will integrate the gender perspective considering that beyond the fact that human trafficking impacts men, women, boys, and girls, women and girls are particularly vulnerable. This means, social and gender inequalities will be specifically addressed.

For this assessment, we will apply the MCC's Trafficking in Persons definitions:

- A. Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; and/or
- B. The recruitment, harbouring, transportation, provision, or obtaining of a person for labour or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

This definition includes additional and specific forms of trafficking in person such as bonded labour, child labour, forced labour, child sex trafficking and sex trafficking, between others.

In this sense, it will be analysed the risks during the lifecycle of the project that could exist regarding the potential presence of exploitation and making profit at the expense of adults or children by compelling them to perform labour or engage in commercial sex. It is important to highlight that in order to fall within this definition, a person does not need to be physically transported from one location to another, for example, crossing borders or being internally displaced from the rural areas to Dili.

The TIP risk assessment will focus on the following areas specific to the Timor-Leste Project:

Construction, implementation and maintenance phases: Assess risks related to labour recruitment, working conditions, and exploitation during the lifecycle of the project.

Community Engagement: Consider risks on populations engaged in, affected by, or benefitting from the project, with a special focus on women and girls.

The assessment of the TIP risks will be informed by two main questions: In what ways does the Timor-Leste WSD Project create an environment for TIP to occur? and what actions should be taken to prevent and mitigate TIP risks during the construction and operation of the WSD Project and to respond to TIP when it occurs?

To answer these questions we apply the following methodology:

Desk review: the following information and documentation will be systematized and analysed:

- General background and information of the Project;
- MCC policies, guidelines and reports related to TIP and gender and social inclusion;
- Timor-Leste reports, laws and policies related to TIP and gender and social inclusion;
- UN agencies reports on TIP, gender and social inclusion in Timor-Leste;
- INGO and local NGO reports on TIP, gender and social inclusion in Timor-Leste.

Stakeholder mapping: an identification of the relevant key players related to TIP will be part of the assessment and prior to the fieldwork stage:

- International agencies;
- International civil society organizations;

- Local civil society organizations working with victims of human trafficking and smuggling, violence against women, child labour, sex workers, etc.;
- Worker recruitment agencies; and
- National and local government agencies.

In depth interviews: We estimate at least 25 interviews will be conducted with key informants identified during the stakeholder mapping and also with members of the population potentially impacted by WSD project.

- This includes representatives of the stakeholders mapped in the previous stage - local NGOs, INGOs, national and local government, international agencies, etc. -. And, mainly local workers potentially related to the project, internal migrants and, if possible, international migrant workers based in Timor-Leste. At this point in time, with the information available, this proposal for the interviews is based on the assumption that the contractor will be appointing unskilled and semiskilled staff locally which from our perspective might decrease the TIP risks. However, if this changes, it would be necessary to follow a more strict approach.
- Special attention will be given to interview representatives of vulnerable groups: women, children, members of the LGBTQI+ community, sex workers, victims of gender violence in the different areas impacted by the project. It will be taken into consideration that for assessing TIP risks, in some cases, people might prefer being interviewed rather than participating in a focus group where the person could be feeling more publicly exposed to share his/her experiences and to have the risk of being revictimized. In this sense, the preference of the person will be respected and this might impact the amount of interviews and number of participation in the focus groups.

Focus groups: a minimum number of 4 focus groups is estimated, two with workers (one with local workers and the other with internal and international migrant workers); and the other two with women from different regions of Dili to identify potential differentiation of risk depending on the geographical areas.

- During the in depth interviews and focus groups, special emphasis will be placed on the representation of women. This is because, following the guidelines of MCC's gender and TIP policies, it is necessary to specifically analyse social and gender inequalities, both to ensure opportunities for the participation and benefit of women and vulnerable groups and to avoid causing negative social and gender impacts.
- All interviews and focus groups discussion will be prefaced with MCC's definition of TIP, and an informed consent and confidentiality statement.

Analysis and risk ranking: the primary and secondary data gathered during the desk review, stakeholders mapping, interviews and focus groups will be coded, triangulated and analysed. These findings will be used to populate the risk assessment matrix and to determine if the WSD has a "high" or "low" risk for TIP, and identify actions/measures to mitigate those risks, which became recommendations.

Recommendations: based on the analysis and risk classification for TIP, recommendations will be made to prevent and mitigate TIP risks and to enhance protection measures.

7.2.3.2.5 Grave sites

The project area has potential for grave site discovery, though no known gravesites were identified through due diligence and the Draft ESIA (TetraTech, 2022a). Gravesites will be further addressed at the current phase through:

- Stakeholder engagement
- Census interviews

Even with this consultation, there is a moderate risk of discovering unmarked graves during construction.

As part of the EMP, an Unanticipated Discoveries Plan will describe:

- A discussion of the risks, expectations, and legal and cultural framework surrounding unmarked grave discovery
- Training requirements for equipment operators and site personnel
- Training requirements for Construction and Project Managers
- Stop-work authority and procedures
- Legal requirements
- Notification requirements
- Removal and reburial procedures and responsibilities

7.3 Analysis of Alternatives

The MCC Compact Development process is rigorous and integrated across benefits, impacts, cost, and schedule. After a constraints analysis, MCC and GoTL defined the objective of the Water, Sanitation and Drainage project as “**reduce faecal pathogens in piped and stored drinking water and groundwater**” (MCC, 2022).

The alternatives analysis for the Project began in 2019 and has proceeded through various levels of detail and complexity, beginning with concept development. The MCC process requires that environmental and social impacts and benefits be incorporated throughout the alternatives analysis and engineering feasibility process. At this time, the project definition is sufficiently mature that remaining alternatives analysis include: 1) engineering alternatives for the WWTP process design and 2) the outfall diffuser configuration. All other expected alternative analysis falls in the categories of avoidance, minimization and mitigation, which will be documented in the EIS and the EMP.

7.3.1 Summary of Alternatives examined to date

The major alternative MCC and GoTL evaluated to date for this Phase of the WSD Project include WWTP site location, biogas management, WWTP treatment standard, biosolids management, and disinfectants. Table 7-9 summarizes the primary alternatives analysed to date. **Bold type** indicates the alternative that was carried forward to the current project definition. Eliminated alternatives either had fatal flaws or had an overall multi-criteria rating that was less attractive than the preferred alternative.

Table 7-9: Alternatives assessed to date

WWTP LOCATION ALTERNATIVES		
East of the Comoro River Mouth	West of the Comoro River Mouth	Elsewhere in Dili Metropolitan Area
BIOGAS MANAGEMENT ALTERNATIVES		
Flaring of biogas		Capture and use in energy production
WWTP DESIGN AND TREATMENT LEVEL ALTERNATIVES		
UASB Primary-Level Treatment with Disinfection	Primary Clarification with Disinfection	Primary Plus Advanced Secondary Treatment with Disinfection
BIOSOLIDS MANAGEMENT ALTERNATIVES		
Haul All Septage to the Central WWTP and Landfill Dewatered Biosolids at Dili Municipal Landfill	Haul All Septage to Central WWTP and Use Dili Municipal Landfill for Biosolids Drying and/or Composting	Continue Hauling Septage to the Tibar WWTP
DISINFECTANT ALTERNATIVES		
Sodium Hypochlorite solution	Calcium Hypochlorite Powder	Ultraviolet (UV)

7.3.2 Current Alternative Process

The remaining alternatives analyses required include: i) treatment technologies for the WWTP and ii) configuration of the outfall diffuser. These alternatives will be assessed using a multi-criteria "optioneering" analysis.

Table 7-10: Phase 1 Alternatives

Alternative	Affected parts of the Project Phase	Alternatives/elements
Treatment process alternatives	WWTP	Upflow Anaerobic Sludge Blanket (UASB) Reactors Primary Settling Tanks followed by Anaerobic Digesters Conventional Activated Sludge (CAS) Process Sequencing Batch Reactors (SBR) Moving Bed Biofilm Reactor (MBBR) Membrane Bioreactor (MBR) Trickling Filters Rotating Biological Contactor (RBC) Waste Stabilization Ponds
Diffuser configuration	Ocean outfall	Single port and multi-port diffusers are under consideration

7.3.2.1 WWTP Treatment Train

7.3.2.1.1 Stage 1 Optioneering

This initial stage of the optioneering utilises a coarse and qualitative screening assessment of various commercially available technologies based on pass/fail criteria.

A comprehensive list of alternative technologies will be considered, each with its unique attributes and advantages. Below is the list of options we propose to be evaluated in Stage 1:

- Upflow Anaerobic Sludge Blanket (UASB) Reactors;
- Primary Settling Tanks followed by Anaerobic Digesters;
- Conventional Activated Sludge (CAS) Process;
- Sequencing Batch Reactors (SBR);
- Moving Bed Biofilm Reactor (MBBR);
- Membrane Bioreactor (MBR);
- Trickling Filters;
- Rotating Biological Contactor (RBC);
- Waste Stabilisation Ponds.

The pass/fail evaluation criteria proposed for Stage 1 optioneering along with a brief description, are presented in Table 7-11 below. We propose that a minimum of two technologies progress to Stage 2 optioneering.

Table 7-11: Stage 1 Optioneering evaluation criteria

Criteria	Description
Effluent Quality	Ability to provide primary level of treatment.
Complexity of Operation	Low requirement for experienced and skilled personnel to operate the plant.
Footprint	Likely to fit within available land.

Cost	Capital cost.
Need for Disinfection	Disinfection required to meet <i>E.Coli</i> effluent standard proposed in Feasibility Study Report.
Ease of expansion	Can be expanded to an advanced secondary treatment.
Scale	Suitability of the technology for the scale of the project.
Maturity	Historical record of successful application.
Energy Recovery Potential	Ability to generate and utilize biogas in the future to generate energy.
Market Appetite for Design and Build	Availability of suitable contractors in the region to design & build such process.

7.3.2.1.2 Stage 2 Optioneering

The technologies that progress from Stage 1 will be further evaluated and scored in Stage 2 optioneering using a Multi Criteria Decision Analysis.

The evaluation criteria proposed for Stage 2 optioneering, along with a brief description, are presented in Table 7-12 below. Specific weightings for each criteria will be developed.

Table 7-12: Stage 2 optioneering evaluation criteria and weightings

Key Criteria	Sub Criterion	Description
Costs	CAPEX	Level of investment required for construction and installation activities.
	OPEX	Annual costs arising during the operation of the plant.
Plant Operation & Maintenance	Ease of Operation	Requirement for experienced and skilled personnel to operate the plant.
	Ease of Maintenance	Requirement for experienced and skilled personnel to maintain the plant. Dependence of off-island parts & consumables.
	Health & Safety	Risks during O&M such as manual handling, working at height, chemical exposure, noise, dust, vibration, odour, working in confined spaces.
Environmental Impact	Effluent Quality	Quality of the final treated effluent.
	Odour & Noise	Potential impact of odour and noise during operation of the plant.
	Sludge Production	Volume of sludge produced by the plant for disposal to Dili Municipal landfill.
Constructability	Footprint	Area requirement for construction including site set-up, plant movement, materials storage and possibility to expand in the future.
	Level of Complexity	Complexity of structures requiring specific construction activities.
	Health & Safety	Level of risks due to requirement of working at height and deep excavation, exposure to vibration, noise, dust odour, manual handling and chemical usage.
Programme	Commissioning	Ease and time required for plant commissioning and start-up.
	Design	Simplicity and time required for design. Requirement for proprietary designs.
	Procurement	Risk associated with manufacturing and delivery of materials or equipment.
	Construction	Time required to construct the plant.

Key Criteria	Sub Criterion	Description
Plant Flexibility	Future Proofing	Ease of expansion to a secondary level treatment.
	Asset Resilience	Ability to cope with variation in flows and loads. Risk of loss of treatment and impact on final product quality.

7.3.2.2 Ocean outfall

As already described in Section 7.2.1.2.6 hydrodynamic modelling will be carried out to simulate the performance of the proposed outfall with respect to the potential zone of influence and the level of impact associated with the effluent discharge plume (e.g. the jetty phenomena, the advection and dilution by and with the ambient flow). Both near and far field simulation has been prepared based on the outfall alignment proposed in the previous Feasibility Study (FS).

An optioneering exercise will be undertaken that considers multi-port discharge arrangement vs single port discharge. The assessment will consider;

- Environmental Impact: Based on findings from the modelling exercise
- Operations: Consider ease of maintenance and blockage risk

7.3.3 Do-nothing/No action alternative

The do nothing/no project/no action alternative serves as a comparative baseline to characterize the cumulative impact, benefits and trade-offs of the proposed project. While the EIS will discuss in more detail, Table 7-13,

Table 7-14, and Table 7-15 provide an initial summary of the avoided impacts, abandoned benefits and trade-offs associated with the do-nothing alternative.

Table 7-13: Avoided impacts

Avoided Impacts
Temporary construction impacts (noise, dust, engine emissions, traffic)
Benthic habitat around outfall preserved
Trafficking-in-persons risk avoided
Temporary land takes and easements avoided
Permanent land takes avoided
Treated effluent /mixing zone plume avoided
Use of waterfront property avoided
Fugitive emissions avoided

Table 7-14: Abandoned benefits

Abandoned benefits
Waterborne illness will not be reduced
Sanitary conditions will not be improved
Groundwater and surface water quality will not be improved
Disinfection supply for public water will not be provided
Local employment opportunities will not be realized

Table 7-15: Trade-offs

Trade-off
Green house gas emissions from plant for Green house gas emission from untreated sewage

Trade-off
Workforce for construction for other employment
Workforce for operation for other employment
Solid waste from plant for trucked sewage from latrines
Treated effluent from plant for trucked sewage and untreated liquid waste from latrines
Odour from WWTP for odour from latrines and untreated sewage in channels
Cash and in-kind compensation for demolished features, temporary land use, and livelihood impacts for business-as-usual

7.4 Impact scoping

Table 7-16, Table 7-17, and Table 7-18 summarize the results of the impact analysis from the Draft ESIA performed for MCC (TetraTech, 2022a) and includes additional impacts not identified at the Draft ESIA that we have since identified for analysis. The EISs will further elaborate on these findings.

7.4.1 Physical environment

Table 7-16: Primary known and expected impacts: Physical resources

Impact	Construction (C) or Operation (O)	Impact significance without mitigation	Potential mitigation or enhancements	Impact with mitigation
Air and climate				
Reduced air quality due to fugitive dust emissions from construction activities causing nuisance to residents, workers and people that frequent areas adjacent to drainage and sanitation works, the WWTP site and haul roads.	C	Moderate	<p>Minimizing soil excavation and earth moving activities during dry and windy conditions.</p> <p>Using water sprays during soil excavation, earth movement and the haulage of materials.</p> <p>Covering soil stockpiles to reduce fugitive dust emissions.</p> <p>Developing and implementing an air quality management plan.</p>	Low, reversible
Reduced air quality due to exhaust emissions from motor vehicles and machinery, impacting residents, workers and people that frequent areas adjacent to areas of construction, haul roads and the WWTP site.	C, O	Moderate	<p>Using fuel efficient plant, vehicles, and equipment.</p> <p>Regularly servicing and maintaining plant, vehicles, and equipment.</p>	Very low, partially reversible
Reduced air quality due to fugitive emissions from the WWTP site.	O	Moderate	Operate and maintain biogas flare at optimal conditions to provide complete combustion of biogas	Very low, partially reversible

Impact	Construction (C) or Operation (O)	Impact significance without mitigation	Potential mitigation or enhancements	Impact with mitigation
Increased greenhouse gas emissions from motor vehicles, machinery, generators and use of grid electricity (which is produced from diesel) and direct from the WWTP.	C, O	Very low	Using fuel efficient plant, vehicles, and equipment. Regularly servicing and maintaining plant, vehicles, and equipment.	Very low, partially reversible
Increased odour from operation of the WWTP, Dili municipal landfill and biosolids transport, impacting residents, workers and people that frequent areas adjacent to sources of odour.	O	Moderate	Designing WWTP layout to optimize buffer between site boundary and odour emissions. Using odour control system at the WWTP to reduce odour emissions. Covering trucks hauling biosolids/sludge/septage.	Low, reversible
Reduced odour within the Project area due to operation of the sanitation system, which will provide sewer connections to residents and businesses and remove existing pit latrine and septic systems.	O	High positive	Connecting all households and commercial properties in the project area to maximize collection of odour-causing elements. Designing WWTP layout to optimize buffer between site boundary and odour emissions. Using odour control system at the WWTP to reduce odour emissions. Covering trucks hauling biosolids/sludge/septage.	High (positive)
Water resources				
Contamination of surface water and groundwater through accidental spills and discharges of fuels, chemicals and hazardous materials, or unplanned / accidental sewage releases.	C, O	Moderate	Establishing a hazardous substance management plan. Ensuring spill response kits and procedures in place. Conducting maintenance/leak tests. Conducting regular maintenance and service checks of the WWTP.	Low, partially reversible
Improved surface water and groundwater quality associated with the operation of the sanitation system within the project area, diverting sewage waste away from the drainage system and reducing infiltration into groundwater.	O	Major (positive)	Conducting maintenance checks on the sewer system. Providing of sanitation connections to the whole Project area. Decommissioning existing pit latrine systems.	High (positive)

Impact	Construction (C) or Operation (O)	Impact significance without mitigation	Potential mitigation or enhancements	Impact with mitigation
Improved aquatic ecology associated with the operation of the sanitation system within the project area, diverting sewage waste away from the river system and reducing infiltration into groundwater.	O	Moderate (positive)	<p>Conducting maintenance checks on the sewer system</p> <p>Providing of sanitation connections to the whole Project area</p> <p>Decommissioning existing pit latrine systems</p>	High (positive)
Use of groundwater for disinfectant production reducing the capacity of the groundwater aquifer to supply existing and potential users.	O	Moderate	<p>Ensuring that groundwater is sourced in a sustainable manner from an aquifer with sufficient yield.</p> <p>Minimizing water consumption through water saving measures.</p>	Low, partially reversible
Soils and topography				
Sedimentation of waterways and drainage due to runoff from construction sites.	C	Moderate	<p>Assessing areas at risk of soil erosion and sedimentation, and establishing erosion and sedimentation controls, including: silt traps and curtains, covering soil stockpiles, stormwater diversion drains, sealing high-traffic areas</p>	Very low, reversible
Contamination of soils, surface water and groundwater due to the disturbance and exposure of acid sulphate soils from soil excavation during construction activities or maintenance activities.	C, O	Moderate	<p>Conducting preconstruction and / or construction soil testing to identify any acid sulphate soils that will be disturbed.</p> <p>Establishing and implementing an acid sulphate soils management plan.</p>	Very low, partially reversible
Contamination of soil from mixing excavated contaminated spoil during construction of the WWTP and sewer network.	C	Moderate	<p>Undertaking soil testing.</p> <p>Not using contaminated soil in construction activities.</p> <p>Identifying methods for safe management and disposal of contaminated soil.</p>	Low, reversible
The extraction of borrow materials for construction purposes, modifying the landforms and drainage patterns.	C	Moderate	<p>Using appropriately regulated borrow pits/quarries and conducting due diligence to determine appropriate erosion and sediment controls, appropriate dust management and appropriate labour conditions.</p>	Low, irreversible

Impact	Construction (C) or Operation (O)	Impact significance without mitigation	Potential mitigation or enhancements	Impact with mitigation
Contamination of soils through accidental spills and discharges of fuels, chemicals and hazardous materials at construction sites, maintenance yards and the WWTP.	C, O	Moderate	<p>Establishing a hazardous substance management plan including appropriate containment.</p> <p>Establishing spill response kits and spill and emergency preparedness and response procedures.</p> <p>Conducting maintenance/leak tests.</p> <p>Establishing a waste management plan.</p> <p>Disposing of waste that reduces potential for soil contamination.</p> <p>Not using contaminated soil in construction activities.</p>	Low, reversible
The operation of the sanitation system and drainage improvements within the project area, reducing a source of existing soil contamination.	O	High (positive)	None identified.	High (positive)

7.4.2 Biological environment

Table 7-17: Primary known and expected impacts: Biological resources

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Threatened and endangered species				
Since the project is located in the Dili metropolitan it is expected that there are only few to no wild animals.	C	Low	<p>Trees need to be checked in relation to the occurrence of nests and roosts.</p> <p>In water construction which creates increased turbidity and TSD like dredging should be carried out between January and September.</p> <p>Further requirements like bubble screens to protect corals will have to be assessed, if required</p>	Very low
Terrestrial environment				
Loss of individual trees and disturbance to fauna behaviour (through noise, vibration or light or other impacts) during the	C	Low	Replanting trees at a defined ratio e.g. 5 for 1 as an improvement to previous situation.	Very low

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
construction of the WWTP and sewage network				
Marine environment				
Modification of marine habitats and disturbance to fauna behaviour (through noise, vibration or light or other impacts) during the construction of the WWTP outfall pipeline.	C	Moderate	<p>Avoiding megafauna migration periods during the construction of the ocean outfall pipeline.</p> <p>Implementing a vessel management plan.</p> <p>Employing an appropriately qualified/experienced specialist during ocean outfall pipeline construction activities to monitor/sight marine megafauna. Establishing protocols for the construction of the ocean outfall pipeline to protect megafauna from construction areas / activities (e.g., maintaining safe distances, suspending particular activities until megafauna moves on).</p> <p>Adopting construction methods that minimize noise and sediment disturbance.</p>	Low, reversible
Loss of or harm to marine life (including cetaceans and marine mammals) through collision with construction equipment or vessels as a result of the WWTP outfall construction.	C	Moderate	<p>Employing an appropriately qualified/experienced specialist during ocean outfall pipeline construction activities to monitor/sight marine megafauna. Establishing protocols for the construction of the ocean outfall pipeline to protect megafauna from construction areas / activities (e.g., maintaining safe distances, suspending particular activities until megafauna moves on).</p>	Low, Irreversible
Changes to marine ocean water quality that may affect marine life (including cetaceans and marine mammals) as a result of the WWTP outfall operation.	O	Very low	<p>Implement regular inspections, testing and monitoring program to measure compliance.</p>	Very low, reversible
Disturbance of fine sediment during construction of the ocean outfall pipeline altering water quality due to increased turbidity and re-suspension of sediments and nutrients.	C	Low	<p>Adopting construction techniques that minimize disturbance of sediments.</p>	Low, reversible

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Modification of benthic habitat during construction of the WWTP outfall pipeline.	C	Moderate	Design and placement of the pipeline outfall in location that avoids sensitive marine habitat such as coral reefs and seagrass areas.	Low, reversible
Operation of the WWTP resulting in alteration of benthic habitat as a result of outfall discharge.	O	Moderate	Design and placement of the pipeline outfall in location that avoids sensitive marine habitat such as coral reefs and seagrass areas.	Low, reversible
Operation of the WWTP outfall changing conditions in the effluent dispersion zone (noise, air, water quality changes) resulting in negative impacts to marine fauna.	O	Moderate	Regularly inspecting the ocean outfall pipeline to allow early detection of potential integrity issues (e.g., leaks, ruptures, deterioration). Establishing effluent discharge quality parameters and testing effluent regularly to measure compliance.	Low, partially reversible
Presence of the WWTP outfall pipeline changing benthic habitat.	O	Moderate	Design and placement of the pipeline outfall in location that avoids sensitive marine habitat such as coral reefs and seagrass areas	Very low, Partially reversible
Erosion of soils during construction activities across the project area, resulting in increased sedimentation/turbidity in the marine environment negatively impacting marine water quality and biodiversity and activities affected by marine water quality including fishing, shellfish harvesting, tourism and recreation.	C	Low	Assessing areas at risk of soil erosion and sedimentation, and establishing erosion and sedimentation controls, including: silt traps and curtains, covering soil stockpiles, stormwater diversion drains, sealing high-traffic areas	Very Low
Contaminated runoff from acid sulphate soils, or disturbance of contaminated soils during construction discharging to the marine environment and negatively impacting marine water quality and biodiversity and activities affected by marine water quality including fishing, seafood collection, tourism and recreation.	C	Moderate	Conducting preconstruction and / or construction soil testing to identify any acid sulphate soils that will be disturbed. Establishing and implementing an acid sulphate soils management plan.	Low
Contaminated surface water/runoff from fuel, chemicals and/or other hazardous substance spills and leaks entering the	C, O	Moderate	Establishing a hazardous substance management plan that identifies controls for the transport, storage, handling and	Low

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
marine environment during the transport, handling, storage and disposal of these substances during construction and operation activities across the project area, negatively impacting marine water quality and biodiversity and activities affected by marine water quality including fishing, seafood collection, tourism and recreation.			<p>disposal of fuels, chemicals and other hazardous substances.</p> <p>Ensuring spill response kits and procedures (including emergency preparedness and response procedures).</p> <p>Conducting maintenance/leak tests on fuel and chemical containers.</p> <p>Conducting regular maintenance and service checks of the WWTP. Regularly inspecting and maintaining the WWTP to ensure operational performance standards are met.</p>	
Discharge of treated effluent from the outfall pipeline off the coast of Dili, decreasing marine water quality and impacting fishing, seafood collection, tourism and recreation in the offshore waters outside the Contact Protection Zone.	O	Low	<p>Establishing effluent discharge quality parameters and testing effluent regularly to measure compliance.</p> <p>Regularly inspecting and maintaining the WWTP to maintain operational performance standards.</p>	Low, Reversible
Reducing the discharge of wastewater containing plastics and microplastics that degrade marine water quality and impact marine life.	O	Moderate (positive)	<p>Designing the WWTP to minimize the release of plastics to the marine environment, including staged screening mechanisms to remove different sized particles (screens are to 6 mm).</p> <p>Regularly inspecting and maintaining the WWTP to ensure operational performance standards are met.</p>	Moderate (positive)
Reducing untreated wastewater/ sewage entering drainage lines and discharging to the marine environment from the operation of the sanitation system within the project area, improving marine water quality and biodiversity and improving conditions for activities affected by marine water quality including fishing, seafood collection, tourism and recreation in the nearshore area (within the Contact Protection Zone).	O	Major (positive)	<p>Conducting maintenance checks on the sewer system where appropriate to allow for early identification of potential problems such as blockages, leaks, ruptures, etc.</p> <p>Regularly inspecting and maintaining the WWTP to ensure operational performance standards are met.</p>	Major (positive)

7.4.3 Human environment

Table 7-18: Primary known and expected impacts: Human environment

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Increased traffic due to project construction vehicles causing increased congestion and inconvenience to road users and decreasing road conditions.	C, O	Moderate	Adoption of appropriate routes. Traffic management plan. Road condition survey.	Low
Disruption to traffic impacting road users (including pedestrians), residents and businesses adjacent to roads that will be impacted as part of the construction of the sanitation and drainage system.	C	High	Adoption of appropriate routes. Traffic management plan. Construction management plan.	Moderate
Decreased safety for road users due to heavy vehicle traffic increases associated with project vehicles.	C, O	High	Adoption of appropriate routes. Traffic management plan. Road condition survey. Construction management plan.	Moderate
Increased traffic due to project vehicles causing increased congestion and inconvenience to road users and increased wear and tear on roads.	O	Moderate	Adoption of appropriate routes. Traffic management plan. Construction management plan.	Low
Cultural heritage				
Disturbance or damage to cultural heritage items or values due to the construction of the project. The risk that this may occur is increased due to inadequate engagement with community stakeholders and GoTL.	C	High	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement). Cultural heritage chance find procedure. Environment and social management and monitoring plan (ESMP) to manage dust, noise, light and vibration impacts.	Low
Disturbance or damage to cultural heritage items or values due to the extraction of borrow materials for construction or the disposal of excess spoil from construction.	C	Moderate	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement). Cultural heritage chance find procedure. Environment and social management and monitoring	Very low

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			plan (ESMP) to manage dust, noise, light and vibration impacts.	
The project's construction may temporarily restrict access to cultural heritage sites or areas of cultural heritage	C	Moderate	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement).	Very low
The establishment of project infrastructure within the urban environment of Dili may result in the impairment of cultural heritage items or values due to the proximity of project infrastructure.	O	Moderate	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement). Cultural heritage chance find procedure. ESMP to manage dust, noise, light and vibration impacts.	Very low
Construction activities create dust, noise, visual impacts, light and vibration and temporarily impair amenity for nearby residents and businesses.	C	Major	Traffic management plan. ESMP to manage dust, noise, light and vibration impacts. Minimize soil excavation and earth moving activities during dry, high wind conditions. Water sprays to minimize dust. Cover soil stockpiles. Establish a grievance redress mechanism.	Moderate
The presence of the WWTP, ocean outfall and pump stations impair nearby residents and businesses due to visual, noise, light and odour impacts.	O	Moderate	As above.	Low
The increased volume of heavy vehicles impairs amenity of nearby residents and businesses along transport routes due to noise, dust, odour (during operations) and vibration impacts.	C, O	Moderate	As above.	Low, Irreversible
Improved amenity of the shoreline and nearshore environment due to removal of sewerage from drainages discharging to these areas.	O	High (positive)	Regularly service and maintain plant, vehicles and equipment in accordance with manufacturer's specifications. Conducting maintenance checks on the sewer system where appropriate to allow for	Major (positive)

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			<p>early identification of potential problems such as blockages, leaks, ruptures etc.</p> <p>Providing sanitation connections to the whole Project area.</p> <p>Decommissioning existing pit latrine systems.</p>	
Community health and safety				
Poor/ unacceptable workforce behaviour in the community, reducing perception of safety for residents.	C	Moderate	As above.	Low, Irreversible
Increased communicable diseases due to interactions between construction workforce and local community.	C	High	<p>Employee code of conduct.</p> <p>Contractor management plans to prevent trafficking-in-persons (TIP).</p> <p>Communicable disease (including HIV) awareness training.</p>	Low, Irreversible
Construction workforce includes trafficked persons.	C	High	<p>Employee code of conduct.</p> <p>Contractor management plans to prevent trafficking-in-persons (TIP).</p> <p>Communicable disease (including HIV) awareness training.</p>	Low, Irreversible
Safety risks from footpath/sidewalk closures/deviations associated with construction within or in proximity to a carriageway and interactions with construction machinery and excavations.	C	High	<p>Traffic management plan.</p> <p>Community safety plan.</p> <p>ESMP to manage dust, noise, light and vibration impacts.</p> <p>Establish a grievance redress mechanism.</p>	Moderate, Irreversible
Effluent discharge causes health issues in nearshore environment or consumers of marine resources (e.g., fish).	O	Moderate	Regular inspection of ocean outfall pipeline, Establishing effluent discharge quality parameters and testing.	Very Low, Reversible
Waste generated during Project is improperly disposed causing health risks.	C, O	Moderate	Waste management plan	Very low, Reversible
Improved health outcomes including improved childhood development and wellbeing, and reduced disease burden for residents and workers in sanitation and drainage project area of influence and those connected to water supplies that receive	O	Major (positive)	Social and behaviour change programs.	Major (positive)

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
disinfectant (e.g., people on the Dili, Aileu, Ermera, Liquica and Manatuto water supply network).				
Improved health outcomes for people using shallow groundwater associated with improved groundwater quality affected by the project.	O	High (positive)	Social and behaviour change programs.	High (positive)
Improved school attendance as a result of decreased cases of diarrheal disease in children.	O	Major (positive)	Social and behaviour change programs.	Major (positive)
Resettlement and livelihood				
Potential disruption to social cohesion and livelihoods due to resettlement of households into different locations to their established social, community and employment networks.	P, C, O	Major	<p>Project is designed to minimize or eliminate resettlement</p> <p>Stakeholder engagement plan.</p> <p>Resettlement policy framework (RPF), resettlement action plan (RAP).</p> <p>Livelihood Restoration Plan (LRP) if applicable.</p> <p>Broad participatory consultation with all members of the community, facilitating meetings in an inclusive manner and ensuring opportunities for those traditionally excluded to speak. Include the marginalized to foster a uniting impact and increase community cohesion.</p> <p>Ensure government representative always attends community consultations.</p> <p>Conduct pre-construction project disclosure and engagement program with communities, with the assistance of Suco administration, to build community knowledge and confidence in project approach.</p> <p>GoTL to provide assurances on housing security.</p> <p>Close coordination with government officials to identify equivalent location for relocation (i.e. - similar</p>	Low, Irreversible

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			services, amenities, etc.) as close to current location as possible.	
Livelihood impacts due to displacement of people from marine areas that support or partially support livelihoods e.g., fishing zones.	C, O	Moderate	As above.	Low, Reversible
Short-term livelihood impacts due to displacement of people from areas that support or partially support livelihoods e.g., fishing zones, drainage lines, roadsides.	P, C	Major	As above	Moderate, Reversible
Inadequate resettlement management or compensation processes resulting in adverse impacts to wellbeing of affected people.	P, C, O	High	As above.	Low, Reversible
Potential impact to residences of a lack of an available/ acceptable resettlement site for in-kind replacement of structures, if requested by impacted persons, resulting in failure of resettlement process.	P, C, O	Major	As above.	Low, Irreversible
Economic and workforce				
Existing businesses have increased competition for workers.	C	Moderate	Transparent and non-discriminatory employment practices Training and development of potential local workforce On-the-job training Engagement with the local communities	Low, Reversible
Construction of the outfall leads to disruption of shipping, fishing and marine tourism industries.	C	Moderate	Conduct pre-construction project disclosure engagement with communities.	Low, Reversible
Decreased work for existing workers and businesses servicing septic systems and supplying drinking water to Dili and other districts that will receive disinfectant.	O	Major	Optimize opportunities for local employment. Local procurement policies and procedures.	Low, Reversible

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			Engagement with the local communities regarding employment opportunities. Inclusive community engagement vulnerable groups.	
Increased employment opportunities.	P, C, O	High to major (positive)	Training and development of local workforce. Engagement with the local communities regarding employment opportunities. Optimizing opportunities for local employment.	High to major (positive)
Increased business opportunities associated with materials and services.	C, O	Low to moderate (positive)	Establishing local procurement policies and procedures.	Moderate to high (positive)
Effluent discharge causes perception risks for the fishing and marine tourism industries.	O	Moderate	Conduct pre-construction project disclosure and engagement program to build community knowledge and confidence in project approach.	Low, Reversible
Improved business equity due to improved sanitation facilities across whole of Area 106 and access to disinfected water supply across whole of Dili (and additional regional areas).	O	High (positive)	None identified.	High (positive)
Increased reinvestment in businesses due to the savings enabled by the sanitation and water disinfection activities	O	High (positive)	None identified.	High (positive)
Improved reputation in tourism sector and in business sector more generally due to the provision of sanitation and disinfected water.	O	High (positive)	None identified.	High (positive)
Improved labour reliability and reduced labour costs due to the improved health of workforce with the reduction in diarrheal disease.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Education and training benefits of the project building workforce capacity and assisting other businesses.	O	Low (positive)	Social and behaviour change program.	Moderate (positive)
Reduced costs to the Timor-Leste medical system due to reduction in diarrheal disease.	O	Major (positive)	Social and behaviour change program.	Major (positive)

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Reduced costs to households (lost wages, medication, travel) due to reduction in diarrheal disease.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Reduced labour/costs to households due to easier/more economical access to disinfected water and a sanitation system.	O	High (positive)	Social and behaviour change program.	High (positive)
Improved gross domestic product (GDP) due to reduced stunting, mortality and morbidity due to reduction in diarrheal disease.	O	High (positive)	None identified.	High (positive)
Gender impacts				
Increased disadvantage experienced by women in Dili if financial burden of payments for improved water and sanitation services falls on women.	O	Major	Gender action plan. Inclusive engagement with women. Setting service and capital prices appropriately. Financial assistance measures as appropriate.	Low, Reversible
Vulnerability of women (in particular female-headed households) is increased through lack of recognition in resettlement and livelihood restoration processes.	C, O	Major	Gender action plan. Inclusive engagement and participatory design processes with women. Resettlement policy framework/ resettlement action plan and livelihood restoration plan.	Low, Reversible
Design and location of the sanitation network (in particular the simplified sewer network) and household-level connection points does not adequately meet the needs of women and children.	O	Moderate	Gender action plan. Inclusive engagement and participatory design processes with women.	Low, Reversible
Harassment, sexual exploitation and violence toward women and girls by construction workers.	C	High	Gender action plan. Employee induction, code of conduct, including zero tolerance policy, education, training and disciplinary measures. Establish grievance redress mechanism. Contractor screening.	Low, Irreversible
Reduced caring burden for women associated with	O	Major (positive)	Social and behaviour change program.	Major (positive)

Impact	Construction (C) or Operation (O)	Impact or significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
decreased incidence of diarrheal disease in dependents.				
Reduced labour and financial burden for women and families associated with accessing or purchasing drinking water due to the disinfection of Dili water supply.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Impacts to women in informal employment that are impacted by construction of project e.g., street vendors.	C	Moderate	Inclusive engagement and participatory design processes with women. Resettlement policy framework/ resettlement and livelihood restoration plan. Code of conduct for construction workers. Traffic management plans.	Low, Reversible

7.5 Impact assessment methodology and assessment and evaluation of alternatives

The EIS document will include, at a minimum, the elements and processes which have been cross-referenced to the discussion in this ToR.

Table 7-19. Elements of an EIS

EIS element	Section of this ToR where discussed
Purpose and need for the Project and other relevant context	Section 1.1, Section 2.1
Legal and policy context and constraints	Section 5
Summary of consultation, coordination, and stakeholder engagement	Section 5.2, Section 7.8
Project description with enough detail to complete the impact analysis	Section 7.1
Description of alternatives, including the no project/no action/do nothing alternative	Section 7.3
Baseline description of physical and biological resources and social conditions	Section 7.2.1, Section 7.2.2, Section 7.2.3
Inventory of impacts including composite ratings and whether they require additional avoidance, minimization, mitigation and/or management measures	Section 7.4, Section 7.5, Section 7.6
A summary of recommendations	Will be in EIS
An Environmental and social management plan	Section 7.7

7.5.1 Identifying impacts

This first step for impact analysis is developing an inventory of impacts including:

- The impact;
- Resource or feature affected;
- Project feature that drives the impact;
- How the impact changes the baseline condition (quantitative, semi-quantitative, or qualitative);
- Whether the impact is negative or positive;
- Sensitive receptors; and
- Regulatory, policy or other applicable thresholds (if they exist).

7.5.2 Rating impacts and determining need for mitigation

The methodology used to rate impacts on a resource or receptor is based on the combination of multiple characteristics of the impact, namely:

- *Likelihood*. The probability that an event will happen. These range from rare, driven mostly by accidents or small mishaps to long-term or permanent.
- *Duration*. Can be temporary (usually as a construction impact), intermittent, long term, or permanent.
- *Magnitude*. Magnitude of the impact can either be measured against specific metrics (such as for air emissions) or performance standards, relative to existing conditions (such as habitat impact relative to an entire forest stand), or a combination, and can be characterized as small, medium, or large.
- *Reversibility*. Many impacts passively reverse (such as vegetation regrowth), are actively mitigated, or are long-term and reversible with active intervention (such as removal of a facility). Occasionally, impacts are permanent or functionally permanent, such as major earthwork.

Some resource impacts consider regulatory or best practice standards, such as for water quality or air emissions. Other resources, absent quantified thresholds, consider the sensitivity of the receptor, such as for noise or habitat disturbance. Typical sensitive receptors include: sensitive habitats, schools, houses of worship, and residences.

In addition to characterizing each impact by type, duration, magnitude, likelihood, and reversibility and as appropriate, effects on sensitive receptors, the analysis results in a significance rating of the impact. Table 7-20 shows a graphical summary of how impacts are rated.

During the project planning and development process, many avoidance, minimization, and mitigation elements were incorporated or embedded into the plans and layouts and are considered as part of the design rather than post-design elements mitigation.

Table 7-20: Impact magnitude

Magnitude of Impact		Sensitivity of Receptor				
		Very low	Low	Moderate	High	Very High
Positive	Very high	Moderate	High	Major	Major	Major
	Major	Low	Moderate	High	Major	Major
	Moderate	Low	Low	Moderate	High	High
	Minor	Very low	Low	Low	Moderate	Moderate
	Negligible	Very low	Very low	Very low	Low	Moderate
Negative	Negligible	Very low	Very low	Very low	Low	Moderate
	Minor	Very low	Low	Low	Moderate	Moderate
	Moderate	Low	Low	Moderate	High	High
	Major	Low	Moderate	High	Major	Major
	Very high	Moderate	High	Major	Major	Major

Table 7-21 lists the key questions we answer when examining impacts.

Table 7-21: Questions concerning the nature of identified impacts

Aspect of impact	How evaluated
Frequency and duration	Will the effect be a one-time only occurrence? Will it be a short-term or long-term effect?
Location and magnitude	Will it be local, regional, national or international in scope? What is the anticipated scale of the effect?
Timing	Is the effect likely to occur at a time that is sensitive to a particular environmental feature?
Risk	Is there a high level of risk associated with the effect, such as exposure of humans to contaminants or pollution, or a high risk of accident?
Irreversibility	Is the effect likely to be irreversible?

7.6 Mitigation Measures

Mitigation is part of a continuum of best practices and is reflected in MCC's environmental policy application. This continuum includes:

- **Avoidance:** for a significant negative impact, we first determine if an adjustment to the project can avoid the impact (e.g. by changing the route of the sewer pipeline).
- **Minimization:** if avoidance is not possible, measures will be sought which aim at minimizing the impact, with the aim of reducing it to low, very low, or insignificant or, where such values exist, within legally prescribed limits. For example, construction noise, while temporary, can further be reduced by limiting idling and work hours.
- **Mitigation/Compensation:** If a significant impact is unavoidable, we then consider mitigation. For example, it may be necessary to plant trees to compensation for trees removed during clearing. As another example, if a business is prevented or impaired from operating a cash compensation will be calculated and offered through the resettlement process.
- Positive effects may also be further enhanced through measures such as job opportunities during construction, requiring hiring policies of the construction

contractor that favour local population, and identifying training opportunities for workforce enhancement.

All proposed measures will also be checked on their effectiveness, which means that they will be scrutinized according to the following questions:

- Is the measure realistic, i.e. can it be implemented under the prevailing conditions?
- Is it adequate in that it actually addresses the identified impact?
- Is it suitable, i.e. will it reduce (or compensate) the impact to the degree required? What will the remaining impact be?
- Is it cost effective?
- Does it create conflicts with other interests?

The EIS will identify impacts that incorporated avoidance, minimization, and mitigation and how the impact level was adjusted by those measures. For example, if an impact is determined to be moderate and can be reduced to very low through a minimization measure, that will be documented in the Impact Analysis.

7.7 Environmental Management Plan

As part of the EIS Report, a Standalone Environmental Management Plan (EMP) will be developed considering all phases of the proposed project, as relevant (pre-construction, construction, operation, closure and decommissioning). The EMP will follow the requirements of the Ministerial Diploma 46/2017, regarding Annex VI and will focus on the required institutional arrangements, the mitigation measures, monitoring measures and reporting arrangement including:

- Description of the institutional setup for EMP implementation: identification of responsibilities and the necessary structures, mainly in terms of manpower and capabilities;
- Summary of the identified significant environmental and social impacts and the corresponding mitigation measures: aggregating, where possible and required, of the measures identified, and describing them in a form (including responsibilities, means required for implementation, procedures to be followed, expected outcome, etc.) in a way to make them practical for implementation;
- Description of any regulatory parameters e.g. emission limits, approvals, permits, etc.; and
- Costs: a budget for implementation will have to be prepared, taking into account the costs (as far as these are not already covered in the technical project) required for their implementation.
- Monitoring: this serves the purpose of following up on implementation of the E&S measures, with the aim to be able to take corrective measures either in case of non-compliance, i.e. if a measure is not being implemented according to plan, or if it does not produce the expected results. Here again, responsibilities and costs will have to be identified.
- Reporting requirements: internal and external, inspections, incident, accident and emergency reports, etc.

This EMP will be a first draft, for being discussed by the various stakeholders involved. It will then serve as the basis for preparation of the final EMP.

7.7.1 Trafficking in Person Management Plan

The counter-trafficking plan (C-TIP plan) will include the requirements for the prevention, monitoring, and managing of cases of trafficking-in-persons (TIP), within and outside the workforce, in keeping with MCC's Counter-Trafficking in Persons Policy.

This C-TIP plan will be interrelated to a social and gender integration plan (SGIP) which will provide a roadmap for the social inclusion and gender integration throughout the lifecycle of the project. The C-TIP plan and the SGIP will identify and seek to address the social and gender risks associated with the project including, but not limited to, risks associated with TIP for sex and labour, gender-based violence, and sexual exploitation and harassment.

7.8 Public Consultation and Stakeholder engagement plan

The main stakeholder groups identified comprise Timor-Leste Government agencies, municipal administration, households and businesses, civil society organizations, multilateral aid agencies, and foreign government agencies.

Stakeholder engagement has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns through key informant interviews and focus group discussions.

The engagement for the Project commenced in February 2019 and extended to April 2022 (with an extended period of limited engagement due to COVID-19). Engagement activities included kick-off meetings, key informant interviews, meetings with Project representatives, i.e., MCC, CDT and Tetra Tech, and various stakeholders from government agencies, bilateral and multilateral aid agencies and civil society and focus group discussions with different community stakeholders.

Additional Stakeholder engagement planning for the Project includes:

- Key stakeholders identification;
- Stakeholder issue mapping;
- Engagement methods and consultation materials;
- Engagement activities; and

Process for recording and incorporating Stakeholder issues into the EISs, EMPs, and design.

7.9 Stakeholder identification to date

Broad stakeholder groups have been identified, based on likely common interests in Timor-Leste's sanitation and water issues. Table 7-22 lists these groups along with a brief description of each.

Table 7-22: Stakeholder groups

Stakeholder Group	Description
Timor-Leste Government agencies	This group includes country-wide government ministries and agencies responsible for water supply, sanitation and drainage infrastructure services and project approvals. It includes Bee Timor Leste (BTL), Secretary of Land and Registry, the National Authority for Water and Sanitation (also known as ANAS), National Authority for Environmental Licensing (ANLA), Ministry of Public Works, and the Secretariat of State for Vocational Training and Employment (SEFOPE), under the Coordinating Minister Economic Affairs.
Municipal administration, households and businesses	This group includes Suco chiefs, households and businesses that may benefit from the Project or be adversely affected during construction of the infrastructure. Also includes Dili Municipality Authority, Ermera Municipality Authority, Municipal Planning Agency for Dili Municipality, and Dili Municipality Water and Sanitation Services.
Civil society	This group include NGOs (both international and national) involved in the water, sanitation, and hygiene (commonly referred to as 'WASH') sector in Timor-Leste and other NGOs that may have an interest in the Project (e.g., NGOs that support development for women and vulnerable persons).
Bilateral and multilateral aid agencies	This group includes international aid organizations implementing large projects in the WASH sector, such as UNICEF, the Asian Development Bank and the World Bank.

Stakeholder Group		Description
Foreign agencies	government	This group includes foreign government agencies such as Australian Government's Department of Foreign Affairs and Trade (DFAT), Japanese International Cooperation Agency and USAID that sponsor or implement programs in Timor-Leste. Also includes European Investment Bank (EIB), that has an ongoing water and sanitation infrastructure investment project throughout Timor-Leste, and the World Bank.

Stakeholder engagement for the Project has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns (February 2020 to March 2022). As part of this stakeholder engagement the MCC ESIA consultant:

- Provided stakeholders with preliminary information regarding the potential project.
- Collected data to support the project deliverables (e.g., Feasibility Study (FS), Preliminary Assessment of Environmental and Social (including gender) Impacts, draft ESIA, RPF, Social and Gender Assessment) through key informant interviews and focus group discussions.
- Identified and examined existing and potential issues from the perspective of key stakeholders.

The engagement for the Project commenced in February 2020, with kick-off meetings and key informant interviews in Dili. The consultation activities included meetings with the MCC, the Compact Development Team (GoTL entity set-up for Compact Development), and Tetra Tech with various stakeholders from government agencies, bilateral and multilateral aid agencies, and civil society. A list of the engagement undertaken is provided in Table 7-23. The engagement program was put on hold in March 2020 due to COVID19 and recommenced in March 2022.

Table 7-23: Stakeholder engagement to date

Date	Stakeholder
17-Feb-20	Ministry of Public Works
18-Feb-20	Ministry of Public Works and Housing, National Directorate of Basic Sanitation
18-Feb-20	National Directorate of Water & Sanitation, Japanese International Cooperation Agency
18-Feb-20	Ministry of Public Works and Housing
19-Feb-20	National Authority for Environmental Licensing (ANLA)
20-Feb-20	National Directorate of Land and Property
20-Feb-20	Conservation International
21-Feb-20	National Directorate for Basic Sanitation
21-Feb-20	Inter-ministerial Commission on Expropriation and presentation by Aguas de Portugal
21-Feb-20	National Directorate of Roads, Bridges and Flood Control
24-Feb-20	Aguas de Portugal, Ministry of Public Works and Housing
25-Feb-20	National Directorate of Roads, Bridges and Flood Control
25-Feb-20	Sistema Nacional de Cadastro
25-Feb-20	Timor-Leste's Business Registration and Verification Service
25-Feb-20	Dili's Chefe of Suco and village

Date	Stakeholder
27-Feb-20	Aguas de Portugal
27-Feb-20	National Directorate for Basic Sanitation
28-Feb-20	Port of Dili
28-Feb-20	Rede ba Rai Team
28-Feb-20	Pertamina
28-Feb-20	National Development Agency
02-Mar-20	Ministry of Agriculture and Fisheries
03-Mar-20	Sistema Nacional de Cadastro
04-Mar-20	National Directorate of Land and Property
09-Mar-20	Timor-Leste's Business Registration and Verification Service
11-Mar-20	Dili Municipality
11-Mar-20	Suco chiefs
1-Mar-22	Asian Development Bank
3-Mar-22	UNICEF
3-Mar-22	Suco Chief Bebonuk focus group
4 Mar-22	Suco Chief Vila Verde focus group
4-Mar-22	Suco Chief Comoro focus group
4-Mar-22	Female informal housing area representatives from Suco Vila Verde focus group
4-Mar-22	Female formal housing area representatives from Suco Comoro focus group
4-Mar-22	Water Aid
7 to 18-Mar-22	Female formal business representatives
9-Mar-22	Department of Foreign Affairs and Trade (Australia)
11-Mar-22	Youth representatives focus group
15-Mar-22	Female informal business representatives
24-Mar-22	CODIVA LGBTQIA+ community NGO
30-Mar-22	National Directorate of Housing under the Ministry of Public Works
7-Nov-23	Kick-Off Meeting MCC, MCC DD Consultant, MCA-TL, BTL, Minter of Finance
8-Nov-23	MCC, MCC DD Consultant, MCA-TL, BTL
10-Nov-23	National Authority for Environmental Licensing (ANLA)
13-Nov-23	EnviPro as Local consultant to support with local understanding, culture challenges, etc.
14-Nov-23	MCA-TL, BTL, EnviPro, NOD
15-Nov-23	National Directorate of Land and Property, Director of Cadastral Office
15-Nov-23	Gender Based NGOs (ACbit & Fokupers)
15-Nov-23	Gender Based NGOs (AJAR)
15-Nov-23	National Authority for Environmental Licensing (ANLA), EnviPro, NOD
15-Nov-23	Institute for Statistics
15-Nov-23	Suco Chief Comoro

Date	Stakeholder
16-Nov-23	Conservation International
29-Jan-24	APORTIL
30-Jan-24	EDTL
23-Feb-24	Suco Chiefs of Comoro, Vila Verde, Madohi, Motael, Bairo-Pite, Fatu-Hada, Maleuna
27-Feb-24	ANLA
27-Feb-24	Forestry Directorate
04-Mar-24	ANLA
04-Mar-24	National Directorate of Land and Property
05-Mar-24	BTL

As part of the community stakeholder engagement conducted in 2022, 69 people engaged in the Suco focus group discussions and business key informant interviews. Of the total, 46% identified as female and 54% male. Additional interviews with Timor-Leste government agencies, Civil society organizations, and bilateral and multilateral aid agencies were also undertaken.

Of the 69 informants that provided input to this report, their ages ranged from 22 to 73 years of age, and they spoke a range of languages at home including Tetum, Portuguese, Indonesian, Japanese, Mandarin and mother tongues such as Makasae. The informants' household size ranged from 2 to 12 people, with only 7 women (10% of the informants) identifying as the head of their household.

A detailed Stakeholder Engagement Plan has been developed and is provided in Annex 3.

8 STATEMENT OF FLEXIBILITY

At this time, we are reasonably certain that the Study Area will not change, since the concept and design have matured adequately at this stage. It is possible that issues may arise over the course of the investigations, noting particularly the Census, that may drive minor changes in the design. We will apprise ANLA of any significant issues that arise that could affect this ToR for the EISs or the EMPs for this project. We are aware that a major change to the ToR may initiate new processing in accordance with Decree Law 5/2011.

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ANNEX 1. Millennium Challenge Compact

MILLENNIUM CHALLENGE COMPACT

BETWEEN

THE UNITED STATES OF AMERICA

ACTING THROUGH

THE MILLENNIUM CHALLENGE CORPORATION

AND

THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE

MILLENNIUM CHALLENGE COMPACT

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MILLENNIUM CHALLENGE COMPACT

PREAMBLE

This MILLENNIUM CHALLENGE COMPACT (this “*Compact*”) is between the United States of America, acting through the Millennium Challenge Corporation, a United States government corporation (“*MCC*”), and the Democratic Republic of Timor-Leste (the “*Government*”). Capitalized terms used in this Compact shall have the meanings provided in Annex VI.

Recognizing that the United States of America (the “*United States*”) and the Government (collectively, the “*Parties*” and each individually, a “*Party*”) are committed to the shared goals of promoting economic growth and the elimination of extreme poverty in Timor-Leste and that MCC assistance under this Compact supports Timor-Leste’s demonstrated commitment to strengthening good governance, economic freedom, and investments in people;

Recalling that the Government consulted with the private sector and civil society of Timor-Leste to determine the priorities for the use of MCC assistance, and developed and submitted to MCC a proposal for such assistance to achieve lasting economic growth and poverty reduction;

Recognizing that the United States wishes to help the Government implement the program described herein to achieve the goal and objectives described herein (as such program description and objectives may be amended from time to time in accordance with the terms of this Compact, the “*Program*”); and

Recognizing that MCC shall serve as an implementing agency for the United States under this Compact.

The Parties hereby agree as follows:

ARTICLE 1.

GOAL AND OBJECTIVES

Section 1.1 Compact Goal. The goal of this Compact is to reduce poverty through economic growth in Timor-Leste (the “*Compact Goal*”). MCC shall provide assistance in a manner that strengthens good governance, economic freedom, and investments in the people of Timor-Leste.

Section 1.2 Project Objectives. The Program consists of the projects described in Annex I (each a “*Project*” and collectively, the “*Projects*”). The objective of each of the Projects (each a “*Project Objective*” and collectively, the “*Project Objectives*”) is to:

- (a) Reduce fecal pathogens in piped and stored drinking water and groundwater (the “*WSD Project Objective*”); and
- (b) Improve student learning outcomes (the “*TALENT Project Objective*”).

ARTICLE 2.

FUNDING AND RESOURCES

Section 2.1 Program Funding. Upon entry into force of this Compact in accordance with Section 7.3, MCC shall grant to the Government, under the terms of this Compact, an amount not to exceed Three Hundred Sixty-Eight Million, Nine Hundred Forty-Eight Thousand, Three Hundred Seventy-One United States Dollars (US\$368,948,371) (“**Program Funding**”) for use by the Government to implement the Program. The multi-year allocation of Program Funding is generally described in Annex II.

Section 2.2 Compact Facilitation Funding.

(a) Upon the signing of this Compact, MCC shall grant to the Government, under the terms of this Compact and in addition to the Program Funding described in Section 2.1, an amount not to exceed Fifty-One Million, Fifty-One Thousand, Six Hundred Twenty-Nine United States Dollars (US\$51,051,629) (“**Compact Facilitation Funding**” or “**CFF**”) under Section 609(g) of the Millennium Challenge Act of 2003, as amended (the “**MCA Act**”), for use by the Government to facilitate implementation of this Compact, including for the following purposes:

- (i) financial management and procurement activities;
- (ii) administrative activities (including start-up costs such as staff salaries) and administrative support expenses such as rent, computers and other information technology or capital equipment;
- (iii) monitoring and evaluation activities;
- (iv) feasibility, design and other project preparatory studies;
- (v) the development of a cost recovery plan under the WSD Project;
- (vi) advisory services; and
- (vii) other activities to facilitate Compact implementation as approved by MCC.

The allocation of CFF is generally described in Annex II.

(e) In accordance with Section 7.5, this Section 2.2 and other provisions of this Compact applicable to CFF shall be effective, for purposes of CFF only, as of the date this Compact is signed by the Parties.

(f) Each Disbursement of CFF is subject to satisfaction of the conditions precedent to such disbursement as set forth in Annex IV.

(g) If MCC determines that the full amount of CFF available under Section 2.2(a) exceeds the amount that reasonably can be utilized for the purposes set forth in Section 2.2(a), MCC, by written notice to the Government, may withdraw the excess amount, thereby reducing

the amount of the CFF available under Section 2.2(a) (such excess, the “**Excess CFF Amount**”). In such event, the amount of CFF granted to the Government under Section 2.2(a) shall be reduced by the Excess CFF Amount, and MCC shall have no further obligations with respect to such Excess CFF Amount.

(h) MCC, at its option by written notice to the Government, may elect to grant to the Government an amount equal to all or a portion of such Excess CFF Amount as an increase in the Program Funding, and such additional Program Funding shall be subject to the terms and conditions of this Compact applicable to Program Funding.

Section 2.3 MCC Funding. Program Funding and CFF are collectively referred to in this Compact as “**MCC Funding**,” and includes any refunds or reimbursements of Program Funding or CFF paid by the Government in accordance with this Compact.

Section 2.4 Disbursement. In accordance with this Compact and the Program Implementation Agreement, MCC shall disburse MCC Funding for expenditures incurred in furtherance of the Program (each instance, a “**Disbursement**”). Subject to the satisfaction of all applicable conditions precedent, the proceeds of Disbursements shall be made available to the Government, at MCC’s sole election, by (a) deposit to one or more bank accounts established by the Government and acceptable to MCC (each, a “**Permitted Account**”) or (b) direct payment to the relevant provider of goods, works or services for the implementation of the Program. MCC Funding may be expended only for Program expenditures.

Section 2.5 Interest. The Government shall pay or transfer to MCC, in accordance with the Program Implementation Agreement, any interest or other earnings that accrue on MCC Funding prior to such funding being used for a Program purpose.

Section 2.6 Government Resources; Budget.

(a) The Government is committed to providing a contribution of up to Sixty-Four Million United States Dollars (US\$64,000,000) over the Compact Term for the WSD Project as further provided in Annex IV to the PIA (the “**WSD Contribution**”).

(b) The Government shall provide all funds and other resources, and shall take all other actions, that are necessary to carry out the Government’s responsibilities under this Compact.

(c) The Government shall use its best efforts to ensure that all MCC Funding it receives or is projected to receive in each of its fiscal years is fully accounted for and identified in its annual budgets for the duration of the Program.

(d) The Government shall not reduce the normal and expected resources that it would otherwise receive or budget from sources other than MCC for the activities contemplated under this Compact and the Program.

(i) Unless the Government discloses otherwise to MCC in writing, MCC Funding shall be in addition to the resources that the Government would otherwise receive or budget for the activities contemplated under this Compact and the Program.

Section 2.7 Limitations on the Use of MCC Funding. The Government shall ensure that MCC Funding is not used for any purpose that would violate United States law or policy, as specified in this Compact or as further notified to the Government in writing, including but not limited to the following purposes:

(a) for assistance to, or training of, the military, police, militia, national guard or other quasi-military organization or unit;

(b) for any activity that is likely to cause a substantial loss of United States jobs or a substantial displacement of United States production;

(c) to undertake, fund or otherwise support any activity that is likely to cause a significant environmental, health, or safety hazard, as further described in MCC's *Environmental Guidelines* and any guidance documents issued in connection with such guidelines (collectively, the "*MCC Environmental Guidelines*"); or

(d) to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilizations as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, or to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning.

Section 2.8 Taxes.

(a) Unless the Parties specifically agree otherwise in writing, the Government shall ensure that all MCC Funding is free from the payment or imposition of any existing or future taxes, duties, levies, contributions or other similar charges (but not fees or charges for services that are generally applicable in Timor-Leste, reasonable in amount and imposed on a non-discriminatory basis) ("*Taxes*") of or in Timor-Leste (including any such Taxes imposed by a national, regional, local or other governmental or taxing authority of or in Timor-Leste). Specifically, and without limiting the generality of the foregoing, MCC Funding shall be free from the payment of (i) any tariffs, customs duties, import taxes, export taxes, and other similar charges on any goods, works or services introduced into Timor-Leste in connection with the Program; (ii) sales tax, value added tax, excise tax, property transfer tax, and other similar charges on any transactions involving goods, works or services in connection with the Program, (iii) taxes and other similar charges on ownership, possession or use of any property in connection with the Program, and (iv) taxes and other similar charges on income, profits, or gross receipts attributable to work performed in connection with the Program, and related social security taxes and other similar charges on all natural or legal persons performing work in connection with the Program, except in the case of this clause (iv): (1) natural persons who are citizens or permanent residents of Timor-Leste and (2) legal persons formed under the laws of Timor-Leste (but excluding MCA-Timor-Leste) and any other entity formed for the purpose of implementing the Government's obligations hereunder).

(b) The mechanisms that the Government shall use to implement the tax exemption required by Section 2.8(a) for certain principal Taxes are set forth in Annex V of the Program Implementation Agreement. Such mechanisms shall be in accordance with the terms of the Agreement for Economic and Technical Cooperation between the United States of America and the Democratic Republic of Timor-Leste, that entered into force on April 25, 2005 and is considered effective from January 1, 2003, and may include exemptions from the payment of Taxes that have been granted in accordance with applicable law, refund or reimbursement of Taxes by the Government to MCC, MCA-Timor-Leste or to the taxpayer, or payment by the Government to MCA-Timor-Leste or MCC, for the benefit of the Program, of an agreed amount representing any collectible Taxes on the items described in Section 2.8(a). For the avoidance of doubt, the identification (or lack of identification) of Taxes in the Program Implementation Agreement shall in no way limit the scope of the tax-free treatment required by this Section 2.8. In addition, the Government shall from time to time execute and deliver, or cause to be executed and delivered, such other instructions, instruments or documents, and to take or cause to be taken such other actions as may be necessary or appropriate in the determination of MCC, in order to implement the provisions of this Section 2.8.

(c) If a Tax has been paid contrary to the requirements of Section 2.8(a) or Annex V of the Program Implementation Agreement, the Government shall refund promptly to MCC (or to another party as designated by MCC) the amount of such Tax in United States dollars within 30 days (or such other period as may be agreed in writing by the Parties) after the Government is notified in writing (whether by MCC or MCA-Timor-Leste) that such Tax has been paid. Failure to refund such amount within the specified time shall result in interest accruing on the unpaid amount in accordance with Section 5.4.

(d) The Government shall not apply any MCC Funding, any proceeds thereof or any Program Assets to satisfy its obligations under Section 2.8(c).

ARTICLE 3.

IMPLEMENTATION

Section 3.1 Program Implementation Agreement. The Parties shall enter into an agreement providing further detail on the implementation arrangements, fiscal accountability and disbursement, and use of MCC Funding and the WSD Contribution, among other matters (the “*Program Implementation Agreement*” or “*PIA*”); and the Government shall implement the Program in accordance with this Compact, the PIA, any other Supplemental Agreement and any Implementation Letter.

Section 3.2 Government Responsibilities.

(a) The Government has principal responsibility for overseeing and managing the implementation of the Program.

(b) In consultation with MCC, the Government may designate an entity to be established as an autonomous entity through issuance of a decree-law, as the accountable entity to implement the Program and to exercise and perform the Government’s right and obligation to oversee, manage and implement the Program, including without limitation, managing the implementation of the Projects and their Activities, allocating resources and managing procurements. Such entity shall be referred to herein as “*MCA-Timor-Leste*,” and shall have the

authority to bind the Government with regard to all Program activities. The Government hereby also designates MCA-Timor-Leste to exercise and perform the Government's right and obligation to oversee, manage and implement the activities described in the Compact Development Funding Agreement, dated May 3, 2019, by and between the Government and MCC (as amended or otherwise modified, the "*CDF Agreement*"). Prior to the recruitment of the Executive Director of MCA-Timor-Leste, the Government hereby designates the existing Compact Development Team of Timor-Leste to implement the Program and to exercise and perform the Government's right and obligation to oversee, manage and implement the Program, including without limitation, managing the implementation of the Projects and their Activities, allocating resources and managing procurements. The designation contemplated by this Section 3.2(b) shall not relieve the Government of any obligations or responsibilities hereunder or under any related agreement, for which the Government remains fully responsible and any provision of this Compact, the PIA or any Supplemental Agreement obligating MCA-Timor-Leste to take any action or refrain from taking any action, as the case may be, means the Government shall cause MCA-Timor-Leste to take such action or refrain from taking such action, as the case may be. MCC hereby acknowledges and consents to the designation in this Section 3.2(b).

(c) The Government shall ensure that any Program Assets or services funded in whole or in part (directly or indirectly) by MCC Funding are used solely in furtherance of this Compact and the Program unless MCC agrees otherwise in writing.

(d) The Government shall take all necessary or appropriate steps to achieve each of the Project Objectives during the Compact Term (including, without limiting Section 2.6(a), funding all costs that exceed MCC Funding and are required to carry out the terms hereof and achieve such objectives, unless MCC agrees otherwise in writing).

(e) The Government shall ensure that the Program is implemented, and that the Government carries out its obligations hereunder, with due care, efficiency, and diligence in conformity with sound technical, financial, procurement, and management practices, and in conformity with this Compact, the Program Implementation Agreement, any other Supplemental Agreement, any Implementation Letter, and the Program Guidelines.

(f) The Government hereby grants to MCC a perpetual, irrevocable, royalty-free, worldwide, fully paid, assignable right and license to practice or have practiced on its behalf (including the right to produce, reproduce, publish, repurpose, use, store, modify, or make available) any portion or portions of Intellectual Property as MCC sees fit in any medium, now known or hereafter developed, for any purpose whatsoever.

Section 3.3 Policy Performance. In addition to undertaking the specific policy, legal, and regulatory reform commitments identified in Annex I, the Government shall seek to maintain and to improve its level of performance under the policy criteria identified in Section 607 of the MCA Act, and the selection criteria and methodology used by MCC.

Section 3.4 Accuracy of Information. The Government assures MCC that, as of the date this Compact is signed by the Government, the information provided to MCC by or on behalf of the Government in the course of reaching agreement on this Compact is true, correct, and complete in all material respects.

Section 3.5 Implementation Letters. From time to time, MCC may provide guidance to the Government in writing on any matters relating to this Compact, MCC Funding or implementation of the Program. The Government shall use such guidance in implementing the Program. The Parties may also issue joint writings to confirm and record their mutual understanding on aspects related to the implementation of this Compact, the PIA or other related agreements, including to record any revisions, exceptions or modifications that are permitted hereunder. All such writings referenced in this section are referred to herein as “**Implementation Letters**.”

Section 3.6 Procurement and Grants.

(a) The Government shall ensure that the procurement of all goods, works, and services by the Government or any Provider to implement the Program shall be in accordance with MCC’s *Program Procurement Guidelines* (the “**MCC Program Procurement Guidelines**”). The MCC Program Procurement Guidelines include the following provisions, among others:

(i) open, fair, and competitive procedures must be used in a transparent manner to solicit, award and administer contracts and to procure goods, works and services;

(ii) solicitations for goods, works, and services must be based upon a clear and accurate description of the goods, works and services to be acquired;

(iii) contracts must be awarded only to qualified contractors that have the capability and willingness to perform the contracts in accordance with their terms on a cost effective and timely basis; and

(iv) no more than a commercially reasonable price, as determined, for example, by a comparison of price quotations and market prices, shall be paid to procure goods, works and services.

(b) Unless MCC otherwise consents in writing, the Government shall ensure that any grant issued in furtherance of the Program (each, a “**Grant**”) is awarded, implemented, and managed in accordance with MCC’s *Program Grant Guidelines* (the “**MCC Program Grant Guidelines**”). The MCC Program Grant Guidelines must be interpreted and applied consistent with the principle that open, competitive and fair procedures are used in a transparent manner in the award and administration of Grants, for the accomplishment of objectives under the Compact.

Section 3.7 Records; Accounting; Covered Providers; Access.

(a) Government Books and Records. The Government shall maintain, and shall use its best efforts to ensure that all Covered Providers maintain, accounting books, records, documents, and other evidence relating to the Program adequate to show, to MCC’s satisfaction, the use of all MCC Funding and the implementation and results of the Program (“**Compact Records**”). In addition, the Government shall furnish or cause to be furnished to MCC, upon its request, originals or copies of such Compact Records.

(b) Accounting. The Government shall maintain, and shall use its best efforts to ensure that all Covered Providers maintain, Compact Records in accordance with generally

accepted accounting principles prevailing in the United States, or at the Government's option and with MCC's prior written approval, other accounting principles, such as those (i) prescribed by the International Accounting Standards Board, or (ii) then prevailing in Timor-Leste. Compact Records must be maintained for at least five years after the end of the Compact Term or for such longer period, if any, required to resolve any litigation, claims or audit findings or any applicable legal requirements.

(c) Access. Upon MCC's request, the Government, at all reasonable times, shall permit, or cause to be permitted, authorized representatives of MCC, the Inspector General of MCC ("***Inspector General***"), the United States Government Accountability Office, any auditor responsible for an audit contemplated herein or otherwise conducted in furtherance of this Compact, and any agents or representatives engaged by MCC or the Government to conduct any assessment, review, or evaluation of the Program, the opportunity to audit, review, evaluate, or inspect facilities, assets, and activities funded in whole or in part by MCC Funding.

Section 3.8 Audits; Reviews.

(a) Government Audits. Except as the Parties may agree otherwise in writing, the Government shall, on at least an annual basis, conduct, or cause to be conducted, financial audits and review engagements of all disbursements of MCC Funding covering the period from signing of this Compact until the following March 31 or September 30, and then covering each semi-annual period thereafter ending March 31 or September 30, through the end of the Compact Term, as well as the 90-day period following expiration of the Compact Term. In addition, the Government shall ensure that such audits are conducted by an independent auditor approved by MCC and selected in accordance with MCC's *The Accountable Entities Guidelines for Contracted Financial Audits* (the "***Audit Guidelines***"). Audits shall be performed in accordance with such Audit Guidelines, and/or other processes and procedures as directed from time to time by MCC. Each audit must be completed, and the draft audit report delivered to MCC, no later than 90 days after the applicable audit period, or such other period as the Parties may otherwise agree in writing. Each final audit report will be delivered to MCC and to MCA-Timor-Leste's *Orgão Fiscal*, when such report has been finalized. Any changes to the period to be audited shall be included in an audit plan developed and implemented by MCA-Timor-Leste in accordance with Audit Guidelines and Program Implementation Agreement and as approved by MCC (the "***Audit Plan***"). The requirements of this Section 3.8(a) do not preclude the Government from conducting audits of MCA-Timor-Leste or of the Program, as may be required by Timor-Leste law.

(b) Audits of Other Entities. The Government shall ensure that MCC-financed agreements between the Government or any Provider, on the one hand, and an entity defined as a Covered Provider by the Audit Guidelines on the other hand, state that the Covered Provider is subject to audit in accordance with the Audit Guidelines.

(c) Corrective Actions. The Government shall use its best efforts to ensure that MCA-Timor-Leste and any other Covered Provider (i) takes, where necessary, appropriate, and timely, corrective actions in response to audits, (ii) considers whether the results of MCA-Timor-Leste's or any other Covered Provider's audits necessitate adjustment of the Government's records, and (iii) permits independent auditors to have access to its records and financial statements as necessary.

(d) Audits. MCC or the Government shall each have the right to arrange for audits of the Government's use of MCC Funding and the WSD Contribution. The Parties agree that the *Câmara de Contas do Tribunal Superior Administrativo, Fiscal e de Contas* (Timor-Leste's Audit Court) will not have jurisdiction over MCA-Timor-Leste's acts, as set forth in more detail in Annex I.

(e) Cost of Audits, Reviews or Evaluations. MCC Funding may be used to fund the costs of any audits, reviews, or evaluations required under this Compact.

ARTICLE 4.

COMMUNICATIONS

Section 4.1 Communications. Any document or communication required or submitted by either Party to the other under this Compact must be in writing and, except as otherwise agreed with MCC, in English. All such documents or communication must be submitted to the address of each Party set forth below or to such other address as may be designated by any Party in a written notice to the other Party.

To MCC:

Millennium Challenge Corporation
Attention: Vice President, Compact Operations
(with a copy to the Vice President and General Counsel)
1099 Fourteenth Street NW, Suite 700
Washington, DC 20005
United States of America
Facsimile: +1 (202) 521-3700
Telephone: +1 (202) 521-3600
Email: VPOperations@mcc.gov (Vice President, Compact Operations)
VPGeneralCounsel@mcc.gov (Vice President and General Counsel)

To the Government:

Minister of the Presidency of the Council of Ministers
Attention: Minister of the Presidency of the Council of Ministers
Palácio do Governo
Edifício 1
Praça da Proclamação da Independência
Dili, Timor-Leste
Telephone: +670 77465004
+670 77859229
Email: fidelis.magalhaes@oitavo.gov.tl

To MCA-Timor-Leste:

Upon establishment of MCA-Timor-Leste, MCA-Timor-Leste shall notify the Parties of its contact details.

Section 4.2 Representatives. For all purposes relevant to implementation of this Compact, the Government shall be represented by the individual holding the position of, or acting as, the Minister of the Presidency of the Council of Ministers, and the United States shall be represented by the individual holding the position of, or acting as, Vice President, Compact Operations of MCC (each of the foregoing, a “*Principal Representative*”). Each Party, by written notice to the other Party, may designate one or more additional representatives of such Party, as appropriate (each, an “*Additional Representative*”) for all purposes relevant to implementation of this Compact except for amending this Compact pursuant to Section 6.2(a). The Government hereby designates the Executive Director of MCA-Timor-Leste as an Additional Representative for the Government. The United States hereby designates the Deputy Vice President for Europe, Asia, Pacific, and Latin America of MCC and the Resident Country Director of MCC for Timor-Leste as Additional Representatives for the United States. A Party may change its Principal Representative to a new representative that holds a position of equal or higher authority upon written notice to the other Party.

Section 4.3 Signatures. Signatures to this Compact and to any amendment to this Compact shall be original signatures appearing on the same page or in an exchange of letters or diplomatic notes.

ARTICLE 5.

TERMINATION; SUSPENSION; EXPIRATION

Section 5.1 Termination; Suspension.

(a) Either Party may terminate this Compact without cause in its entirety by giving the other Party 30 days’ prior written notice. MCC may also terminate MCC Funding without cause in part by giving the Government 30 days’ prior written notice.

(b) MCC may, immediately, upon written notice to the Government, suspend or terminate this Compact or MCC Funding, in whole or in part, and any obligation related thereto, if MCC determines that any circumstance identified by MCC as a basis for suspension or termination (as notified to the Government in writing) has occurred, which circumstances include, but are not limited to the following:

(i) the Government fails to comply with its obligations under this Compact or any other agreement or arrangement entered into by the Government in connection with this Compact or the Program;

(ii) any statement, affirmation or assurance of the Government made or deemed made in this Compact, the PIA, any Supplemental Agreement, or in any certificate or other document delivered in connection with this Compact proves to have been incorrect or misleading as of the date when made or deemed made;

(iii) an event or series of events has occurred that makes it probable that any Project Objective is not going to be achieved during the Compact Term or that the Government is not going to be able to perform its obligations under this Compact;

(iv) a use of MCC Funding or continued implementation of this Compact or the Program violates applicable law or United States Government policy, whether now or hereafter in effect;

(v) the Government or any other person or entity receiving MCC Funding or using Program Assets is engaged in activities that are contrary to the national security interests of the United States;

(vi) an act has been committed or an omission or an event has occurred that would render Timor-Leste ineligible to receive United States economic assistance under Part I of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2151 *et seq.*), by reason of the application of any provision of such act or any other provision of law;

(vii) the Government has engaged in a pattern of actions inconsistent with the criteria used to determine the eligibility of Timor-Leste for assistance under the MCA Act;

(viii) Timor-Leste is classified as a Tier 3 country in the United States Department of State's annual Trafficking in Persons Report; and

(ix) a person or entity receiving MCC Funding or using Program Assets is found to have been convicted of a narcotics offense or to have been engaged in drug trafficking.

Section 5.2 Consequences of Termination, Suspension or Expiration.

(a) Upon the suspension or termination, in whole or in part, of this Compact or any MCC Funding, or upon the expiration of this Compact, the Program Implementation Agreement shall govern the post-suspension, post-termination or post-expiration treatment of MCC Funding, any related Disbursements and Program Assets. Any portion of this Compact, MCC Funding, the Program Implementation Agreement or any other Supplemental Agreement that is not suspended or terminated shall remain in full force and effect.

(b) MCC may reinstate any suspended or terminated MCC Funding under this Compact if MCC determines that the Government or other relevant person or entity has committed to correct each condition for which MCC Funding was suspended or terminated.

Section 5.3 Refunds; Violation.

(a) If any MCC Funding, any interest or earnings thereon, or any Program Asset is used for any purpose in violation of the terms of this Compact, then MCC may require the Government to repay to MCC in United States Dollars the value of the misused MCC Funding, interest, earnings, or asset, plus interest thereon in accordance with Section 5.4 within 30 days after the Government's receipt of MCC's request for repayment. The Government shall not use MCC Funding, proceeds thereof or any Program Asset to make such payment.

(b) Notwithstanding any other provision in this Compact or any other agreement to the contrary, the United States' right under Section 5.3(a) to obtain a refund shall continue

during the Compact Term and for a period of (i) five years thereafter or (ii) one year after MCC receives actual knowledge of such violation, whichever is later.

Section 5.4 Late Payment Interest. If the Government fails to pay any amount under this Compact or the Program Implementation Agreement when due (including amounts under Section 2.8(c) and 5.3(a)), the Government shall pay interest on such past due amount. Interest shall accrue on such amount at a rate equal to the then-current US Treasury Current Value of Funds Rate, calculated on a daily basis and a 360-day year from the due date of such payment until such amount is paid in full. Any such payment shall first be credited against interest due, and once the interest due amount is extinguished, then payments shall be credited against outstanding principal.

Section 5.5 Survival. The Government's responsibilities under this Section and Sections 2.7 (Limitations on the Use of MCC Funding), 2.8 (Taxes), 3.2(f), 3.7 (Records; Accounting; Covered Providers; Access), 3.8 (Audits; Reviews), 5.2 (Consequences of Termination, Suspension or Expiration), 5.3 (Refunds; Violation), 5.4 (Late Payment Interest), and 6.4 (Governing Law) shall survive the expiration, suspension or termination of this Compact, provided that the terms of Section 2.8 shall survive for only 120 days following this Compact's expiration.

ARTICLE 6.

COMPACT ANNEXES; AMENDMENTS; GOVERNING LAW

Section 6.1 Annexes. Each annex to this Compact constitutes an integral part hereof, and references to "*Annex*" mean an annex to this Compact unless otherwise expressly stated.

Section 6.2 Amendments and Modifications.

(a) The Parties may amend this Compact only by a written agreement. Such agreement shall specify how it enters into force.

(b) Notwithstanding subsection (a), the Parties agree that the Government and MCC may by written agreement, which shall enter into force upon signature, modify any Annex to, in particular, but without limitation (i) suspend, terminate or modify any Project or Activity, (ii) change the allocations of funds as set forth in Annex II, (iii) modify the implementation framework described in Annex I, (iv) add, change or delete any indicator, baseline or target or other information set forth in Annex III in accordance with the MCC M&E Policy, or (v) add, modify or delete any condition precedent described in Annexes IV and V; *provided that*, in each case, any such modification (1) is consistent in all material respects with the Project Objectives, (2) does not cause the amount of Program Funding to exceed the aggregate amount specified in Section 2.1 (as may be modified by operation of Section 2.2(e)), (3) does not cause the amount of CFF to exceed the aggregate amount specified in Section 2.2(a), and (4) does not extend the Compact Term.

(c) The Parties understand that any modification of any Annex pursuant to this Section 6.2 may be entered into by the Government without the need for further action by the Government (including any parliamentary action), or satisfaction of any additional domestic requirements of Timor-Leste.

Section 6.3 Inconsistencies. In the event of any conflict or inconsistency between:

- (a) any Annex and any of Articles 1 through 7, such Articles 1 through 7, as applicable, shall prevail; or
- (b) this Compact and any other agreement between the Parties regarding the Program, this Compact shall prevail.

Section 6.4 Governing Law. This Compact is an international agreement and as such shall be governed by international law.

Section 6.5 Additional Instruments. Any reference to activities, obligations or rights undertaken or existing under or in furtherance of this Compact or similar language shall include activities, obligations, and rights undertaken by, or existing under or in furtherance of any agreement, document or instrument related to this Compact and the Program.

Section 6.6 References to MCC Website. Any reference in this Compact, the PIA or any other agreement entered into in connection with this Compact, to a document or information available on, or notified by posting on the MCC Website shall be deemed a reference to such document or information as updated or substituted on the MCC Website from time to time.

Section 6.7 References to Laws, Regulations, Policies and Guidelines; References to Compact Expiration and Termination; Government Successors.

(a) Each reference in this Compact, the PIA or any other agreement entered into in connection with this Compact to a law, regulation, policy, guideline or similar document shall be construed as a reference to such law, regulation, policy, guideline or similar document as it may, from time to time, be amended, revised, replaced, or extended, and shall include any law, regulation, policy, guideline or similar document issued under or otherwise applicable or related to such law, regulation, policy, guideline or similar document.

(b) Each reference in this Compact, the PIA or any other agreement entered into in connection with this Compact, to the Compact's "expiration" refers to the date on which the Compact Term ends if the Compact is not terminated earlier, which in accordance with Section 7.4 is five years after its entry into force. Each reference in any of the aforementioned documents to the Compact's "termination" refers to this Compact ceasing to be in force prior to its expiration in accordance with Section 5.1.

(c) Unless expressly provided otherwise, each reference in this Compact, the PIA, or any other agreement entered into in connection with this Compact, to a Government ministry shall be construed to include any successor ministry with the relevant subject matter or sector authority.

Section 6.8 MCC Status. MCC is a United States government corporation acting on behalf of the United States in the implementation of this Compact. The United States Government, including MCC, assumes no liability for any claims or loss arising out of activities or omissions under this Compact. The Government waives any and all claims against the United States Government, including MCC, and any current or former officer or employee of the United States Government, including MCC, for all loss, damage, injury, or death arising out of activities or omissions under this Compact, and agrees that it shall not bring any claim or legal proceeding of

any kind against any of the above entities or persons for any such loss, damage, injury, or death. The Government agrees that the United States Government, including MCC, and any current or former officer or employee of the United States Government, including MCC, shall be immune from the jurisdiction of all courts and tribunals of Timor-Leste for any claim or loss arising out of activities or omissions under this Compact.

ARTICLE 7.

ENTRY INTO FORCE

Section 7.1 Domestic Procedures. The Government shall proceed in a timely manner to complete all of its domestic requirements for this Compact to enter into force. The Parties understand that this Compact and the PIA, upon entry into force, shall prevail over the laws of Timor-Leste with the exception of the constitution of Timor-Leste.

Section 7.2 Conditions Precedent to Entry into Force. Each of the following conditions must be met to MCC's satisfaction, before this Compact enters into force:

- (a) the Program Implementation Agreement is signed by the parties thereto;
- (b) The Government delivers to MCC:
 - (i) a letter signed and dated by the Principal Representative of the Government, or such other duly authorized representative of the Government acceptable to MCC, confirming that the Government has completed its domestic requirements necessary for this Compact to enter into force and that the other conditions precedent to entry into force in this Section 7.2 have been met;
 - (ii) a signed legal opinion from the Presidency of the Council of Ministers of Timor-Leste (or such other legal representative of the Government acceptable to MCC), in form and substance satisfactory to MCC; and
 - (iii) complete, certified copies of all decrees, legislation, regulations or other governmental documents relating to the Government's domestic requirements necessary for this Compact and the PIA to enter into force, which MCC may post on its website or otherwise make publicly available.
- (c) MCC determines that, after signature of this Compact, the Government has not engaged in a pattern of actions inconsistent with the eligibility criteria for MCC Funding; and
- (d) The conditions set forth in Annex V have been satisfied.

Section 7.3 Date of Entry into Force. This Compact shall enter into force on the date of the letter from MCC to the Government in an exchange of letters confirming that MCC and the Government have completed their respective domestic requirements for entry into force of this Compact and that the conditions precedent to entry into force in Section 7.2 have been met to MCC's satisfaction.

Section 7.4 Compact Term. This Compact shall remain in force for five years after its entry into force, unless terminated earlier under Section 5.1 (the "*Compact Term*").

Section 7.5 Provisional Application. Upon signature of this Compact, and until this Compact has entered into force in accordance with Section 7.3, the Parties shall provisionally apply the terms of this Compact; *provided that*, no MCC Funding, other than CFF, shall be made available or disbursed before this Compact enters into force.

SIGNATURE PAGE FOLLOWS ON THE NEXT PAGE

IN WITNESS WHEREOF, the undersigned duly authorized by their respective governments have signed this Compact. Done at Dili, Timor-Leste, this 19th day of July, 2022. The English language text is the only authentic text of this Compact.

FOR THE UNITED STATES OF AMERICA

FOR THE DEMOCRATIC REPUBLIC OF
TIMOR-LESTE

/s/

/s/

Name: Cameron Alford
Title: Acting Vice President, Department
of Compact Operations, the
Millennium Challenge Corporation

Name: Fidelis Manuel Leite Magalhães
Title: Minister of the Presidency of the
Council of Ministers

**SIGNATURE PAGE TO MILLENNIUM CHALLENGE COMPACT
BETWEEN THE UNITED STATES OF AMERICA
ACTING THROUGH THE MILLENNIUM CHALLENGE CORPORATION
AND THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE**

ANNEX I

PROGRAM DESCRIPTION

This Annex I describes the Program that MCC Funding will support in Timor-Leste during the Compact Term.

A. PROGRAM OVERVIEW

1. Background and Consultative Process.

a. Background.

Since gaining independence in 2002, Timor-Leste has been engaged in building a strong, resilient economy that benefits all Timorese. Supported by significant donor investment since its founding, the Government coordinates aid financing in an effort to make the strategic investments necessary to address critical development priorities and generate sustained job-creating growth, as reflected in the Government's Foreign Aid Policy.

In 2010, MCC's Board of Directors approved a \$10.49 million Threshold Program for Timor-Leste, which aimed to reduce corruption by building a network of anti-corruption institutions and actors and improve access to immunization services through the creation of a more effective community health system. The program was administered by USAID and completed in 2014. In December 2017, MCC's Board of Directors selected Timor-Leste as eligible to develop a compact and reselected Timor-Leste in each year from 2018 to 2021. In discussions with MCC, the Government has shown strong commitment to an inclusive and transparent compact development process to identify investments that will reduce poverty through economic growth.

The constraints analysis identified four primary constraints, two of which were selected for further development: weak policies and institutions to enable market transactions, and low human capital attributed to poor nutritional outcomes and lack of high skilled workers. The Government ultimately decided to submit two project proposals in education and water, sanitation, and drainage to address the human capital constraint, recognizing the importance of a skilled, healthy workforce in improving the business environment and generating significant and sustainable economic returns for the country.

b. Consultative Process.

The Government and MCC engaged in an inclusive and strategic consultative process to inform the constraints analysis and project designs. Both project teams consulted with government ministries and stakeholders, international development partners, and civil society throughout the compact development process.

2. Description of Program and Beneficiaries.

(a) Program Description.

The Program aims to address the human capital constraint to economic growth by improving the health and skills of the Timorese people through two projects: the WSD Project and the TALENT Project.

(b) Intended Beneficiaries.

The Program is projected to benefit hundreds of thousands of people in Timor-Leste over a twenty-year period, as set forth below and as further detailed in Annex III. Through the WSD Project, an estimated 429,000 residents of the capital city of Dili and 64,000 residents of four neighboring districts will receive disinfected water. Approximately 301,000 Dili residents are also expected to benefit from the wastewater collection and treatment infrastructure introduced by the WSD Project. Through improved secondary school teaching and school leadership, the TALENT Project is expected to benefit all upper secondary graduates in the country who were taught by TALENT Project-trained teachers and subsequently entered the labor force, as well as their co-householders, which totals approximately 957,000 beneficiaries. As there is some anticipated overlap in beneficiaries across both projects, the beneficiaries cannot simply be added together to estimate total beneficiaries.

B. DESCRIPTION OF PROJECTS

Set forth below is a description of each of the Projects that the Government shall implement, or cause to be implemented, using MCC Funding and the WSD Contribution to advance the applicable Project Objective. In addition, specific activities that shall be undertaken within each Project (each, an “*Activity*”), including sub-activities, are also described.

1. WSD Project

a. Summary of Project and Activities.

The objective of the Water, Sanitation, and Drainage Project (the “*WSD Project*”) is stated in Section 1.2. The WSD Project will achieve the WSD Project Objective by (i) building a plant to produce a disinfectant chemical to treat city water supply across Dili and four districts, (ii) constructing the country’s first central wastewater system, (iii) making improvements to the related drainage network in Dili, (iv) supporting key policy and institutional reforms to support long-term sustainability of the infrastructure, and (v) supporting social behavioral change efforts to improve household water management and hygiene practices. Collectively, these investments are aimed at mitigating exposure to sanitary waste and pathogens in water, households, and the environment.

The WSD Project includes the following five Activities:

(i) Water Disinfection Activity

This Activity will supply disinfected water to Dili and four districts of Timor-Leste (Aileu, Ermera, Liquica, and Manatuto) through the design and construction of an On-site Sodium Hypochlorite Generation (“*OSHG*”) plant and the purchase of disinfectant distribution equipment. MCC

Funding will support the design and construction of the OSHG plant which will provide the required amount of 0.8% sodium hypochlorite solution for disinfection of wastewater and drinking water. The drinking water disinfection component will serve the Dili Municipal Water System and the four targeted districts. The facility will house up to four OSHG skids each with a production capacity of 680kg/day. MCC Funding also will support the design and construction of a high-grade sodium chloride storage building at the Wastewater Treatment Plant with the capacity to store salt, the primary raw material required for the OSHG system, with capacity for a two-month supply of salt. This high-grade sodium chloride storage building will also house brine tanks, water tank, pressure filters, water pump, and brine pumps.

In addition, MCC Funding will support the purchase of a number of tanker trucks and associated infrastructure and equipment for delivery of disinfectant to water supply application points in Dili and the surrounding districts.

(ii) Sanitation Activity

The aim of the Sanitation Activity is to remove fecal pathogens from the environment and reduce exposure pathways through the development of a new centralized wastewater treatment system in Dili, which has nearly four times the population density and higher incidence of diarrheal disease when compared to the other districts of Timor-Leste. This activity includes the design and construction of a new wastewater treatment plant (“*Wastewater Treatment Plant*”), ocean outfall, wastewater collection systems, and wastewater connections to households and businesses.

A. *Wastewater Treatment Plant*

MCC Funding will support the design and construction of a new Wastewater Treatment Plant. The Wastewater Treatment Plant will treat and disinfect wastewater from the piped sanitation coverage area and include a septage receiving facility to treat septage received from areas outside the piped sanitation coverage area. The plant will be sized for future connections in Dili, allowing the Government and other donors to continue cost effective expansion of the sewage collection system. The Sub-Activity also includes support for operations and maintenance of the plant by a private operator. The private operator is expected to also provide training of local utility staff in operations and maintenance management.

B. *Ocean Outfall*

Through this Sub-Activity, MCC Funding will support a marine pipeline constructed to convey treated, disinfected wastewater from the Wastewater Treatment Plant to the ocean to ensure adequate mixing of treated effluent with ocean waters. The outfall is designed to convey treated wastewater flows from the Wastewater Treatment Plant operating at full capacity, hence the investment will cover areas outside the WSD Project areas to account for future growth.

C. *Wastewater Collection System – Conventional Gravity Sewers*

Under this Sub-Activity, MCC Funding will support the construction of conventional wastewater collection networks comprised of approximately 130 km of sewer pipelines, four pumping stations receiving flows from the project area, and a transmission main pipeline conveying the wastewater to the Wastewater Treatment Plant.

D. Wastewater Collection System – Simplified Gravity Sewers

In order to expand service to all households in the project area, MCC Funding for this Sub-Activity will support the construction of a simplified sewer collection system comprised of approximately 160 km of sewer pipelines in unstructured¹ areas in the project area.

E. House Connections, Toilets, Decommissioning Septic Tanks

This Sub-Activity, expected to be funded by the Government through the WSD Contribution, will support the implementation of household and business wastewater connections, the decommissioning of pit latrines, and the provision of toileting facilities, where required, in both structured and unstructured areas.

(iii) Associated Drainage Activity

This Activity includes improving specific portions of the drainage system in areas where the WSD Project-funded conventional gravity sewer system will be constructed. Installing the sanitary sewer and the drainage infrastructure simultaneously provides the opportunity to avoid conflicts between the two systems. MCC Funding will provide for the construction of new drainage structures in the Activity areas.

(iv) Institutional Reform Activity

To ensure long-term sustainability of the WSD Project’s infrastructure investments, this Activity will support the capacity building and institutional development of the water utility with a focus on strengthening asset management expertise and operations and maintenance (“*O&M*”) capacity. The Activity will further promote sustainability through targeted assistance to the new independent water regulator (“*ANAS*”), to develop and implement regulations around sanitation and disinfection. Together with other institutional reform efforts that are supported by the Government and other development partners, this Activity contributes to improved customer services and the sustainability of all assets under the management of the newly established water utility, the Bee Timor Leste Public Company (“*BTL*”), including the Project-funded construction.

A. Utility Operator Training Program

All sanitation and disinfection assets will require trained operators to properly operate and maintain the systems. MCC Funding will provide for a foundational technical training program to prepare BTL staff for subsequent on-the-job training by the private operator and to ultimately assume responsibility in operating and maintaining all assets.

¹ For the purposes of this Compact, an “unstructured area” is an area that is difficult to serve with a conventional gravity sewer. These areas are often further characterized by gravel or dirt road access and dense, informal housing developments and uncertain land ownership. These areas are in contrast to “structured areas” that are able to be served with a conventional gravity sewer.

B. Utility Private Operator Procurement Support

Through this Sub-Activity, MCC Funding will provide technical assistance to develop terms of reference for private operator assistance that will be procured through the Wastewater Treatment Plant construction contract. Over an approximately five-year period, the private operator will operate the Wastewater Treatment Plant and the OSHG plant. Simultaneously, the private operator will train BTL staff so that BTL can assume operations of both the Wastewater Treatment Plant and the OSHG plant after the end of the private operator's contract.

C. Regulatory Reform Assistance

MCC Funding under this Sub-Activity will provide technical assistance to ANAS to develop sanitation regulations and promulgate relevant decree-law(s). This includes sanitation standards in wastewater effluent quality from the Wastewater Treatment Plant, wastewater discharges from industrial customers, decommissioning of septic tanks, mandatory connections when a central collection system is made available, and septic tank regulations for areas without piped sanitation.

D. Sanitation and Disinfection Operations and Maintenance Support

Under this Sub-Activity, MCC Funding will fund the initial cost of the equipment and vehicles needed to operate and maintain the wastewater system and the drainage network and provide for laboratory equipment for water quality monitoring. Technical assistance will also be provided to evaluate the feasibility of producing food grade salt for the OSHG plant locally.

(v) Household Water and Hygiene Activity

This Activity includes interventions to increase household and community awareness of the benefits of and support for the infrastructure as well as the adoption and maintenance of key behaviors aimed at reducing fecal pathogens and ultimately reducing the diarrheal disease burden, using a gender-focused approach. Social behavioral change techniques employed in these interventions will seek to improve the knowledge, awareness, social support, and self-efficacy of project participants in performing these behaviors and be appropriately phased to complement infrastructure milestones and interventions.

A. Household Water Management

MCC Funding under this Sub-Activity will support the diffusion of techniques usable at the household-level to promote safe household water management practices prior to and post-construction, including point-of-use treatment, storage, transport, and dispensing of water to prevent recontamination of water. These techniques will be communicated through community training and household-level mentorship programming, communications campaigns, and targeted capacity building for relevant entities, all in collaboration with the Government and other donors. It will support increasing awareness of the use of water from various sources, including the impact of the Water Disinfection Activity on the quality of water supplied to households.

B. Household Sanitation

In collaboration with the Government and other donors, MCC Funding under this Sub-Activity supports community training and household-level mentorship programming, communications campaigns, and targeted capacity building for relevant entities on consistent and correct use of flush toilets in both structured and unstructured areas, appropriate hygiene practices, and regular toilet maintenance.

b. Beneficiaries.

Through the Water Disinfection Activity, the WSD Project will provide sufficient disinfectant that will permit BTL to supply disinfected water to approximately 108,000 residents of Dili who are currently connected to the water supply network, and in conjunction with the World Bank and Asian Development Bank-funded Dili Water Supply Project, ultimately serve 429,000 total residents in Dili's water service area by 2036. Using the OSHG plant developed by the WSD Project, BTL will supply disinfected water to up to 64,000 residents in the other four districts of Timor-Leste. Through the Sanitation Activity, the WSD Project will initially connect approximately 106,165 residents of Dili to the new Wastewater Treatment Plant; however, the WSD Project treatment and conveyance infrastructure is sized to collect wastewater from up to 300,909 residents of Dili's wastewater service area (as projected in 2036 in accordance with the Government's 2018 Sanitation Master plan) when additional upstream conveyance infrastructure and collection systems are constructed following the expiration of this Compact. The WSD Project's design of selected additional wastewater collection service areas will enable the implementation of planned, additional connections.

c. Environmental and Social Mitigation Measures.

In compliance with Section 3.2(e), the Government shall ensure that all Projects and Activities undertaken, funded or otherwise supported in whole or in part (directly or indirectly) by MCC Funding under the Compact comply with the MCC Environmental Guidelines, including the environmental and social performance standards set forth in the *Performance Standards on Environmental and Social Sustainability of the International Finance Corporation* (as in effect from time to time, the "**IFC Performance Standards**") that have been incorporated by reference into the MCC Environmental Guidelines. Based on preliminary due diligence against MCC Environmental Guidelines criteria, the WSD Project is classified as a Category A project.

By providing a reliable disinfectant for drinking water, a sanitation system, household connections and flush toilets, and decommissioning pit latrines for 106,165 residents, the WSD Project will result in significant environmental and health benefits. However, land acquisition and potential relocations, community health and safety impacts associated with building a linear project in a densely populated urban area, construction of the marine outfall pipeline, and operational impacts on the marine environment are potentially significant and sensitive, and as such they will require more complex intervention and mitigation measures to address. The WSD Project will require an Environmental and Social Impact Assessment ("**ESIA**"), Environmental and Social Management Plans ("**ESMPs**"), and robust stakeholder engagement to assess these and other potential impacts and define appropriate mitigation measures to minimize adverse environmental impacts. In addition, land tenure issues in Timor-Leste are complex and there is little land available for relocation sites. The Government will provide all land required for the WSD Project, and has agreed to provide land acquisition and resettlement documentation for MCC review and to remedy

any inconsistencies with the IFC Performance Standards prior to initiating any land acquisition activities. A Resettlement Policy Framework (“**RPF**”) is being prepared, which will be followed by a Resettlement Action Plan (“**RAP**”).

The WSD Project will also generate significant volumes of biosolid wastes. Biosolids from the WSD Project are expected to be trucked to a Dili municipal landfill for disposal. The Government is working with donors to expand and upgrade this Dili municipal landfill to ensure future operations are environmentally sound.

d. Social Inclusion and Gender Integration

In compliance with Section 3.2(e), this Project and all its Activities will be implemented in compliance with the MCC Gender Policy, the MCC Counter-Trafficking in Persons Policy, and the MCC Gender and Social Inclusion Operational Milestones and Procedures.

The WSD Project involves significant construction in the capital city of Dili, which presents both risks and opportunities for women and vulnerable groups (including youth, rural migrants, and the unemployed). The Water Disinfection Activity, supported by the corresponding Household Water and Hygiene Activity-funded efforts, are expected to improve the health of household members in Dili. Businesses are also likely to benefit, since absenteeism of workers due to water-borne diseases is expected to diminish as water quality improves. Similarly, since the poor have more limited access to health care and are more likely to be exposed and suffer the consequences of a contaminated environment, the Sanitation Activity presents great potential to disproportionately benefit the poor and women.

Furthermore, in an effort to reach more poor households, the WSD Project will incorporate simplified sewer technology, which will facilitate access to the unstructured areas of Dili that tend to have higher concentration of poor and women-headed households. The Household Water and Hygiene Activity is structured to take into account the fact that women are the primary managers of water within the household and that they will play a critical role in the adoption of safe household water management practices and improved toileting practices.

As a part of the Institutional Reform Activity, MCC will provide technical assistance to the Government to develop a cost recovery plan (the “**Cost Recovery Plan**”), which will assess customers’ ability and willingness to pay, as well as include recommendations on customer assistance programs to effectively address affordability for women-headed and low-income households.

The risk of trafficking in persons (“**TIP**”) and gender-based violence will be continuously monitored, with measures taken during implementation to manage such risks, especially as they apply to women and children. The WSD Project will engage women and vulnerable groups in order to maximize income-generating opportunities for those populations.

e. Donor Coordination.

MCC and the Government coordinated closely with other donors during project development to maximize WSD Project benefits through a direct impact on diarrheal disease reduction. In particular, MCC and the Government are coordinating with the World Bank and the Asian Development Bank to align their components of the Dili Water Supply Project with the WSD

Project. The Dili Water Supply Project, which is jointly financed by the World Bank and the Asian Development Bank, will replace the existing water supply infrastructure in Dili, upgrade water treatment plants, increase groundwater supply, and construct water reservoirs and water distribution networks. Through the collaboration, the OSHG plant will provide sodium hypochlorite for disinfecting the drinking water provided by the World Bank and Asian Development Bank projects. MCC understands that the Asian Development Bank and the World Bank have also agreed to adopt the important policy conditions attached to the WSD Project, such as the Cost Recovery Plan, for their respective projects. The partnership will result in better quality and lower cost of water. Additionally, water supply facilities funded by other donors in the surrounding districts will be able to use the disinfectant produced in Dili.

MCC is also collaborating with other donors on an integrated policy and institutional reform agenda for BTL and ANAS, ranging from regulatory reforms to institutional development and capacity strengthening. Assistance mobilized through the Water Donor Forum (which includes MCC, World Bank, Asian Development Bank, AusAID, Japan International Cooperation Agency and the Government of Portugal) will support BTL and ANAS in strengthening the institutions and building their staff's capacity and systems.

f. USAID.

USAID is supporting efforts to strengthen water, sanitation, and hygiene systems in community health centers in Timor-Leste through a partnership with the Government's Ministry of Health and UNICEF. Such improvements will support the Government's ability to deliver quality health services to communities.

The WSD Project also broadly supports the objectives of USAID's Tourism for All Project in Timor-Leste and "Water for the World" strategy through activities aimed at developing sustainable, climate-resilient water and sanitation infrastructure and improving drinking water quality, water management, and hygiene at the household-level.

Although Timor-Leste is not currently identified as a "Water for the World Priority Country" by USAID, MCC intends to coordinate with USAID on related and complementary activities in support of mutually aligned objectives.

g. Sustainability.

Financial sustainability of the WSD Project investment relies principally on the development and implementation of the Cost Recovery Plan for BTL and ANAS to sustainably manage all assets. Assistance mobilized through the Water Donor Forum (which includes MCC, World Bank, Asian Development Bank, AusAID, Japan International Cooperation Agency and the Government of Portugal) will further support BTL and ANAS in strengthening the institutions and building their capacity and systems. Other aspects of the WSD Project's sustainability are associated with protecting and monitoring the marine environment, utilizing an experienced private operator at the Wastewater Treatment Plant, taking responsible measures to manage waste biosolids, and incorporating measures for climate adaption, mitigation, and resilient components. The design of the WSD Project takes both sector and social sustainability into account, as described above.

h. Policy, Legal and Regulatory Reforms.

An institutional development plan and reform agenda for the water sector in Timor-Leste was formally adopted by the Government when the independent water utility BTL and an independent water regulator ANAS were created in 2021. The plan is supported by development partners for implementation in the near and medium term. Consistent with the reform agenda, the Institutional Reform Activity will provide support to strengthen the institutional and asset management capabilities of the utility and regulator. The Government has also agreed to develop and promulgate decree-laws that will regulate the sanitation system and water quality monitoring in the country. The Institutional Reform Activity will fund technical assistance for the regulatory reform.

The Government has agreed to develop, approve, and implement a full Cost Recovery Plan so that sufficient funds will be generated for BTL to undertake operations and maintenance of all assets and systems at required levels. Approval and implementation of the plan will be a condition for periodic disbursements throughout the Compact. MCC understands that other donors have agreed to adopt elements of this Cost Recovery Plan as conditions in their respective project agreement(s) with the Government.

2. TALENT Project

a. Summary of Project and Activities.

The objective of the Teaching and Leading the Next generation of Timorese Project (the “**TALENT Project**”) is stated in Section 1.2. The TALENT Project seeks to achieve this Objective by improving the quality of teaching and school leadership in all secondary schools in Timor-Leste. Specifically, the TALENT Project aims to improve pedagogy, school and classroom management; increase opportunities for women in teaching and leadership positions; improve language and information and communication technology (“**ICT**”) instruction for future teachers; and enhance instructional leadership and create a supportive and inclusive learning environment. The TALENT Project is organized around the following four Activities:

(i) The Center of Excellence for Teacher Education Activity

This Activity will establish a new autonomous institution in Timor-Leste to provide professional training and certification to future secondary teachers entering the workforce, as well as training and certification of a portion of current secondary teachers.

A. *Establishing the Center of Excellence*

Under this Sub-Activity, MCC Funding will support the formal establishment and initial operations of the Center of Excellence, which will operate under the purview of the Ministry of Higher Education Science and Culture with the oversight of an executive board consisting of members from key Government entities. The Center of Excellence will be legally established, equipped with an organizational structure reflecting appropriate staffing and resources, and led by a competitively hired director. The Center of Excellence will also actively recruit women to leadership positions.

The establishment of the Center of Excellence will involve the development of an appropriate policy framework. This policy framework may include the modification of the Timor-Leste Education System Framework Law to require future secondary school teachers and school leaders to have a professional certificate from the Center of Excellence in order to be hired into Ministry of Education, Youth and Sport- or Ministry of Higher Education Science and Culture-supported positions (“*Ministry-supported Positions*”). Teacher trainees admitted to the Center of Excellence will subsequently be offered full-time teaching positions across Timor-Leste if they successfully complete their professional training and meet certification requirements.

B. Design and Build the Center of Excellence

Under this Sub-Activity, MCC Funding will support the design and construction or rehabilitation of a building to house the Center of Excellence, on land provided by the Government. The building will provide space for the training and professional development of teachers and support Center of Excellence staff in engaging in ongoing quality assurance, course development and refinement. While the Center of Excellence building is under construction or rehabilitation, the Government will provide any necessary temporary space where training for secondary teachers and leaders can commence. This Sub-Activity integrates design features that are expected to contribute to the goal of increasing the number of women in teaching and leadership positions.

(ii) Teacher Training Activity

MCC Funding will support the development and delivery of trainings to current and future secondary school teachers in Timor-Leste. All current secondary teachers are expected to receive some form of training to improve their pedagogical skills, including student assessment, in the areas of numeracy, literacy, and soft skill development. A sub-set of current secondary teachers will receive additional training to receive their professional certification from the Center of Excellence. Future teaching candidates will be trained at the Center of Excellence and receive practical training at secondary schools throughout Timor-Leste. They will then be offered full-time employment in Ministry-supported Positions.

A. Course Development

Within this Sub-Activity, MCC Funding will support the development of course modules, course content, and corresponding materials. These materials will be designed based on needs assessments and current materials from existing institutions to target key pedagogical practices, including student assessment, in the areas of numeracy, literacy, and soft skills. Materials will be inclusive and use gender-responsive and disability-appropriate pedagogical approaches in the classroom.

B. Training Current Teachers

MCC Funding will support the training of current secondary teachers through two training streams.

The first stream of training aims to reach all current secondary teachers (general and technical) to improve the quality of teaching in the areas of numeracy, literacy, and soft skills. This training will be provided by Center of Excellence staff in collaboration with both the Ministry of Education Youth and Sport and the Ministry of Higher Education Science and Culture.

The second stream of training will provide intensive training to a sub-set of current secondary teachers to enable them to receive full professional certification from the Center of Excellence, similar to the training provided to teacher trainees. Such teachers may provide mentorship to other teachers.

C. Training Future Teachers

Under this Sub-Activity, MCC Funding will support training of candidate secondary school teachers at the Center of Excellence. Training will focus on the development of teacher trainees' approaches to instruction (pedagogy) that will improve secondary students' performance in the areas of numeracy, literacy, and soft skills. The training will be carried out at the Center of Excellence and in situ at secondary schools throughout Timor-Leste and will target the skills required by teacher trainees for student-centered learning.

(iii) School Leadership Training Activity

Under the School Leadership Training Activity, MCC Funding will support the training of school leaders to create effective schools through strong school leadership, both in school management and in terms of instructional leadership. Training will focus on competencies in school leadership, including gender and social inclusion and ICT in education.

A. Developing Curriculum and Materials

In this Sub-Activity, MCC Funding will support training for school leaders and prospective school leaders on the design and delivery of curriculum and training materials, including:

- Management (interdisciplinary structures and community outreach), instructional leadership, and teacher assessment;
- Good practices in development planning and curriculum frameworks;
- Developing/improving teaching and learning materials and resources for current leaders, including the uses of ICT in education;
- Key issues related to gender and social inclusion; and
- Providing support to enhance skills in the language of instruction.

B. Training Delivery

MCC Funding will support the training of every current senior secondary school leader and approximately 650 prospective school leaders during the Compact Term through professional development courses, resources, and ongoing support through the Center of Excellence. Prospective women school leaders will be intentionally targeted for involvement. During and after Center of Excellence training, school leaders (approximately five per school) will also become trainers and mentors in their own schools for current leaders. School leaders in training will receive ongoing training and support from Center of Excellence staff, using different modalities, including online modules and face-to-face meetings, to enhance their instructional leadership and school management practices.

(iv) Ensuring Excellence Activity

This Activity consists of three Sub-Activities, all of which focus on ensuring the accessibility and quality of the Center of Excellence's services.

A. *Quality Assurance and Monitoring*

MCC Funding under this Sub-Activity will support the creation of a quality assurance team at the Center of Excellence. This team will facilitate the ongoing evidence-based improvement and oversight of the Center of Excellence's programs by developing evaluation tools to regularly analyze and report on the effectiveness of trainings. These tools, including online surveys and assessment tasks, will allow for collection and analysis of data gathered from trainees after they have completed individual modules and the full program. Data and analysis will support the Center of Excellence's continuous improvement of courses, teaching styles, and learning materials, as well as its responsiveness to emerging needs that prompt new courses, components, or modules.

B. *Women's Economic Empowerment in Education*

This Sub-Activity aims to increase women's access to the profession of teaching and school leadership at the secondary level by removing barriers for women to enter employment opportunities in education. Efforts supported by MCC Funding to achieve this aim may include the development and implementation of fair and transparent recruitment and promotion processes, incentive schemes for women working in education, support systems for women teachers and school leaders (such as an association or mentorship programs), support for women to participate in trainings (for example, childcare or transport stipends), and leadership programs tailored for women in education. MCC Funding for this Sub-Activity will also support community engagement through workshops to address barriers to entry into the workforce faced by women.

C. *Creating Language and ICT Supports*

To support trainees in the areas of language and ICT, MCC Funding will provide both ICT equipment for the Center of Excellence and language laboratories at the Center of Excellence. Additionally, MCC Funding will support the formulation of an ICT team at the Center of Excellence to support blended and online/distance learning. The Government will also explore forming partnerships with existing institutions that work in the area of language training,

b. Beneficiaries.

Beneficiaries are assumed to include all upper secondary graduates who were taught by Project-trained teachers and who subsequently entered the labor force, as well as members of their households. The total number of beneficiaries is estimated to be 957,721 and analysis suggests that at least initially, the poor will be moderately represented amongst those benefiting from the project.

c. Environmental and Social Mitigation Measures.

Through the provision of secondary teacher and school leader trainings, the TALENT Project will deliver significant social benefits, including potential career advancement for participants and improved educational outcomes for students in Timor-Leste. While the location of the Center of Excellence remains to be determined, no major negative environmental or social impacts are

anticipated with the construction or rehabilitation of the Center of Excellence building. Anticipated impacts include typical construction phase environmental and social risks associated with modest sized vertical structures and operational risks. The Center of Excellence building is categorized as Category B because impacts are expected to be readily manageable with appropriate mitigation measures.

During the design phase of the Center of Excellence building, an environmental review will be undertaken and Environment and Social Management Plans and Health and Safety Management Plans will be developed and implemented during construction. Opportunities to address climate change via energy efficiency, resiliency, and the use of solar panels will be considered, as will use of low flow faucets. A project-specific TIP assessment will outline management measures for the Center of Excellence construction or rehabilitation, taking into consideration risks related to the operation of the Center of Excellence. If temporary buildings are used to house the Center of Excellence prior to completion of construction, then an environmental, health and safety evaluation may be undertaken, and any required remediation will be performed prior to taking over the temporary location. Waste management plans will address risks if building or room upgrades are needed, or disposal of old equipment is required. The Government will provide land for any building and will need to document land ownership and conduct any required land acquisition in accordance with IFC Performance Standards, to MCC satisfaction, and document that the parcel is fit for purpose, free of contamination, and located outside flood zones.

d. Social Inclusion and Gender Integration

In compliance with Section 3.2(e), this Project and all its Activities will be implemented in compliance with the MCC Gender Policy, the MCC Counter-Trafficking in Persons Policy, and the MCC Gender and Social Inclusion Operational Milestones and Procedures. The TALENT Project will integrate social inclusion and gender equality components throughout all the project activities. In addition, the standalone Women's Economic Empowerment in Education Sub-Activity seeks to increase the number of women overall in secondary education teaching positions and increase women's access to leadership positions in secondary education in Timor-Leste. To do so, the Women's Economic Empowerment in Education Sub-Activity will focus on creating an enabling environment for women within the education system by undertaking activities to promote fair and transparent recruitment and selection processes for teachers and school leaders, in addition to providing leadership and/or mentorship support and training opportunities.

The TALENT Project focuses on taking an inclusive approach to education by building content into the teacher training curriculum that promotes gender equality and inclusivity. To promote women's participation in the trainings, the program will consider the needs of women, such as prioritizing shorter-term trainings that are in-person, avoid conflicts with school schedules and childcare, and use incentives (such as transport allowances and childcare services).

For the Center of Excellence, it is important to ensure that risks related to TIP and gender-based violence are addressed both during the construction phase as well as during the operation of the Center of Excellence moving forward.

e. Donor Coordination.

Within the education sector, the majority of investments have benefited early childhood education and primary education, with key support coming from the Australian Department of Foreign

Affairs and Trade, the Australian Ministry of Foreign Affairs and Trade, UNICEF, and more recently, the Global Partnership for Education and the World Bank. A donor mapping exercise carried out by the Global Partnership for Education revealed a lack of large-scale, comprehensive interventions at the secondary level. The TALENT Project fills this gap and builds on the success experienced with interventions at the primary-level to support teachers, school leaders, and students.

f. USAID.

Current USAID programming in economic growth and trade and health complement the TALENT Project.

Over the last two years, USAID has carried out a youth assessment to inform the development of a new Country Development Cooperation Strategy released in 2020. The 2020-2025 Country Development Cooperation Strategy includes a target that calls for the economic inclusion of women and youth to be expanded. While the TALENT Project aims to improve the skills of youth, the intention of the USAID programming is to increase employment opportunities for those youth.

g. Sustainability.

A primary consideration in the design of the TALENT Project is the long-term sustainability of programmatic impacts and the operation of the Center of Excellence. Investments in training in strong coordination and collaboration with the ministry(ies) responsible for education, the National Institute for Professional Education Training (“*INFORDEPE*”), and existing higher education institutions are critical for the sustainability of programmatic inputs and impacts. Therefore, the TALENT Project includes investments in training for current secondary teachers and school leaders in order to foster a supportive and enabling environment for future teacher trainees certified who have completed training at the Center of Excellence to apply pedagogical best practices by also including investments in trainings for current secondary teachers and school leaders. Furthermore, such teacher trainees will have the support of a more robust school leadership team who have also been trained in the new practices. Finally, during the Compact Term, additional trainings will be provided to universities and institutions of higher education to help build capacity to strengthen candidates who may enter the Center of Excellence. Overall, the TALENT Project strikes a balance by complementing existing systems and filling gaps where they exist. It provides existing institutions with additional resources during the life of the Compact to carry out surge training for individuals that are already in the system, while the new Center of Excellence readies itself to train individuals to fill future positions in secondary schools. Operations and maintenance planning for the Center of Excellence building will be included by the Government in post-construction budget cycles, following an initial Compact-funded investment in building operations and maintenance, as detailed in the multi-year financial plan. Members of the Government will be closely engaged on the executive board of the Center of Excellence to assist with planning and ensure that there is absorptive capacity at the secondary schools for the newly trained teachers and leaders. In addition, the technical review committee created by the Government to oversee the design of the TALENT Project may continue to provide support and advice to the Board of Directors of MCA-Timor-Leste and to the relevant MCA-Timor-Leste staff to ensure ongoing technical support for the TALENT Project.

h. Policy, Legal and Regulatory Reforms.

There are two key legal and regulatory reforms that will be required for the TALENT Project. The first is the legal recognition of the Center of Excellence as an autonomous institution under the Ministry of Higher Education Science and Culture via a decree-law.

In addition, it is anticipated that the Government will introduce changes to Education System Framework Law (Law 14/2008) to require secondary school teachers to receive professional certification from the Center of Excellence in order to be employed in Ministry-supported Positions. Current legislation requires secondary teachers to hold an undergraduate degree as their sole qualification. With this reform, all future teachers will be required to hold a professional certification to serve as a secondary school teacher. It should also be noted that a portion of current secondary school teachers will also be professionally certified during the life of the Compact. Such teachers will have to meet the same required standards as future candidates, including mandatory trainings and demonstrated competency. Furthermore, if teachers wish to pursue leadership positions, they will be required to participate in mandatory trainings and meet established requirements.

C. IMPLEMENTATION FRAMEWORK

1. MCA-Timor-Leste

(a) MCA-Timor-Leste Creation.

In accordance with this Compact and in view of implementing the Program, the Government will create, through a decree-law to be enacted by the Council of Ministers, a public institute (“*instituto publico*”) having legal personality and financial autonomy, named “*MCA-Timor-Leste*” with its head office located in Dili. The administrative and financial organization of MCA-Timor-Leste, as well as the general rules of its governance, will be promulgated by such decree-law.

(b) Independence and Autonomy.

MCA-Timor-Leste shall have operational and legal independence and full decision-making autonomy, including, inter alia, the ability, without consultation with, or the consent or approval of, any other party, to: (i) enter into contracts in its own name, (ii) sue and be sued, (iii) establish bank accounts with a financial institution in its own name and hold MCC Funding and the WSD Contribution in those accounts, (iv) expend MCC Funding and the WSD Contribution, (v) engage contractors, consultants and/or grantees, including, without limitation, procurement and fiscal agents, all in compliance with Section 3.6, and (vi) competitively engage one or more auditors of its accounts. In addition, any acts, contracts, and further documentation and procedures undertaken by MCA-Timor-Leste will not be subject to the preliminary supervisory power established in articles 30.º to 34.º of the Law 9/2011 of 17 August (with the amendments introduced by Law 3/2013), on the *Câmara de Contas do Tribunal Superior Administrativo, Fiscal e de Contas* (Timor-Leste’s Audit Court). Therefore, it is clear between the Parties that any such acts carried out by MCA-Timor-Leste using MCC Funding or the WSD Contribution, as well as the effect thereby produced are not, in any circumstances, and regardless of their value, subject to any type of approval or review by the *Câmara de Contas do Tribunal Superior Administrativo, Fiscal e de Contas*.

(c) Employment Requirements.

The Parties agree that the Law No. 4/2012, of 21 February shall apply to MCA-Timor-Leste. The Government shall regulate and specify any applicable rules deemed necessary to clarify any aspects of the legal regime applicable to MCA-Timor-Leste through a decree-law and to ensure MCA-Timor-Leste has the authority to recruit staff for a period exceeding 6 years during the Compact term through the Compact closure period. MCA-Timor-Leste will be permitted to extend such employment contracts ending at the expiration of the Compact Term for a closure period not to exceed 120 days to allow for the winding down of the Program, if deemed necessary by MCA-Timor-Leste. Such extension will not void the nature of or the category of the contract. For the avoidance of doubt, severance will not be due upon the expiration of such employment contracts.

MCA Timor-Leste will be permitted to: (a) arrange for any foreign personnel (staff, individual consultants or personnel of firms) providing goods, works or services under the Compact along with their family to be provided promptly with any necessary entry or work visas, and any such visas and their renewal will be exempt from any fees or costs payable to the Government; and (b) provide the foreign personnel (staff, individual consultants or personnel of firms) providing goods, works or services under the Compact with work permits and such other documents as shall be necessary to enable the foreign personnel to perform services and to remain in Timor-Leste for the duration of the Compact, without the need to exit the country for any period in the interim.

Foreign staff of MCA-Timor-Leste who are not resident in Timor-Leste at the time of their hiring are guaranteed the right to transfer their salaries or remuneration outside Timor-Leste without any restrictions.

(d) Corporate Governance.

The governance of MCA-Timor-Leste shall be set forth in more detail in the Program Implementation Agreement and the constitutive documents and internal regulations of MCA-Timor-Leste (or as otherwise agreed in writing by the Parties). Remuneration for members of the MCA-Timor-Leste Board of Directors shall be consistent with the MCC Program Guidelines.

MCA-Timor-Leste shall be administered, managed and supported by a board of directors (the “*Board of Directors*”) and an operations unit (the “*Operations Unit*”).

(e) Board of Directors.

The Board of Directors shall have ultimate responsibility for the oversight, direction, and decisions of MCA-Timor-Leste, as well as the overall implementation of the Program. The Board of Directors shall be comprised of seven voting members and one or more non-voting observers. As of the date hereof, the voting members of the Board of Directors shall include representatives from each of the following:

- Office of the Prime Minister (one representative);
- Office of the Presidency of the Council of Ministers (one representative);
- Ministry responsible for water, sanitation, and drainage infrastructure sectors (one representative);
- Ministry responsible for finance (one representative);

- Ministry responsible for education (one representative);
- Women’s organizations (one representative); and
- Civil society (one representative)

The number of voting members may be changed through amendments to MCA-Timor-Leste’s constitutive documents, while the identity of the voting members may be changed through changes to the Government’s relevant decrees regarding MCA-Timor-Leste, in both cases, with MCC’s approval. The process of selecting the members of the Board of Directors shall be further stipulated in the government decree-law setting out the legal framework for MCA-Timor-Leste. MCC’s resident country director and the Executive Director of MCA-Timor-Leste shall be non-voting observers of the Board of Directors.

(f) Operations Unit.

The Operations Unit shall report to the Board of Directors and have principal responsibility for the day-to-day operations and management of MCA-Timor-Leste and implementation of the Program. The Operations Unit shall be led by the Executive Director and shall be composed of the Key Staff (as defined in the PIA) as agreed between the Parties and selected after an open, competitive, and non-discriminatory recruitment and selection process (or its equivalent). The MCA-Timor-Leste Executive Director will be selected in the same manner and the MCA-Timor-Leste Board of Directors will solely be responsible for considering, approving, or disapproving the hiring and dismissal of the Executive Director, subject to MCC’s written approval. The Key Staff shall be supported by appropriate additional staff to enable the Operations Unit to execute its roles and responsibilities.

MCA-Timor-Leste shall develop and implement a stakeholder engagement plan for sustaining public consultation and engagement with the private sector, civil society organizations, and organizations representing women and vulnerable groups and allow them opportunities to provide advice and input.

2. Implementing Entities.

Subject to the terms and conditions of this Compact, the Program Implementation Agreement and any other related agreement entered into in connection with this Compact, the Government, acting through MCA-Timor-Leste (or prior to MCA-Timor-Leste’s establishment, the Compact Development Team), may engage one or more entities of the Government to implement and carry out any Project or Activity (or a component thereof) under this Compact (each, an “**Implementing Entity**”). The appointment of any Implementing Entity shall be subject to review and approval by MCC. The Government shall ensure that the roles and responsibilities of each Implementing Entity and other appropriate terms are set forth in an agreement, in form and substance satisfactory to MCC (each an “**Implementing Entity Agreement**”).

3. Fiscal Agent.

Unless MCC agrees otherwise in writing, the Government, acting through MCA-Timor-Leste (or prior to MCA-Timor-Leste’s establishment, the Compact Development Team), shall engage a fiscal agent (a “**Fiscal Agent**”), which shall be responsible for assisting the Government with its fiscal management and assuring appropriate fiscal accountability of MCC Funding, and whose duties shall include those set forth in the Program Implementation Agreement and such agreement

as the Government enters into with the Fiscal Agent, which agreement shall be in form and substance satisfactory to MCC.

4. Procurement Agent.

Unless MCC agrees otherwise in writing, the Government, acting through MCA-Timor-Leste (or prior to MCA-Timor-Leste's establishment, the Compact Development Team), shall engage one or more procurement agents (collectively, the "*Procurement Agent*") to carry out and certify specified procurement activities in furtherance of this Compact. The roles and responsibilities of the Procurement Agent shall be set forth in the Program Implementation Agreement or such agreement as the Government enters into with the Procurement Agent, which agreement shall be in form and substance satisfactory to MCC. The Procurement Agent shall adhere to the procurement standards set forth in the MCC Program Procurement Guidelines and ensure procurements are consistent with the procurement plan adopted by the Government pursuant to the Program Implementation Agreement, unless MCC agrees otherwise in writing.

ANNEX II
MULTI-YEAR FINANCIAL PLAN SUMMARY

This Annex II summarizes the Multi-Year Financial Plan for the Program.

A. General.

A multi-year financial plan summary (“*Multi-Year Financial Plan Summary*”) is attached hereto as Exhibit A to this Annex II. By such time as specified in the Program Implementation Agreement, the Government shall adopt, subject to MCC approval, a multi-year financial plan that includes, in addition to the multi-year summary of estimated MCC Funding, the annual and quarterly funding requirements for the Program (including administrative costs) and for each Project and Activity, projected both on a commitment and cash requirement basis. The multi-year financial plan for the WSD Contribution will be set forth in Annex IV to the Program Implementation Agreement.

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EXHIBIT A TO ANNEX II
MULTI-YEAR FINANCIAL PLAN SUMMARY

COMPONENT	Compact Facilitation Funding (CFF)	Year 1	Year 2	Year 3	Year 4	Year 5 + Program Closure	TOTAL COMPACT FUNDING
WATER SANITATION & DRAINAGE (WSD)	\$33,372,500	\$42,776,013	\$75,502,718	\$75,155,474	\$49,635,192	\$31,763,153	\$308,205,050
Activity 1: Water Disinfection	\$404,710	\$1,133,188	\$4,168,514	\$2,321,271	\$121,413	\$121,413	\$8,270,509
Activity 2: Sanitation	\$31,792,790	\$39,852,825	\$65,675,182	\$65,675,182	\$46,861,279	\$28,989,240	\$278,846,498
Activity 3: Associated Drainage			\$4,469,022	\$4,469,022			\$8,938,044
Activity 4: Institutional Reform	\$925,000	\$800,000	\$200,000	\$1,700,000	\$1,662,500	\$1,662,500	\$6,950,000
Activity 5: Household Water and Hygiene	\$250,000	\$990,000	\$990,000	\$990,000	\$990,000	\$990,000	\$5,200,000
TEACHING & LEADING THE NEXT GENERATION OF TIMORESE (TALEN)	\$3,000,000	\$5,485,986	\$8,050,665	\$8,504,830	\$9,034,938	\$6,114,119	\$40,190,538
Activity 1: Center of Excellence (CoE)	\$1,500,000	\$1,526,045	\$2,626,045	\$3,526,045	\$3,526,045	\$1,895,274	\$14,599,454
Activity 2: Teacher Training	\$1,000,000	\$2,560,902	\$2,815,160	\$3,269,319	\$2,509,382	\$2,509,379	\$14,664,142
Activity 3: School Leadership Training	\$250,000	\$709,566	\$1,019,990	\$1,019,993	\$1,019,993	\$1,019,993	\$5,039,535
Activity 4: Ensuring Excellence	\$250,000	\$689,473	\$1,589,470	\$689,473	\$1,979,518	\$689,473	\$5,887,407
MONITORING & EVALUATION	\$450,000	\$1,625,000	\$800,000	\$1,175,000	\$950,000	\$1,800,000	\$6,800,000
PROGRAM ADMINISTRATION	\$14,229,129	\$9,518,647	\$9,452,700	\$9,615,202	\$9,750,036	\$12,238,698	\$64,804,412
Activity 1: MCA Timor-Leste Administrative Expenses	\$11,829,129	\$7,118,647	\$7,052,700	\$7,215,202	\$7,350,036	\$8,998,698	\$49,564,412
Activity 2: Procurement Agent	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,550,000	\$7,300,000
Activity 3: Fiscal Agent	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,550,000	\$7,300,000
Activity 4: Audits	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$140,000	\$640,000
MCC TOTAL INVESTMENT	\$51,051,629	\$59,405,646	\$93,806,083	\$94,450,506	\$69,370,165	\$51,915,970	\$420,000,000

ANNEX III

COMPACT MONITORING & EVALUATION SUMMARY

This Annex III summarizes components of the monitoring and evaluation plan for this Compact (“*M&E Plan*”). The actual structure and content of the M&E Plan, which may differ from those specified in this Annex III, shall be agreed to by MCC and the Government in accordance with MCC’s *Policy for Monitoring and Evaluation of Compacts and Threshold Programs* (the “*MCC M&E Policy*”). In addition, the M&E Plan may be modified from time to time as described in the MCC M&E Policy without requiring an amendment to this Annex III. The M&E Plan shall be posted publicly on the MCC Website and updated as necessary.

1. Objective

MCC and the Government shall formulate and agree to, and the Government shall implement or cause to be implemented, an M&E Plan that explains in detail how and what MCC and MCA-Timor-Leste shall (i) monitor to determine whether the Projects are on track to achieve their intended results (“*Monitoring Component*”), and (ii) evaluate to assess implementation strategies, provide lessons learned, compare costs to benefits, and estimate the impact of compact interventions (“*Evaluation Component*”). The M&E Plan shall summarize all indicators that must be reported to MCC on a regular basis, as well as a description of any complementary data to be collected for evaluation of the Program. The M&E Plan shall also include any monitoring and evaluation (“*M&E*”) requirements that MCA-Timor-Leste must meet in order to receive Disbursements, and shall serve as a communication tool so that MCA-Timor-Leste staff and other stakeholders clearly understand the objectives and targets MCA-Timor-Leste is responsible for achieving. The results of M&E activities, measured by monitoring data and evaluations, shall be made publicly available on the website of MCA-Timor-Leste and on the MCC Website.

2. Program Logic

The program logic is an explanatory model that demonstrates how specific interventions lead to the expected outcomes, objectives, and goal of a compact program. This model reflects the design and implementation plans of a program, noting planned activities and outputs and the sequencing of results. Secondly, it reflects the economic logic, which forms the basis of the cost-benefit analysis that produces the Economic Rate of Return (“*ERR*”). Lastly, it notes critical risks and assumptions related to achieving results. The program logic forms the basis of the M&E Plan.

2.1 Logic Models

A description of the logic underlying each Project is included below:

Project 1: Water, Sanitation and Drainage Project

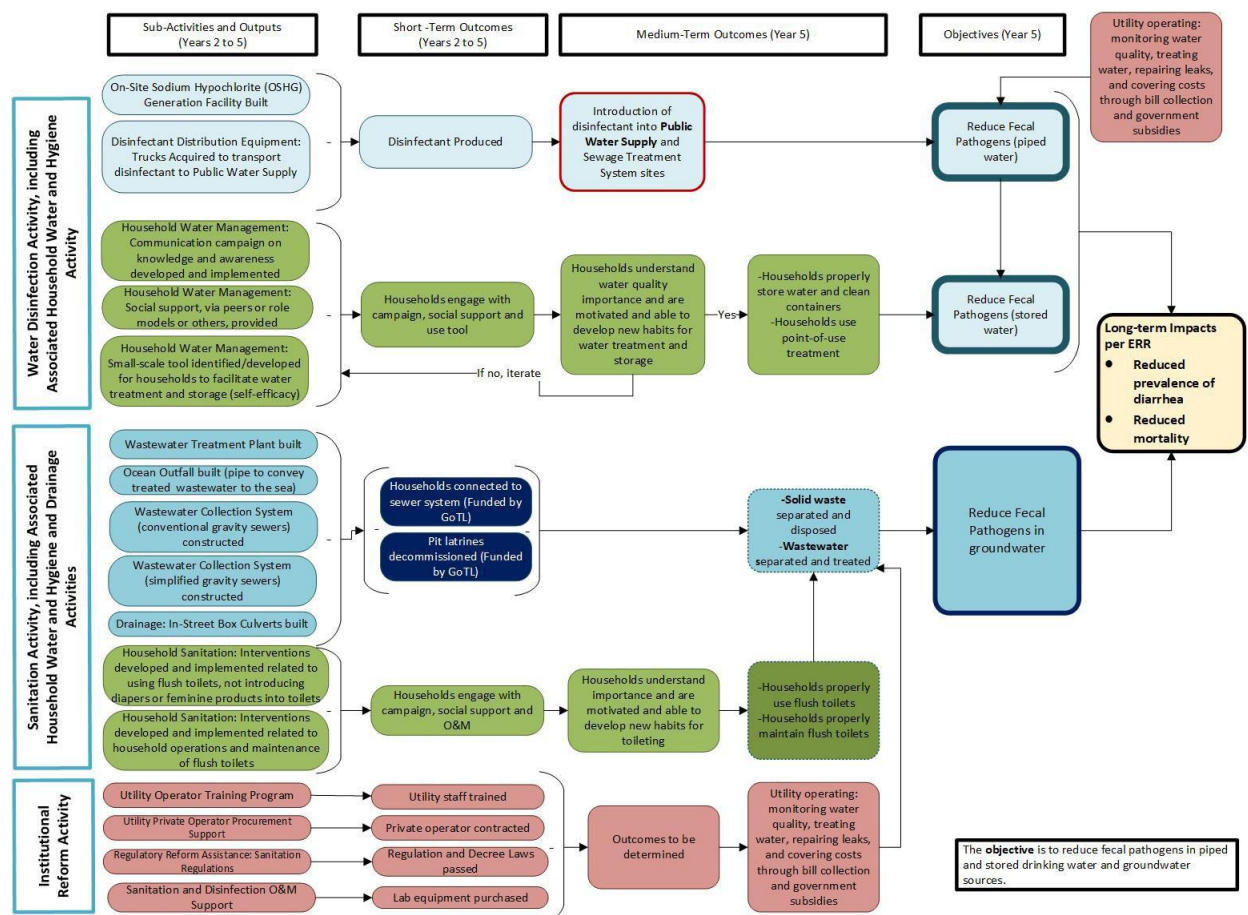
The objective of the **Water, Sanitation and Drainage Project** is to reduce fecal pathogens in piped and stored drinking water, and groundwater. The Project responds to the binding constraint of low human capital—specifically, to Timor-Leste’s high rate of stunting, where more than half of children under the age of five are stunted. The high incidence of fecal pathogens in the water system was identified as one of the root causes of this constraint, based on Government-provided water-quality data, which indicated widespread fecal contamination of the public water supply in Dili not localized to a certain water source.

The Project's theory of change, as shown below, starts with building key infrastructure, supporting institutional and regulatory reform, and supporting key household sanitation and water management practices.

The Water Disinfection Activity will construct the OSHG plant to provide a reliable supply of disinfectant for treating water via a new water network in Dili and four nearby districts. The logic of the Water Disinfection Activity is to reduce disease-causing pathogens in piped water through the production of disinfectant and the application of the disinfectant in the supply of water to households and businesses in Dili and four neighboring districts, resulting in drinking-quality water at the household-level. Disinfected water will be provided in Dili through a new water network funded by the Government and other donors.

To manage the results risks of delivering uncontaminated drinking water, the Project is coordinating with the World Bank and the Asian Development Bank's piped-water improvement projects and includes the Household Water and Hygiene Activity. MCC understands that the Government plans to use Compact-funded disinfectant for their projects and incorporate training and capacity building to BTL and ANAS in order to ensure regular and routine water treatment and monitoring of water quality during and beyond the Compact Term. To ensure households know how to treat and store water properly, the Project includes the Household Water Management Sub-Activity to improve household water storage habits and point-of-use treatment to address intermittent piped-water supply.

To reduce fecal pathogens in the groundwater, the Sanitation Activity includes establishing a sewer network with mandatory service connections, the Wastewater Treatment Plant, a septage receiving facility and biosolids disposal operation, and an open ocean outfall. The treated effluent will be disinfected with sodium hypochlorite generated by the OSHG plant. The Associated Drainage Activity includes constructing specific portions of the drainage system in areas where Compact-funded sewerage system will be constructed. The Project relies on integral investments from the Government as well as related institutional strengthening and behavior-change interventions. Realizing the objective of cleaner groundwater will require that enough households connect to the new sewer system and discontinue use of pit latrines and septic tanks. Household connections, and pit-latrines and septic-tank decommissioning is intended to be funded by the Government as part of the WSD Contribution. In addition, the complementary Household Sanitation Sub-Activity will focus on key toileting behaviors, including on properly managing and regularly maintaining flush toilets. Finally, given that the water utility is new and inexperienced, the Project includes an intense five-year institutional capacity-building component that is expected to extend for at least three years post-Compact Term to help mitigate related sustainability and results risks.



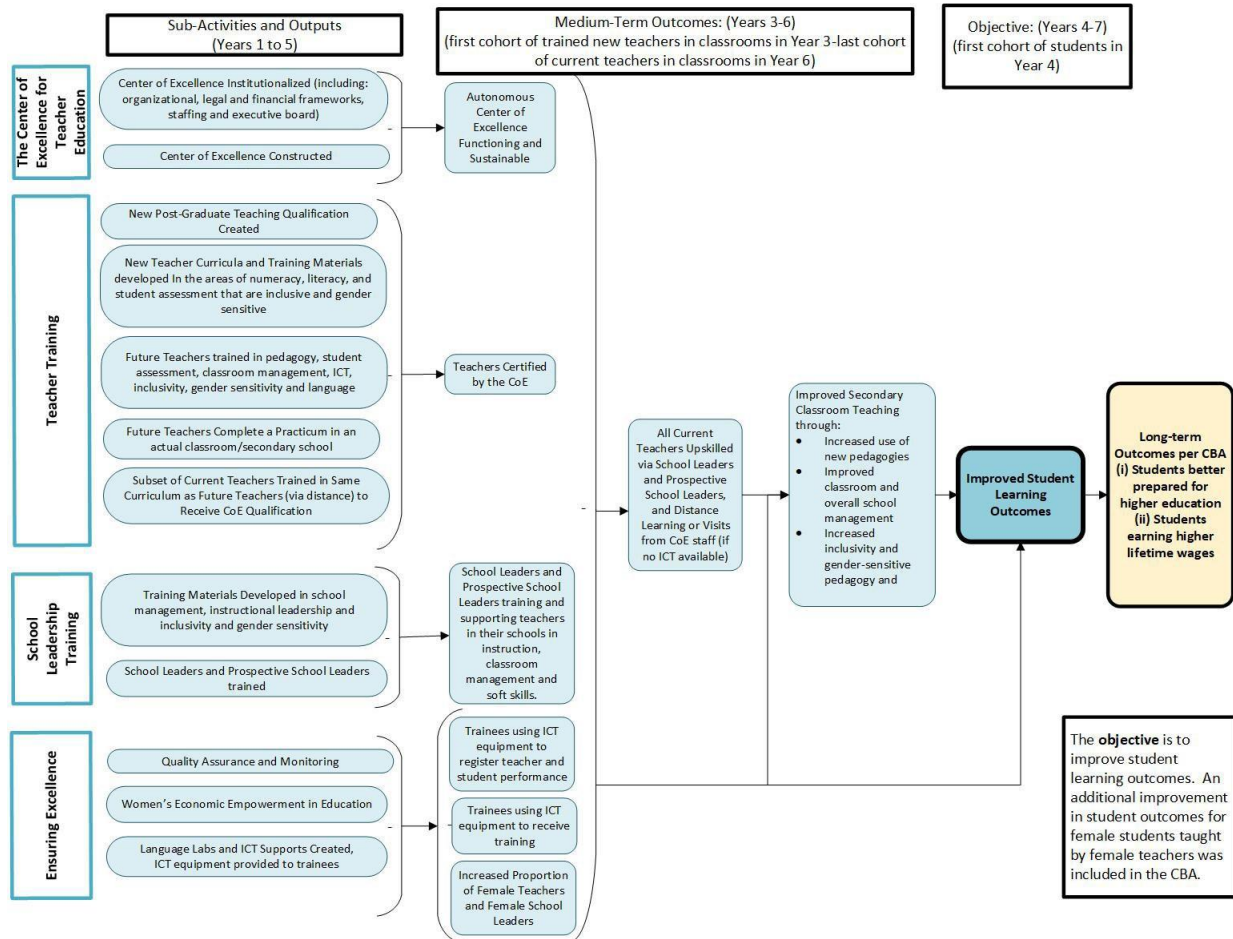
Project 2: Teaching and Leading the Next generation of Timorese (TALENT) Project

The **TALENT Project** responds to the binding constraint of low human capital, as noted in the MCC constraints analysis: “in the workforce, the lack of tertiary education is costly to firms and has resulted in 30-40% of professional jobs being filled by foreign nationals.” The root causes of this constraint were traced to low-quality secondary education, including student deficiencies in soft skills, numeracy and literacy.

The Project will construct and institutionalize a secondary school teacher training institute, the Center of Excellence. The Project will also (i) create and deliver new training curricula to both future and current secondary-school teachers and (ii) create and deliver training to school leaders and prospective school leaders, who will in turn help train and mentor current teachers in their schools. Lastly, the Project will embed quality assurance monitoring, women’s economic empowerment, language labs, and ICT services in the Center of Excellence to support trained teachers and school leaders.

To improve secondary instruction and student learning, the Project will need to manage results risks. First, instruction is currently delivered in a language students may not have mastered. Improving teachers’ mastery of Portuguese is part of the Project, but it remains that the students may not fully understand the language of instruction. Second, the Center of Excellence is being created because the current institutions that train teachers have not been able to adequately prepare teachers for the secondary classroom. To avoid creating another similar institution, the

Project has included quality assurance monitoring into the structure of the Center of Excellence, competitive and transparent recruitment of staff for the Center of Excellence, and a board to oversee the Center of Excellence. Third, the Center of Excellence will directly train a cadre of school leaders and prospective school leaders (current teachers) who are expected to impart this training to the teachers in their schools. To mitigate this risk, the Project is training up to five teachers and school leaders per school, and the Center of Excellence will provide routine oversight in the field.



2.2 Risks and Assumptions

The M&E Plan shall also outline key assumptions and risks that underlie the accomplishment of the theory of change summarized in the program logic. However, such assumptions and risks shall not excuse any Party's performance unless otherwise expressly agreed to in writing by the other Party. The known assumptions and risks include:

Project 1: Water, Sanitation and Drainage Project

Assumptions for Outputs	Assumptions for Outcomes	Assumptions for Objective	Assumptions for Long-term outcomes per CBA

<p>Access to required land is granted.</p> <p>Project retains support of GoTL², even when government changes.</p>	<p>Technical staff are trained to operate the new infrastructure.</p> <p>Disinfectant is delivered to all essential sites with indicated regularity.</p> <p>Utility monitors water quality to deliver appropriate levels of disinfectant.</p> <p>Construction quality is high and includes considerations for climate change-especially during the rainy season.</p> <p>Electricity disruptions do not harm the system.</p> <p>Open drainage canals are free of debris and trash, so drains do not overflow.</p> <p>Households can identify when their water is contaminated. The flush-toilet market for supplies and expertise (plumbers) will be available and affordable.</p>	<p>There is constant, positive pressure in pipes, so pathogens do not cause recontamination of piped water.</p> <p>There is sufficient water supply in the dry season to keep sewage moving and provide water to connected households.</p> <p>Cost-Recovery Plan developed and implemented</p> <p>Enough households connect to the sewage system to sufficiently reduce human waste burden in the environment.</p> <p>Other sources of contamination (animals, etc.) are not major drivers of contamination.</p> <p>Households use only stored water or water from pipes for consumption.</p> <p>Customers can afford and do pay their water bills Government takes ownership of the new system and performs routine operation and maintenance for long-term sustainability.</p>	<p>A key major cause of illness was from contaminated water and not from other causes, such as undernourishment.</p> <p>People benefit at places where they spend major amounts of time, including at home and at work.</p>
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Project 2: Teaching and Leading the Next generation of Timorese (TALENT) Project

<i>Assumptions for Outputs</i>	<i>Assumptions for Outcomes</i>	<i>Assumptions for Objective</i>	<i>Assumptions for Long-term outcomes</i>
<p>GoTL allocates reasonable budget for education.</p> <p>Land or appropriate building is allocated for CoE³ and transport issues are taken into consideration.</p> <p>CoE has an institutional home, is supported by all stakeholders, and has credibility.</p> <p>GoTL can forecast the future need for</p>	<p>GoTL operates and maintains the CoE beyond the Compact Term with the appropriate staffing and trainers to run the training center.</p> <p>CoE is well managed, accountable, and transparent.</p> <p>CoE curriculum & training is adequate and appropriate.</p> <p>Teacher pedagogy complements secondary school curriculum.</p> <p>There is an adequate process to certify secondary school</p>	<p>Future teachers who have credentials are placed into positions in Timor-Leste.</p> <p>Teachers are not absent from the job.</p> <p>Teachers transfer new and/or improved pedagogy and curriculum into the classroom.</p> <p>Teachers can confidently use the determined language (Portuguese).</p> <p>School leaders transfer knowledge and are motivated to improve school management.</p> <p>There are routine current teacher checks and training opportunities.</p>	<p>Secondary (or higher) education and the skills gained are valued in Timor-Leste.</p> <p>Secondary students can transfer their skills to the labor market in Timor-Leste or to attain higher education.</p> <p>After attaining higher education, students enter the labor market in Timor-Leste.</p>

² For use in the tables in this Annex III and the M&E Plan, “GoTL” refers to the Government.

³ For use in the tables in this Annex III and the M&E Plan, “CoE” refers to the Center of Excellence.

<p>secondary teachers and fills that need.</p> <p>GoTL will retire older teachers to make room for future teachers.</p> <p>Curriculum reform is addressed and teachers are trained in the correct curriculum content.</p> <p>Teachers want to and can improve their teaching methods.</p> <p>There is a demand for secondary teaching positions and acquiring the required credentials.</p> <p>Enough future teachers who meet the prerequisites apply to the CoE, including female teachers.</p> <p>The CoE secondary teacher education is affordable.</p> <p>Language won't be a barrier to enter the CoE.</p> <p>INFORDEPE trains trainers and updates training materials.</p>	<p>teachers and this process is being used.</p> <p>Future teachers can find teaching positions in Timor-Leste and will be adequately paid for their credentials.</p> <p>Future teachers know both Portuguese and local language.</p> <p>INFORDEPE is adequately staffed to train/re-train current teachers /school leaders.</p> <p>School leaders and prospective school leaders adequately train and support teachers in their schools (cascade model).</p>	<p>There is routine teacher supervision and support with an accountability and reward mechanism.</p> <p>Parents and the local community are engaged in the learning process and value secondary education.</p> <p>Secondary students are enrolled in and attending secondary school.</p> <p>Secondary students can learn in the determined language.</p> <p>Secondary schools have adequate infrastructure to promote learning and be effective.</p> <p>National exams are in an accessible language for secondary students.</p>	
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2.3 Projected Economic Benefits and Beneficiaries

The economic analysis of compact programs consists of a cost-benefit analysis, which is summarized by an estimated ERR and a beneficiary analysis. This analysis for the Program is summarized below.

2.3.1 Projected Economic Benefits

Cost-Benefit Analysis (“CBA”) is completed to determine the cost effectiveness of MCC investments. A threshold of 10% is typically used to inform investment decisions.

The underlying economic logic of the CBA models follow the project logics depicted above. Additionally, several of the variables included in the model become key indicators to monitor the Program and evaluate whether the Program reached the intended outcomes, as well as determining its cost effectiveness. Each model includes estimated benefits and the total estimated costs to reach

those intended benefits, whether costs are incurred by MCC, another donor, the Government, or another entity. These are typically examined over a 20-year period, unless otherwise noted.

The table below provides a summary of the estimated ERRs across this Compact’s projects. The text following the table describes the general methodology and logic of the CBA model(s), as well as the key benefit streams, costs, assumptions, risks, etc. for each of the calculated ERRs.

Project/Activity	Estimated Economic Rates of Return
WSD Project	7.5-11.7%
TALENT Project	15.6%

Project 1: WSD Project

The benefits of the WSD Project are derived from improved health outcomes of the beneficiary population. Recent literature has found that reducing disease burden through water, sanitation, and hygiene interventions require a “transformative” set of interventions that are complementary and comprehensive.

Thus, the WSD Project is designed to complement and enhance the impact of other investments in the water and sanitation sector in Timor-Leste, in line with a master plan developed by the Government. The WSD Project will construct a wastewater infrastructure backbone in Dili, which will be expanded upon in the future by other donors and financiers so that the system can function efficiently and at a low cost. Therefore, the full benefits (and thus the ERR) of the Project depend on whether additional investment occurs that builds on the backbone provided through the WSD Project.

MCC evaluated a range of plausible scenarios based on the extent to which additional investments leverage Project-funded infrastructure. The estimated ERR for the Project without subsequent investments from other sources (e.g., the Government, other donors, and/or the private sector) is 7.5 percent (lower ERR scenario). If the Government’s entire master plan is implemented by 2036, the ERR of the combined WSD Project and additional buildout is estimated at 11.7 percent (higher ERR scenario). MCC determined the higher ERR scenario to be sufficiently probable to proceed with the WSD Project. Given the expected long-term benefits, including serving as a foundational investment for the system, MCC decided to proceed with the WSD Project even in the lower ERR scenario.

The benefits of the WSD Project are derived from improved health outcomes of the beneficiary population. The largest benefit stream driving the rate of return is increased child survival.

Project 2: TALENT Project

The economic analysis of the TALENT Project is based on the aggregate earnings of all projected upper secondary graduates who enter the labor force. The program is assumed to result in increased human capital through the training of teachers and school leaders and the increase in the share of

secondary school teachers who are female. Students taught by program-trained teachers are expected to be subsequently compensated in the labor market via higher wages.

Given the large number of beneficiaries, benefits are large in absolute terms and relative to costs, and the baseline economic rate of return is estimated to be 15.6%.

3.3.2 Projected Program Beneficiaries

The M&E Plan shall also define the persons or entities expected to benefit from the Program. Beneficiary analysis is an extension of the CBA and seeks to disaggregate the total increase in income to determine specifically which segments of society will benefit from the Projects and Activities. MCC considers beneficiaries of Projects and Activities to be those people who experience better standards of living as a result of the Project or Activity (as the case may be) through higher real incomes.⁴ For definitional purposes it is important to note that not all project participants are necessarily project beneficiaries. The expected beneficiaries of this Compact over 20 years (unless otherwise noted) are shown in the following table. The text below the table provides a description of the beneficiaries.

Project/Activity	Estimated Beneficiaries*
<i>WSD Project: Water Disinfection</i>	429,000 residents of Dili 64,000 residents of four Dili-adjacent districts
<i>WSD Project: Sanitation</i>	301,000 residents of Dili
<i>TALENT Project</i>	957,000 students

*There is some anticipated overlap in beneficiaries across the projects so the beneficiaries cannot simply be added together to estimate total compact beneficiaries.

Because poor households suffer higher disease burden than non-poor households, maximizing disease burden reduction meant maximizing the inclusion of the poor. The footprint of the sanitation system was thus chosen to maximize inclusion of poor households, given engineering and design constraints. Thus, while the poor represent just over 20% of the beneficiary population of the WSD Project, around 30% of the disease burden reduction and lives saved is expected to come from poor households.

Given the broad scope of the TALENT Project, beneficiaries are assumed to include all upper secondary graduates who were taught by Project-trained teachers and who subsequently entered the labor force, as well as their co-householders. The total number of beneficiaries is estimated to be 957,721, and the beneficiary analysis suggests that at least initially, the poor will be moderately under-represented amongst beneficiaries.

⁴ As used in this Compact, the term “beneficiary” has the meaning described in MCC’s *Guidelines for Economic and Beneficiary Analysis*.

4. Monitoring Component

As defined in the MCC M&E Policy, monitoring is the continuous, systematic collection of data on specified indicators to provide indications of progress toward objectives and the achievement of intermediate results along the way. To monitor progress toward the achievement of results of this Compact, the Monitoring Component of the M&E Plan shall identify (i) the Indicators (as defined below), (ii) the definitions of the Indicators, (iii) the sources and methods for data collection, (iv) the frequency for data collection, (v) the party or parties responsible for collecting and analyzing relevant data, and (vi) the timeline for reporting on each Indicator to MCC. It should be noted that some indicators shall continue to be tracked after the Compact Term as necessary.

4.1 Outcome, Output, and Process Indicators

The full M&E Plan shall measure the results of the Program using quantitative, objective, and reliable data (“*Indicators*”).

4.1.1 Baselines

The full M&E Plan shall establish baselines for every Indicator (each a, “*Baseline*”). An Indicator’s Baseline should be established prior to the start of the corresponding Project, Activity and/or Sub-Activity. Baselines demonstrate that the problem can be specified in measurable terms and are thus a pre-requisite for adequate intervention design. The Government shall collect Baselines on the selected Indicators or verify already collected Baselines where applicable.

4.1.2 Benchmarks and Targets

The full M&E Plan shall establish a benchmark for each Indicator that specifies the expected value and the expected time by which the result shall be achieved (“*Target*”).

4.1.3 Disaggregation of Indicators

The full M&E Plan shall indicate which Indicators shall be disaggregated by gender, income level, and age, and beneficiary types to the extent practical and applicable.

4.1.4 Outcome, Output, and Process Indicators

Outcome, output and process Indicators are all defined in the MCC M&E Policy.

4.1.5 Common Indicators

MCC’s Common Indicators (as described in the MCC M&E Policy) shall also be included as relevant.

4.1.6 Revisions to Indicators and Targets

Subject to prior written approval from MCC and in accordance with the MCC M&E Policy, the Government may add Indicators or refine the definitions and Targets of existing Indicators.

4.1.7 Indicator Tracking Table

MCA-Timor-Leste must report to MCC on monitoring Indicators in the M&E Plan on a quarterly basis using an Indicator Tracking Table (“*Indicator Tracking Table*” or “*ITT*”) in the form provided by MCC. No changes to Indicators, Baselines or Targets may be made in the ITT until the changes have been approved in the M&E Plan. Additional guidance on Indicator reporting is contained in the *MCC Guidance to Accountable Entities on the Quarterly Disbursement Request Package*. In the case that MCA-Timor-Leste submits a six-month disbursement request, the ITT must still be submitted quarterly.

The M&E Plan shall contain the monitoring Indicators listed in Schedule A.

5. Evaluation Component

While good program monitoring is necessary for program management, it is not sufficient for assessing ultimate results. MCC therefore advocates the use of different types of evaluations as complementary tools to better understand the effectiveness of its programs. As defined in the MCC M&E Policy, evaluation is the objective, systematic assessment of a program's design, implementation and results. MCC is committed to making its evaluations as rigorous as warranted in order to understand the causal impacts of its programs on the expected outcomes and to assess cost effectiveness.

5.1 Independent Evaluations

Every Project must undergo a comprehensive, independent evaluation (impact and/or performance) in accordance with the MCC M&E Policy. The Evaluation Component of the M&E Plan shall describe the purpose of the evaluation, methodology, timeline, required MCC approvals, and the process for collection and analysis of data for each evaluation. All independent evaluations must be designed and implemented by independent, third-party evaluators. If the Government wishes to engage an evaluator, the engagement shall be subject to the prior written approval of MCC. Contract terms must be acceptable to MCC and ensure non-biased results and the publication of results.

For each independent evaluation, MCA-Timor-Leste is expected to review and provide feedback to independent evaluators on the evaluation design reports, evaluation materials (including questionnaires), baseline report (if applicable), and any interim/final reports in order to ensure proposed evaluation activities are feasible, and final evaluation products are technically and factually accurate.

Project 1: WSD Project

The evaluation methodology will be an impact evaluation if a comparable control group can be identified. If not, the evaluation methodology will be a performance evaluation. The Evaluation Questions follow:

- Was the program implemented according to plan (in terms of quantity and quality of outputs?)
- Did the program achieve its targeted outcomes, particularly its stated objective of reducing fecal pathogens in piped and stored water and in groundwater, in the timeframe and magnitude expected? Why or why not? The outcomes related to MCC's learning agenda include household water and toileting practices, household drinking-water quality, and utility operation. Depending on statistical power and program implementation, MCC may be able to assess the project's contribution to lowering disease prevalence.
- Do the results of the program justify the allocation of resources toward it?

Project 2: TALENT Project

The Evaluation Methodology for this Project is yet to be finalized. There may be an opportunity to compare outcomes between teachers trained earlier in the Project with those trained later in the project. In addition, there may be an opportunity to assess the cascade approach in different sized schools, i.e., does the percentage of teachers receiving centralized training affect teachers' adoption of new practices.

The Evaluation Questions follow:

- Was the program implemented according to plan (in terms of quantity and quality of outputs?)
- Did the program achieve its targeted outcomes, particularly its stated objective of improving secondary-student learning outcomes, in the timeframe and magnitude expected? Why or why not? The outcomes related to the learning agenda include changes in classroom management and content, effects of female teachers on girls' and boys' learning and effects of the cascade approach.
- Do the results of the program justify the allocation of resources toward it?

6. Data Quality Reviews

Data Quality Reviews (“**DQR**”) are a mechanism to review and analyze the utility, objectivity, and integrity of performance information. DQRs are to cover: a) quality of data, b) data collection instruments, c) survey sampling methodology, d) data collection procedures, e) data entry, storage and retrieval processes, f) data manipulation and analyses and g) data dissemination. MCC requires that an independent entity conduct the DQR, such as a local or international specialized firm or research organization, or an individual consultant, depending on the size of the program or project in review. The frequency and timing of data quality reviews must be set forth in the M&E Plan; however, MCC may request a DQR at any time. DQRs should be timed to occur before or early enough in the Compact Term that meaningful remedial measures (if any) may be taken depending on the results of the review. The methodology for the review should include a mix of document and record reviews, site visits, key informant interviews, and focus groups.

7. Other Components of the M&E Plan

In addition to the monitoring and evaluation components, the full M&E Plan shall include the following components:

7.1 Data Management System

The M&E Plan shall describe the information system that shall be used to collect data, store, process and deliver information to relevant stakeholders in such a way that the Program information collected and verified pursuant to the M&E Plan is accessible and useful to those who wish to use it.

7.2 Budget

A detailed cost estimate for all components of the M&E Plan.

Description	CFF	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
MONITORING & EVALUATION	\$ 450,000	\$ 1,625,000	\$ 800,000	\$ 1,175,000	\$ 950,000	\$ 1,800,000	\$ 6,800,000

Data collection and surveys	\$ 350,000	\$ 850,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,100,000	\$ 2,750,000
Performance Indicator Monitoring	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000
Data quality reviews and audits		\$ 225,000		\$ 225,000	\$ 100,000		\$ 550,000
Capacity building and training	\$ 100,000	\$ 200,000	\$ 150,000	\$ 150,000	\$ 50,000	\$ 50,000	\$ 700,000
Monitoring Systems and Equipment		\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000
Other	\$ -	\$ 50,000	\$ 200,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 1,300,000

8. Responsibility for Developing the M&E Plan

MCC desires to “[refrain] from requesting the introduction of performance indicators that are not consistent with countries’ national development strategies.”⁵ For this reason, primary responsibility for developing the M&E Plan lies with the M&E directorate of MCA-Timor-Leste with support and input from MCC’s M&E and economist staff. The M&E Plan must be developed in conjunction with key stakeholders, including MCA-Timor-Leste leadership and sector leads, the MCC Resident Country Mission, and other MCC staff (such as cross-cutting leads), as well as external stakeholders, as applicable. While the entire M&E Plan must be developed collaboratively, MCC and MCA-Timor-Leste Project/Activity leads are expected to guide the selection of Indicators at the process and output levels that are particularly useful for management and oversight of Projects and Activities.

9. Approval and Implementation of the M&E Plan

The approval and implementation of the M&E Plan, as amended from time to time, shall be in accordance with the Program Implementation Agreement, any other relevant Supplemental Agreement and the MCC M&E Policy. All M&E Plan modifications proposed by MCA-Timor-Leste must be submitted to MCC for prior written approval. The M&E Plan may undergo peer review within MCC before the beginning of the formal approval process.

Table 1.1: Indicators

The table below lists the preliminary set of monitoring and evaluation indicators linked to each result in the project logic. Key Indicators that can be reported on at least an annual basis shall be included in quarterly monitoring indicator reports, while Indicators that require survey data or a longer time period to track shall be included in evaluation reports.

Table 1.1: Project 1: WSD Project Indicators

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
Outcome Indicators						
Water Disinfection and Associated Social and Behavior Change Activities						

⁵ Busan Partnership for Effective Development Cooperation, Busan Outcome Document, 1 December 2011, p. 5

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>Reduce Fecal Pathogens (piped water)</i>	Proportion of tests passing drinking water quality criteria (WS-21)	The percentage of recommended total number of samples tested for residual chlorine that pass the relevant standard (for drinking water, WHO recommends: 0.2 mg/L < residual chlorine concentration < 5 mg/L)	percentage	Value: Dili : 60% (rainy season) and 80% (dry season) of tested public water supply sites passed tests. Year: 2019	Value: 99% for points of entry Year: 2029	N
<i>Reduce Fecal Pathogens (stored water)</i>				Value: TBD Year: TBD	Value: 90% for taps Year: 2029	
<i>Introduction of disinfectant into public water supply sites</i>	Treated Water Quantity	The volume of treated water supplied to the entire distribution system, which equals the total volume of water produced and treated by the utility for a reference period of time.	m ³	Value: TBD Year: TBD	Value: TBD Year: 2029	N
<i>Households properly store water and clean containers and use point-of-use treatment</i>	Use of safely managed drinking water (WS-12)	The percentage of households in the project areas whose main source of drinking water is through safely managed drinking water services.	percentage	Value: 23% Year: 2021	Value: 70% Year: 2029	N
<i>Households understand water quality importance and are motivated and able to develop new habits for water treatment and storage</i>	The percentage of households that perform at least one type of water treatment for drinking water	The percentage of households that perform at least one type of water treatment (boiling or adding bleach) for drinking water	number	Value: 28% Year: 2021	Value: 70% Year: 2029	N
<i>Disinfectant Produced</i>	Disinfectant produced	Annual indicator	kg of FAC (Free Available Chlorine)	Value: 0 Year: 2021	Value: 70,566 Year: 2029	Y
<i>Households engage with change campaign, social support and use tool</i>	Households receiving water treatment and storage messaging	The number of households that receive communication via radio, TV or other source	number	Value: 0 Year: 2021	Value: 20,000 Year: 2029	Y
	Households that receive tool	The number of households that receive storage/treatment tool	number	Value: 0 Year: 2021	Value: 1,000 Year: 2029	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
Output Indicators						
Water Disinfection and Associated Social and Behavior Change Activities						
<i>OSHG plant built</i>	OSHG plant built	Date on which OSHG plant is completed.	date	Value: 0 Year: 2021	Value: 1 Year: 2028 (compact year 5, quarter 1)	Y
<i>Disinfectant Distribution Equipment: Trucks acquired to transport disinfectant to public water supply</i>	Disinfectant delivered	Annual volume of disinfectant, based on a uniform 0.8% sodium hypochlorite solution delivered to public water systems in Dili, Aileu, Ermera, Liquica and Manatuto	liters	Value: 0 Year: 2021	Value: Dili: 2,826,000 Aileu: 205,000 Ermera: 196,000 Liquica: 119,000 Manatuto: 552,000 Year: 2028 (compact year 5, quarter 1)	Y
<i>Communication campaign on knowledge and awareness developed and implemented</i>	Communication campaign on knowledge and awareness developed and implemented	Campaign may include radio or TV or other media	date	Value: 0 Year: 2021	Value: TBD (determined Dec 2022) Year: TBD (determined Dec 2022)	Y
<i>Social support via peers or role models or others provided</i>	Individuals trained in social and behavioral change	The number of individuals in a community trained towards achieving a specific social or behavior change, particularly pertaining to sustaining access to services, and to hygiene behaviors that block the fecal-oral pathogen transmission pathways	number	Value: 0 Year: 2021	Value: 5000 Year: 2029	Y
<i>Small scale tool identified/developed for households to facilitate water treatment and storage</i>	Tool completed	Tool for treatment/storage will be piloted/tested to determine appropriate design	date	Value: 0 Year: 2021	Value: TBD (determined Dec 2022) Year: TBD (determined Dec 2022)	Y
Outcome Indicators						
Sanitation and Associated Social and Behavior Change Activities						
<i>Reduce fecal pathogens in groundwater</i>	Proportion of tests passing water quality criteria	The percentage of recommended total number of samples tested for fecal pathogens that pass the relevant standard.	percentage	Value: Dili: 31% of tested private wells without E.coli detected Year: 2019	Value: 90% Year: 2029	N
<i>Solid waste separated and disposed</i>	Total suspended solids collected at Wastewater Treatment Plant	TBD	kilograms	Value: 0 Year: 2021	Value: 2,300,000 Year: 2028 (year 5, quarter 1)	N
<i>Wastewater separated and treated</i>	Proportion of wastewater treated (WS-22)	The percentage of the total collected sewage volume that receives at least primary wastewater treatment	percentage	Value: 0 Year: 2021 Source: TetraTech Pre-Feasibility Study (FS)	Value: TBD Year: 2028 (year 5, quarter 1) Source: TBD	N

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
	Disinfectant delivered	Disinfectant delivered to wastewater treatment plant	kg of FAC	Value: 0 Year: 2021 Source: TetraTech Pre-Feasibility Study (FS)	Value: 39,380 Year: 2028 (year 5, quarter 1) Source: TetraTech Pre-Feasibility Study (FS)	N
<i>Households properly use and maintain flush toilets</i>	Use of safely managed sanitation facility	Proportion of households in the project area using safely managed sanitation ('improved') services. 'Improved' sanitation facilities include flush toilets to sewer systems.	percentage	Value: TBD (December 2022) Year: TBD	Value: TBD (December 2022) Year: TBD	N
	Households maintain their flush toilets	Proportion of households in the project area that do not throw trash (diapers, feminine products, etc.) into flush toilets.	percentage	Value: TBD (December 2022) Year: TBD	Value: TBD (December 2022) Year: TBD	N
<i>Households understand importance & motivated & able to develop new habits for toileting</i>	TBD	TBD	TBD	Value: TBD (December 2022) Year: TBD	Value: TBD (December 2022) Year: TBD	N
<i>Households connected to sewer system</i>	Sanitation facilities constructed (WS-26)	Number of sanitation facilities constructed as part of the Project. The facility is counted as operational when it has been handed over to the community for use. Sanitation facilities to be included in this indicator include flush toilet.	number	Residential, conventional Value: 0 Year: 2021	Residential, conventional Value: 8,292 Year: 2028 (year 5, quarter 1)	Y
				Residential, simplified Value: 0 Year: 2021	Residential, simplified Value: 5,318 Year: 2028 (year 5, quarter 1)	
				Non-residential Value: 0 Year: 2021	Non-residential Value: 1,775 Year: 2028 (year 5, quarter 1)	
<i>Households connected to sewer system</i>	Total customer connections, sanitation (WS-25)	Total number of wastewater connections operational through billing by the utility in a year	Number	Residential, conventional Value: 0 Year: 2021	Residential, conventional Value: 9,951 Year: 2028 (year 5, quarter 1)	Y
				Residential, simplified Value: 0 Year: 2021	Residential, simplified Value: 6,382 Year: 2028 (year 5, quarter 1)	
				Non-residential Value: 0 Year: 2021	Non-residential Value: 2,130 Year: 2028 (year 5, quarter 1)	
<i>Pit latrines decommissioned</i>	Total pit latrines decommissioned	TBD.	Number	Residential, conventional Value: 0 Year: 2021	Residential, conventional Value: 7,740 Year: 2028 (year 5, quarter 1)	Y
				Residential, simplified Value: 0 Year: 2021	Residential, simplified Value: 4964 Year: 2028 (year 5, quarter 1)	
				Non-residential Value: 0 Year: 2021	Non-residential Value: 1657 Year: 2028 (year 5, quarter 1)	

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>Households engage with campaign, social support and O&M</i>	Households receiving SBC toileting messaging	The number of households that receive communication via radio, TV or other source	number	Value: 0 Year: 2021	Value: TBD (December 2022) Year: TBD (December 2022)	Y
	Individuals trained in social and behavioral change (WS-6)	The number of individuals in a community trained towards achieving a specific social or behavior change, particularly pertaining to sustaining access to services, and to hygiene behaviors that block the fecal-oral pathogen transmission pathways	Number	Value: 0 Year: 2021	Value: 5,000 Year: 2029	Y
Output Indicators Sanitation and Associated Social and Behavioral Change Activities						
<i>Wastewater Treatment Plant built</i>	Wastewater Treatment Plant constructed	Date on which construction is completed.	Date	Value: 0 Year: 2021	Value: 2028 (year 5, quarter 1) Year: 2028 (year 5, quarter 1)	Y
<i>Ocean outfall built</i>	Ocean outfall constructed	Date on which construction is completed.	Number	Value: 0 Year: 2021	Value: 2028 (year 5, quarter 1) Year: 2028 (year 5, quarter 1)	Y
<i>Wastewater collection system constructed (conventional gravity sewers)</i>	Length of sewers constructed (WS-28)	Total length in kilometers of the sewage network constructed or replaced including service network and interceptors. This indicator should include all sewers including laterals to individual homes and interceptors conveying the sewage to a treatment facility. The sewers are considered completed and counted in this indicator after handover to the utility by the contractor and once operational.	kilometers	Value: 0 Year: 2021	Value: 289 Year: 2028 (year 5, Q1)	Y
<i>Wastewater collection system constructed (Simplified gravity sewers)</i>	Length of sewers constructed (WS-28)	Total length in kilometers of the sewage network constructed or replaced including service network and interceptors. This indicator should include all sewers including laterals to individual homes and interceptors conveying the sewage to a treatment facility. The sewers are considered completed and counted in this indicator after handover to the utility by the contractor and once operational.	kilometers	Value: 0 Year: 2021	Value: 1,775 Year: 2028 (year 5, Q1)	Y
<i>In-street box culverts built</i>	In-street box culverts constructed		Number	Value: 0 Year: 2021	Value: 4 Year: 2028 (year 5, Q1)	Y
<i>Interventions developed and implemented related to</i>	TBD	TBD	TBD	TBD	TBD	TBD

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>using flush toilets</i>						
<i>Interventions developed and implemented related to household</i>	TBD	TBD	TBD	TBD	TBD	TBD
<i>O&M of flush toilets</i>	TBD	TBD	TBD	TBD	TBD	TBD
Outcome Indicators						
Institutional Reform Activity						
<i>Utility operating</i>	Indicators TBD	TBD	TBD	TBD	TBD	TBD
	Utility staffed to manage wastewater system	Number of Full-Time Equivalents, target is based on approximately 6.6 FTEs per 1000 connections to the wastewater system	Number	Value: 0 Year:	Value: 135 Year:	Y
<i>Utility staff trained</i>	Number of BTL staff managed and trained by private operator	Private operator will train staff to operate and maintain new infrastructure in years 4 and 5 of the Compact plus 3 years post Compact	Number	Value: 0 Year:2021	Value: TBD Year: TBD	Y
<i>Private operator contracted</i>	Date on which private operator is contracted		Date	Value: 0 Year: 2021	Value: TBD Year: TBD	Y
<i>Regulation and Decree-Laws passed</i>	Regulation and Decree-Laws passed	TBD				TBD
<i>Lab equipment purchased and in use</i>	Planned water-quality tests completed	BTL and/or ANAS routinely tests public water and wastewater quality, including independent sampling and analysis to hold water suppliers and dischargers into the wastewater system accountable.	Percent	Value: 0 Year:2021	Value: TBD Year: TBD	Y
Output Indicators						
Institutional Reform Activity						
<i>Utility operator training program</i>	Utility staff training developed	Trained to include operation and maintenance of new infrastructure	Date	Value: 0 Year: TBD	Value: 0 Year: TBD	Y
<i>Utility private operator</i>	Private operator Terms of	Private operator will provide management and training to BTL	Date	Value: 0 Year: TBD	Value: TBD Year: TBD	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>procurement support</i>	Reference completed	for a period of 5 years, beginning in Year 3 of the Compact				
<i>Regulatory reform assistance: sanitation regulations</i>	TBD	TBD	TBD	TBD	TBD	Y
<i>Sanitation and Disinfection O&M Support</i>	Standards and enforcement measures for potable water and wastewater effluent quality created	Develop standards in the following (1) effluent quality from the Wastewater Treatment Plant, (2) wastewater discharges from industrial customers (treatment before entering piped sanitation collection system, (3) decommissioning of septic tanks and mandatory connections when a central collection system is made available, and (4) septic tank regulations for areas without piped water.	Number	Value: 0 Year: TBD	Value: 0 Year: TBD	Y
Long-Term Outcomes per CBA						
<i>Long-term outcomes per CBA</i>	Prevalence of diarrhea, children under 5	The percentage of individuals reported as having diarrhea in the two weeks preceding the survey.	percentage	Value: 15.5 (Dili) Year: 2016	Value: 11.6 Year: 2029	N

Table 1.2: Project 2: TALENT Project Indicators

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
Outcome Indicators						
<i>Improved student learning outcomes (literacy, numeracy, soft skills)</i>	Student test scores	Average test scores on standardized tests for secondary students	standard deviation	Value: TBD Year: TBD	An increase in test scores of: 0.14 SD for students taught by current teachers trained 0.14 for students taught by trained future teachers 0.04 SD for girls taught by Female Teachers	N
<i>Improved secondary classroom teaching</i>	Time on task	Per class period, the amount of time the teacher spends on instruction versus discipline and out of the classroom	percentage	Value: TBD Year: TBD	Value: TBD Year: TBD	N
	Percentage of school day that school leaders spend observing and coaching teachers	Per school day, the amount of time the school leader spends on observing teachers during class and giving feedback.	percentage	Value: TBD Year: TBD	Value: TBD Year: TBD	N
	Number CoE-trained secondary teachers placed in schools	Future teachers placed in secondary schools	number	Value: 0 Year: 2021	Value: 400 Year: 2029	Y
	Number of schools with CoE-trained teachers	Secondary schools	number	Value: 0 Year:2021	Value: 167 Year:2029	Y
	(E-6) Students participating in Project-supported education activities	The number of students enrolled or participating in Project-supported educational schooling	number	Value: 0 Year: 2021	Value: 74,000 Year: 2029	Y
<i>Current teachers upskilled</i>	(E-5) Instructors trained, current	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the compact training activity. Teachers trained in their schools by prospective school leaders and school leaders and CoE. To avoid double counting, the target is calculated as the total number of teachers (4400-1000 current teachers certified – 600 future teachers certified -835 prospective school leaders trained)	number	Value: 0 Year:2021	Value: 1965 Year: 2029	Y
<i>Autonomous CoE functioning and sustainable</i>	CoE operational	TBD	date	Value: 0 Year:2021	Value: 2029 Year: 2029	Y
	Number of future instructors certified	Number of classroom instructors receiving CoE qualification (future teachers)	number	Value: 0 Year: 2021	Value: 600 Year: 2029	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>Teachers certified by the CoE</i>	Number of current instructors certified	Number of classroom instructors receiving CoE qualification (current teachers)	number	Value: 0 Year:2021	Value: 1000 Year:2029	Y
	Number of school leaders and prospective school leaders certified	Number of classroom school leaders and prospective school leaders receiving CoE qualification	number	Value: 0 Year:2021	Value: 167 (school leaders) 668 (prospective school leaders) Year:2029	Y
<i>School leaders and prospective school leaders training and supporting teachers in their schools</i>	Instructors supported	The number of classroom instructors who are supported by their school leaders and prospective school leaders (cascade model)	number	Value: 0 Year: 2021	Value: 3565 (4400 total teachers minus 835 school leaders and prospective school leaders) Year: 2029	Y
<i>Trainees using ICT equipment to register teacher and student performance</i>	Percentage of teachers and students entered into monitoring system	TBD	percentage	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>Trainees using ICT equipment to receive training</i>	Number of instructors and school leaders taking computerized training courses	TBD	number	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>Increased proportion of female teachers and female school leaders</i>	Percentage of female secondary-school teachers	Percentage of female secondary-school teachers divided by all secondary school teachers	percentage	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
	Percentage of female secondary-school leaders	Percentage of female secondary-school leaders divided by all secondary school leaders	percentage	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
Output Indicators						
<i>CoE institutionalized</i>	CoE with executive board and organizational, legal and financial frameworks drafted	Dates for each of these milestones: executive board populated, and organizational, legal and financial frameworks drafted	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
	CoE staffed	Staffing requirements fulfilled	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>CoE constructed</i>	(E-4) Educational facilities constructed or rehabilitated	The number of educational facilities constructed or rehabilitated according to standards stipulated in MCA contracts signed with implementers.	number	Value: 0 Year: 2021	Value: 1 Year: 2029	Y
<i>New post-graduate teacher qualification created</i>	Post-graduate teacher qualification created	TBD	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>New teacher curriculum and training materials developed</i>	Teacher education curriculum developed	Inclusive and gender-sensitive teacher education curriculum developed	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
	Training materials developed	Dates on which training materials are completed: to include numeracy, literacy, and student assessment, that are gender sensitive and inclusive	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>Future teachers trained in pedagogy, student assessment, classroom management, ICT, inclusivity, gender sensitivity, and language</i>	(E-5) Future instructors trained	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the Teacher Training Activity. Trained by CoE staff.	number	Value: 0 Year: 2021	Value: 600 Year: 2029	Y
<i>Future teachers complete a practicum in an actual classroom</i>	Future teachers complete practicum	TBD	Number	Value: 0 Year: 2021	Value: 600 Year: 2029	Y
<i>Subset of current teachers trained in same curriculum as future teachers</i>	(E-5) Current instructors trained	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the Teacher Training Activity. Trained by CoE staff.	number	Value: 0 Year: 2021	Value: 1000 Year: 2029	Y
<i>Training materials developed in school management, instructional leadership</i>	Training materials developed	Dates on which training materials are completed: to include school management and instructional leadership	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>School leaders and prospective school leaders trained</i>	(E-5) School leaders and prospective school leaders trained	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the Teacher Training Activity. Trained by CoE staff.	number	Value: 0 Year:	Value: 167 (School Leaders) 668 (prospective school leaders) Year:	Y
<i>Quality Assurance Monitoring Sub-Activity</i>	TBD					
<i>Women's Economic Empowerment in Education Sub-Activity</i>	TBD					
<i>Language labs and ICT supports created, ICT equipment provided to trainees</i>	TBD					

ANNEX IV
CONDITIONS PRECEDENT
TO DISBURSEMENT OF CFF

This Annex IV sets forth the conditions precedent applicable to Disbursements of Compact Facilitation Funding (each a “*CFF Disbursement*”). Upon signature of the Program Implementation Agreement, each CFF Disbursement shall be subject to the terms of the Program Implementation Agreement in addition to the terms set forth in this Annex IV.

1. Conditions Precedent to Initial CFF Disbursement.

Each of the following must have occurred or been satisfied, in form and substance acceptable to MCC, prior to the initial CFF Disbursement:

- (a) The Government (or MCA-Timor-Leste) has delivered to MCC an interim fiscal accountability plan acceptable to MCC; and
- (b) The Government has put in place a CFF procurement plan acceptable to MCC.

2. Conditions Precedent to all CFF Disbursements (Including Initial CFF Disbursement).

Each of the following must have occurred or been satisfied prior to each CFF Disbursement:

- (a) The Government (or MCA-Timor-Leste) has delivered to MCC the following documents, in form and substance satisfactory to MCC:
 - (i) a completed Disbursement Request, together with the applicable Periodic Reports, for the applicable Disbursement Period, all in accordance with the Reporting Guidelines;
 - (ii) a certificate of the Government (or MCA-Timor-Leste), dated as of the date of the CFF Disbursement Request, in such form as provided by MCC;
 - (iii) if a Fiscal Agent has been engaged, a Fiscal Agent Disbursement Certificate; and
 - (iv) if a Procurement Agent has been engaged, a Procurement Agent Disbursement Certificate.
- (b) If any proceeds of the CFF Disbursement are to be deposited in one or more bank accounts, MCC has received satisfactory evidence that (i) the Bank Agreement has been executed and (ii) the Permitted Accounts have been established.
- (c) Appointment of an entity or individual to provide fiscal agent services, as approved by MCC, until such time as the Government provides to MCC a true and complete

copy of a Fiscal Agent Agreement, duly executed and in full force and effect, and the fiscal agent engaged thereby is mobilized.

(d) Appointment of an entity or individual to provide procurement agent services, as approved by MCC, until such time as the Government provides to MCC a true and complete copy of the Procurement Agent Agreement, duly executed and in full force and effect, and the procurement agent engaged thereby is mobilized.

(e) MCC is satisfied, in its sole discretion, that (i) the activities being funded with such CFF Disbursement are necessary, advisable or otherwise consistent with the goal of facilitating the implementation of this Compact and shall not violate any applicable law or regulation; (ii) no material default or breach of any covenant, obligation, or responsibility by the Government, MCA-Timor-Leste, or any Government entity has occurred and is continuing under this Compact or any Supplemental Agreement; (iii) there has been no violation of, and the use of requested funds for the purposes requested shall not violate, the limitations on use or treatment of MCC Funding set forth in Section 2.7 of this Compact or in any applicable law or regulation; (iv) any Taxes paid with MCC Funding through the date 90 days prior to the start of the applicable Disbursement Period have been reimbursed by the Government in full in accordance with Section 2.8(c) of this Compact; and (v) the Government has satisfied all of its payment obligations, including any insurance, indemnification, tax payments, or other obligations, and contributed all resources required from it, under this Compact and any Supplemental Agreement.

(f) For any CFF Disbursement occurring after this Compact has entered into force in accordance with Article 7: MCC is satisfied, in its sole discretion, that (i) MCC has received copies of any reports due from any technical consultants (including environmental auditors engaged by MCA-Timor-Leste) for any Activity since the previous Disbursement Request, and all such reports are in form and substance satisfactory to MCC; (ii) the Implementation Plan Documents and Fiscal Accountability Plan are current and updated and are in form and substance satisfactory to MCC, and there has been progress satisfactory to MCC on the components of the Implementation Plan for any relevant Projects or Activities related to such CFF Disbursement; (iii) there has been progress satisfactory to MCC on the M&E Plan and Social and Gender Integration Plan for any relevant Projects or Activities and substantial compliance with the requirements of the M&E Plan and Social and Gender Integration Plan (including the targets set forth therein and any applicable reporting requirements set forth therein for the relevant Disbursement Period); (iv) there has been no material negative finding in any financial audit report delivered in accordance with this Compact and the Audit Plan for the prior two quarters (or such other period as the Audit Plan may require); (v) MCC does not have grounds for concluding that any matter certified to it in the related MCA Disbursement Certificate, the Fiscal Agent Disbursement Certificate, or the Procurement Agent Disbursement Certificate is not as certified; and (vi) if any of the officers or key staff of MCA-Timor-Leste have been removed or resigned and the position remains vacant, MCA-Timor-Leste is actively engaged in recruiting a replacement.

(g) MCC has not determined, in its sole discretion, that an act, omission, condition, or event has occurred that would be the basis for MCC to suspend or terminate, in whole or in part, this Compact or MCC Funding in accordance with Section 5.1 of this Compact.

ANNEX V
ADDITIONAL CONDITIONS PRECEDENT
TO ENTRY INTO FORCE

The following additional conditions must be met before this Compact enters into force:

- (a) MCA-Timor-Leste must have submitted to MCC evidence in form and substance satisfactory to MCC that MCA-Timor-Leste has secured, or the appropriate Government entity has secured and made available to MCA-Timor-Leste, land for the Wastewater Treatment Plant and the OSHG plant to be able to comply with the IFC Performance Standards, including the IFC Performance Standard on Land Acquisition and Involuntary Resettlement.

ANNEX VI DEFINITIONS

Activity has the meaning provided in Section B of Annex I.

Additional Representative has the meaning provided in Section 4.2.

ANAS has the meaning provided in Section B.1(a)(iv) of Annex I.

Annex has the meaning provided in Section 6.1.

Audit Guidelines has the meaning provided in Section 3.8(a).

Audit Plan has the meaning provided in Section 3.8(a).

Bank means the financial institution approved by MCC to hold MCA-Timor-Leste's Permitted Account.

Bank Agreement means an agreement, in form and substance satisfactory to MCC, between MCA-Timor-Leste and the Bank that sets forth the signatory authority, access rights, anti-money laundering and anti-terrorist financing provisions, and other terms related to MCA-Timor-Leste's Permitted Account.

Baseline has the meaning provided in Section 4.1.1 of Annex III.

Board of Directors has the meaning provided in Section C.1(d) of Annex I.

BTL has the meaning provided in Section B.1(a)(iv) of Annex I.

CBA has the meaning provided in Section 2.3.1 of Annex III.

CDF Agreement has the meaning provided in Section 3.2(b).

CFF Disbursement has the meaning provided in Annex IV.

CFF Disbursement Request means a Disbursement Request pertaining to CFF.

Compact has the meaning provided in the Preamble.

Compact Facilitation Funding or *CFF* has the meaning provided in Section 2.2(a).

Compact Goal has the meaning provided in Section 1.1.

Compact Records has the meaning provided in Section 3.7(a).

Compact Term has the meaning provided in Section 7.4.

Cost Recovery Plan has the meaning provided in Section B.1(d) of Annex I.

Covered Provider has the meaning provided in the Audit Guidelines.

Detailed Financial Plan means the financial plan developed and implemented by MCA-Timor-Leste for each quarter for the upcoming year and on an annual basis for each year of the remaining years of the Compact, in accordance with the Reporting Guidelines, setting forth funding requirements for the Program (including administrative costs) and for the Project, broken down to the sub-activity level (or lower, where appropriate), and projected both on a commitment and cash requirement basis.

Disbursement has the meaning provided in Section 2.4.

Disbursement Period means each quarter, or any other period of time as agreed between MCA-Timor-Leste and MCC, during which MCA-Timor-Leste submits to MCC a Disbursement Request for funding.

Disbursement Request means a request by MCA-Timor-Leste to MCC for Program Funding or CFF, respectively, submitted in accordance with the Reporting Guidelines.

DQRs has the meaning provided in Section 6 of Annex III.

ERR has the meaning provided in Section 2 of Annex III.

ESIA has the meaning provided in Section B.1(c) of Annex I.

ESMP has the meaning provided in Section B.1(c) of Annex I.

Evaluation Component has the meaning provided in Section 1 of Annex III.

Excess CFF Amount has the meaning provided in Section 2.2(d).

Fiscal Accountability Plan means the manual, to be developed and implemented by MCA-Timor-Leste (as approved by MCC) setting forth the principles, mechanisms and procedures that MCA-Timor-Leste shall use to ensure appropriate fiscal accountability for the use of MCC Funding.

Fiscal Agent has the meaning provided in Section C.3 of Annex I.

Fiscal Agent Agreement means an agreement between MCA-Timor-Leste and the Fiscal Agent, in form and substance satisfactory to MCC, that sets forth the roles and responsibilities of the Fiscal Agent and other appropriate terms and conditions.

Fiscal Agent Disbursement Certificate means a certificate of the Fiscal Agent, substantially in the form provided by MCC.

Government has the meaning provided in the Preamble.

Grant has the meaning provided in Section 3.6(b).

ICT has the meaning provided in Section B.2(a) of Annex I.

IFC Performance Standards has the meaning provided in Section B.1(c) of Annex I.

Implementation Letters has the meaning provided in Section 3.5.

Implementation Plan refers to the collective nine Implementation Plan Documents, in form and substance approved by MCC, elaborating the framework for implementation of the Program.

Implementation Plan Document means each of nine documents further described in the PIA, including (i) a Work Plan, (ii) a Detailed Financial Plan, (iii) an Audit Plan and (iv) a Procurement Plan.

Implementing Entity has the meaning provided in Section C.2 of Annex I.

Implementing Entity Agreement has the meaning provided in Section C.2 of Annex I.

Indicator Tracking Table and **ITT** have the meaning provided in Section 4.1.7 of Annex III.

Indicators has the meaning provided in Section 4.1 of Annex III.

INFORDEPE has the meaning provided in Section B.2(g) of Annex I.

Initial CFF Disbursement means the first Disbursement relating to CFF.

Inspector General has the meaning provided in Section 3.7(c).

Instituto publico has the meaning provided in Section C.1(a) of Annex I.

Intellectual Property means all registered and unregistered trademarks, service marks, logos, names, trade names and all other trademark rights; all registered and unregistered copyrights; all patents, inventions, shop rights, know how, trade secrets, designs, drawings, art work, plans, prints, manuals, computer files, computer software, hard copy files, catalogues, specifications, and other proprietary technology and similar information; and all registrations for, and applications for registration of, any of the foregoing, that are financed, in whole or in part, using MCC Funding.

M&E has the meaning provided in Section 1 of Annex III.

M&E Plan has the meaning provided in Annex III.

MCA Act has the meaning provided in Section 2.2(a).

MCA-Timor-Leste has the meaning provided in Section 3.2(b).

MCC has the meaning provided in the Preamble.

MCC Environmental Guidelines has the meaning provided in Section 2.7(c).

MCC Funding has the meaning provided in Section 2.3.

MCC Gender Policy means the MCC Gender Policy (including any guidance documents issued in connection with such policy).

MCC M&E Policy has the meaning provided in Annex III.

MCC Program Closure Guidelines means the MCC Program Closure Guidelines (including any guidance documents issued in connection with such guidelines).

MCC Program Grant Guidelines has the meaning provided in Section 3.6(b).

MCC Program Procurement Guidelines has the meaning provided in Section 3.6(a).

MCC Website means the MCC website at www.mcc.gov.

Ministry-supported Positions has the meaning provided in Section B.2(a)(i)(A) of Annex I.

Monitoring Component has the meaning provided in Section I of Annex III.

Multi-Year Financial Plan Summary has the meaning provided in Annex II.

O&M has the meaning provided in Section B.1(a)(iv) of Annex I.

Operations Unit has the meaning provided in Section C.1(d) of Annex I.

Orgão Fiscal means the body or individual responsible for monitoring and ensuring MCA-Timor-Leste's compliance with legal, regulatory, and financial requirements, as well as the provisions of this Compact, the PIA, or any Supplemental Agreement.

OSHG has the meaning provided in Section B.1(a)(i) of Annex I.

Party and Parties have the meaning provided in the Preamble.

Periodic Reports means the reports and information that MCA-Timor-Leste shall periodically provide to MCC, in form and substance satisfactory to MCC, as required by the Reporting Guidelines.

Permitted Account has the meaning provided in Section 2.4.

Principal Representative has the meaning provided in Section 4.2.

Procurement Agent has the meaning provided in Section C.4 of Annex I.

Procurement Agent Agreement means the agreement that MCA-Timor-Leste shall enter into with the Procurement Agent, in form and substance satisfactory to MCC, that sets forth the roles and responsibilities of the Procurement Agent with respect to the conduct, monitoring and review of procurements and other appropriate terms and conditions.

Procurement Agent Disbursement Certificate means a certificate of the Procurement Agent, substantially in the form provided by MCC.

Procurement Plan means the plan prepared by MCA-Timor Leste for acquiring the goods, works, and consultant and non-consultant services needed to prepare and implement the Compact.

Program has the meaning provided in the recitals to this Compact.

Program Assets means any assets, goods or property (real, tangible or intangible) purchased or financed in whole or in part (directly or indirectly) by MCC Funding.

Program Funding has the meaning provided in Section 2.1.

Program Guidelines means collectively the Audit Guidelines, the MCC Environmental Guidelines, the MCC Policy for Accountable Entities and Implementation Structures, MCC Program Grant Guidelines, the MCC Program Procurement Guidelines, the Reporting Guidelines, the MCC M&E Policy, the MCC Cost Principles for Government Affiliates, the MCC Program Closure Guidelines, the MCC Gender Policy, the Gender and Social Integration Milestones and Operational Procedures, the MCC Guidelines for Economic and Beneficiary Analysis, the MCC Standards for Global Marking, the MCC Guidelines for Country Contributions, the MCC Counter-Trafficking in Persons Policy, the Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations, and any other guidelines, policies or guidance papers relating to the administration of MCC-funded compact programs, in each case, as such may be posted from time to time on the MCC Website.

Program Implementation Agreement and PIA have the meaning provided in Section 3.1.

Project has the meaning provided in Section 1.2.

Project Objective has the meaning provided in Section 1.2.

Provider means (a) any entity of the Government that receives or uses MCC Funding or any other Program Asset in carrying out activities in furtherance of this Compact or (b) any third party that receives at least US\$50,000 in the aggregate of MCC Funding (other than as salary or compensation as an employee of an entity of the Government) during the Compact Term.

RAP has the meaning provided in Section B.1(c) of Annex I.

Reporting Guidelines means the MCC Guidance to Accountable Entities on the Quarterly Disbursement Request Package.

RPF has the meaning provided in Section B.1(c) of Annex I.

Social and Gender Integration Plan means the plan prepared in accordance with the MCC Gender Policy and the Gender and Social Integration Milestones and Operational Procedures, as further described in the Program Implementation Agreement.

Supplemental Agreement means any agreement between (a) the Government (or any Government affiliate, including MCA-Timor-Leste) and MCC (including, but not limited to, the PIA), or (b) MCC and/or the Government (or any Government affiliate, including MCA-Timor-Leste), on the one hand, and any third party, on the other hand, including any of the Providers, in each case, setting forth the details of any funding, implementing or other arrangements in furtherance of, and in compliance with, this Compact.

Target has the meaning provided in Section 4.1.2 of Annex III.

Taxes has the meaning provided in Section 2.8(a).

TIP has the meaning provided in Section B.1(d) of Annex I.

United States has the meaning provided in the Preamble.

United States Dollars or US\$ means the lawful currency of the United States of America.

USAID means the United States Agency for International Development.

Wastewater Treatment Plant has the meaning provided in Section B.1(a)(ii) of Annex I.

Work Plan means the plan, in form and substance satisfactory to MCC that MCA-Timor-Leste shall develop and implement for the overall administration of the Program.

WSD Contribution has the meaning provided in Section 2.6(a).

WSD Project has the meaning provided in Section B.1(a) of Annex I.

ANNEX 2. PROJECT CLASSIFICATION DOCUMENT



GABINETE DO PRESIDENTE

ke. Eze,

Ref^o : 36/GP-ANLA, I.P / MTA / X/2023

Dili, 02 October 2023

To : Ex^{mo}. Presidente BE'E Timor –Leste (BTL, E.P)
Mr. Carlos Peloi dos Reis, STP, M.S

① Scan no save
② Kopia ba DEF, DOCA
UP BUS no MCA.

Subject: Issued of project Category

Reference:

1. BE'E Timor –Leste (BTL, E.P) submission of PD to ANLA, I.P 18 July 2023
2. ANLA issued technical comment of PD, 16 August 2023
3. BE'E Timor –Leste (BTL, E.P), re-submission of PD to NAEL/ANLA, 15 September 2023
4. ANLA issued categorization, 02 October 2023.

Oct. 04, 2023

Referring to the Project document (PD) which was submitted to Autoridade Nacional de Licenciamento Ambiental, Instituto Público (ANLA, I.P.) dated 15 September 2023, ANLA through the Internal Committee reviewed and concluded the project as Category A. This classification reference based on the Decree Law Environmental License No.39/2022 first amendment of Decree Law 5/2011, article 4, and paragraph 1.a , “Category A” - includes projects that may potentially cause significant environmental impacts, and are subject to the procedure of Environmental Impact Assessment (EIA), this based on Impact Analysis and Environmental Management Plan (EMP) in accordance with the provisions in this law.” Therefore, the proponent must follow category A process, where proponent should conduct public consultation for the Term of reference (ToR) document after that submitted Term of reference (ToR) document to ANLA in soft copy and hard copy for review and approval.

Yours sincerely


António Lelo Taci, M. Sc.
President of ANLA, I.P.

Autoridade Nacional de Licenciamento Ambiental, Instituto Público

1890	
GABINETE PRESIDENTE BTL, E.P.	
Entrega Husi:	_____
Simu Husi :	Sobnye
Data :	04/10/2023
No Kontaktu :	_____
_____	STP



Vice – Primeiro Ministro
 Ministro do Túrismo e Ambiente
 IX GOVERNO CONSTITUCIONAL



Autoridade Nacional de
 Licenciamento Ambiental,
 Instituto Público (ANLA, I.P.)

See. Fzo;
 ① scan no save.
 ② kopia bn DE I, ~~DE I~~ NCA
 UP SUR; DOCA.

GABINETE DO PRESIDENTE

Oct. 04, 2023

Ref N° : ~~361~~/GP-ANLA, I.P. / MTA / X / 2023

Dili, 02 October 2023

To : President BTL, E.P
 Mr. Carlos Peloi dos Reis, STP, M.S.

Subject: Technical Comment of the Project Document (PD)

Referring to the Project document (PD) that submitted to Autoridade Nacional de Licenciamento Ambiental (ANLA) dated 15 September 2023. Through Internal Committee for Environmental Impact Assessment (ICEIA) has reviewed the document, which the BE'E Timor –Leste (BTL, E.P) – Ministry of Public Works as the proponent that will construct Waste water Collection system, in urban area of Timor-Leste especially in Dili Municipality

All section of Project Document is noted, therefore the proponent no need to revise the Project Document.

For your information please see enclosure of technical comments on the next page.

If you have any questions at all, please contact Mr. Salvador S. Ximenes +670 78510589 or email infonael2019@gmail.com

Sincerely yours,

Antonio Lelo Taci
Antonio Lelo Taci, M.Sc
 Presidente

Autoridade Nacional de Licenciamento Ambiental, Instituto Publico

GABINETE PRESIDENTE BTL, E.P.	
Entrega Husi:	<i>Carlito</i>
Simu Husi :	<i>Solange</i>
Data :	<i>04 Nov 2023</i>
No Kontaktu :	<i>SFF</i>
Assinatura :	<i>SFF</i>



Vice - Primeiro Ministro
Ministro do Turismo e Ambiente
IX GOVERNO CONSTITUCIONAL



Autoridade Nacional de
Licenciamento Ambiental,
Instituto Público (ANLA, I.P.)

KOMITE AVALLIASAUN IMPAKTU AMBIENTAL (KAIA)

Proponent	Be'e Timor Leste Empresa Publica (BTL, E.P)
Location of the project	City of Dili, post Administrative Vera Cruz, such as, Colmera, Vila Verde, Motel, Kampung Alor, and the village of administrative post of Dom Aleixo such as, Fatuhada, Bairro Pite, Manluhana, and Comoro.
Type of the project	Wastewater Collection system
Date of submission	15-09-2023

Evaluated by	Signature
1. Idalia de Jesus Sousa	
2. Antonio dos Santos	
3. Alice Joana	
4. Agostinho T. Carvalheira	
5. Salvador Soares Ximenes	
6. Emmanuel Carceres	
7. Date of Evaluation :	16-29 OF September 2023

Technical comments for Project Document (PD)

Num	Pages	Sections	Sub-Sections	Ratings	Comments
1.	1	Details of the proponent	This information should also contain the principal contact person for the proponent (name, title, phone number and email address)	A	Noted
2.		Location and scale of the project	a. Maps and plans of the location of the project, showing		Noted

			<p>v. National parks, protected areas, community managed reserves or grounds, habitats of species that require special protection (i.e. threatened species) or other environmentally sensitive areas</p> <p>vi. Fisheries and fishing areas</p> <p>vii. Hunting areas</p>		A	Noted
			d. Photographs of the proposed project location, where possible		A	Noted
			e. Description of the legal ownership of the land to be used for the proposed project, including any title, deed or documentation, or lease or other authorization.		A	Noted
3.		District and Villages	<p>Provide the name of the district in which the proposed project will be located. Where the project may have any impact on another district, provide details of those likely affected districts.</p> <p>Provide the name of the village or villages in which the proposed project will be located. Where the project may have any impact on another village, provide details of those likely affected villages.</p>		A	Noted
4.		Plans and technical			A	Noted

5.		drawing Feasibility studies of the proposed project	This section should include a summary of the technical studies on the feasibility of the proposed project. The studies themselves may be included as annexes to this Document. Where the feasibility studies are not included, they shall be made available to the Environmental Authority upon request at any time during the environmental assessment process.		A	Noted
6.		Land and water use	Describe any land uses or water uses that may be affected by the proposed project		A	Noted
7		Environmental Impact	A. Biophysical impacts		A	Noted
			a. a description of the physical and biological components,		A	Noted
			b. a description of the physical and biological components that may be negatively affected by the proposed project.		A	Noted
			c. whether there are likely to be any cross-border impacts and, if so, the nature and extent of those likely impacts		A	Noted
			d. whether there are likely to be any global impacts, including climate change impacts, and, if so, the nature and extent of those likely impacts		A	Noted

			<p>b. An overview of key comments and concerns expressed to date by stakeholders and any responses that have been provided.</p> <p>c. An overview of any ongoing or proposed stakeholder consultation activities.</p> <p>d. A description of any consultations that have occurred with other jurisdictions that have environmental assessment or regulatory decisions to make with respect to the project.</p>		A	Noted
9.		<p>Consultation with other authorities</p>	<p>If there has been any consultation with any other authority, this should be summarized here. This section should also indicate any permissions, permits or licenses that the project proponent will have to obtain from any other authority.</p>		A	Noted
10.		<p>The proposal for classification of the proposed project</p>	<p>Taking account of the information provided, and the definitions of the three categories of project set out in Article 4 of the ELL and Annexes 1 and 2 of that law, the proponent shall make a proposal for the classification of the proposed project with reasons for the proposed category.</p>		A	Noted
11.		<p>Executive summary</p>	<p>The Executive Summary shall summarize the information</p>		A	Noted

			provided in the above sections.			
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Rating scale:

- A – Excellent** : Overall good, no need to revise;
- B – Good** : Overall good and satisfactory, very little mistake;
- C – Sufficient** : Satisfactory but need to complete some part;
- D – Not good** : Some part are incomplete, not satisfied;
- E – Poor** : All are incomplete and not satisfied;
- N/A** : The review section is not applicable/incomplete

Annex 3: Stakeholder Engagement Plan



MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA



TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

STAKEHOLDER ENGAGEMENT PLAN



March 2024

MCA – TIMOR LESTE

TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

STAKEHOLDER ENGAGEMENT PLAN

REF: 20960.240109.NOD.REP.007

**Nicholas O’Dwyer Ltd
Consulting Engineers
Nutgrove Office Park
Nutgrove Avenue
Dublin 14**

March 2024

PROJECT NO. Project No.					
Revision	Reason for Revision	Prepared by	Reviewed by	Approved by	Issue Date
-	First Issue	Britta Lammers	Liza Van Der Merwe	Carol Young	22/01/2024
A	Updated for additional meetings	Britta Lammers	M. Hickey	Terry O’Flanagan	05/03/2024
B					
C					
D					

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LIST OF ACRONYMS AND ABBREVIATION

ACbit	Associaçaon Chega Ba Ita
AJAR	Asia Justice & Rights
ANLA	National Authority for Environmental Licensing
BTL	Bee Timor–Leste, Empresa Publica
CDT-TL	Compact Development Team
CED	Compact End Date
CODIVA	Coalition on Diversity and Action
DD	Due Diligence
DFAT	Australian Government’s Department of Foreign Affairs and Trade
EIB	European Investment Bank
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessments
ESS	Environmental and Social Standards
Fokupers	Forum Komunikaçaun Ba Feto Timor Loro Sa'e
FS	Feasibility Study
GoTL	Government of Timor–Leste
GSI	Gender and Social Inclusion
IFC	International Finance Corporation
LGBTQIA+	lesbian, gay, bisexual, transgender, queer, intersex, asexual and others
MCA-TL	Millennium Challenge Account – Timor–Leste
MCC	Millennium Challenge Corporation
NGO	Non–Governmental Organizations
NOD	Nicholas O'Dwyer
OSHG	Onsite Sodium hypochlorite generation
PAP	Project Affected Person
PEA	Project Executing Agency
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEFOPE	Secretariat of State for Vocational Training and Employment
SEP	Stakeholder Engagement Plan
TIP	Trafficking in Persons
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WASH	Water, sanitation, and hygiene
WB	World Bank
WSD	Water, Sanitation and Drainage
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

1.1 Overview

This document presents the Stakeholder Engagement Plan (SEP) for the Water, Sanitation and Drainage (WSD) Project in Timor–Leste. The WSD project is part of a Compact programme developed between the United States of America, acting through the Millennium Challenge Corporation (MCC), and the Government of Timor–Leste (GoTL). The main objective of the compact program is to improve public health by reducing the incidence of waterborne disease largely caused by the poor sanitary conditions in Timor–Leste. This will be achieved by providing access to a wastewater collection, treatment and disposal system to an estimate of 300,909 inhabitants by 2036. The area covered by the WSD Project includes Area 106 (population of 106,165 inhabitants) and the priority extension areas of: Hallibur, Lorio, Moris Ba Dame, Terra Santa, Golgota, and 12 de Outubro.

Nicholas O'Dwyer (NOD) was engaged to provide consulting services for the preparation of designs, tender documents, Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs) for the WSD project.

As part of the Compact Development, MCC and GoTL created Compact Development Team Timor–Leste (CDT–TL) to represent GoTL in the initial phase of the WSD project. Since that time, the Millennium Challenge Account–Timor–Leste (MCA–TL) has been established. MCA–TL is an agency of the GoTL and is responsible for administration, execution, and management of the MCC Compact.

The project proponent is Bee Timor–Leste, Empresa Publica (BTL), which will assume responsibility for the facilities constructed under the Compact. For the duration from the present to Compact End Date (CED), MCA–TL, its designated Consultants, and BTL share responsibility for Stakeholder Engagement, but will be functionally led by MCA–TL's Consultant, Nicholas O'Dwyer (NOD) for the duration of NOD's contract. After the end of the five–year Compact when MCA–TL will dissolve, we expect BTL will assume responsibility for any ongoing Stakeholder Engagement, including maintenance and management of the Grievance Redress Mechanism (GRM).

MCA–TL, through its overall responsibility for implementation for the Compact including the WSD elements of Compact workflow, will coordinate communications among the GoTL and all consultants and contractors and stakeholders within the Compact. BTL will assume responsibility for operation and maintenance of the built facilities after compact implementation.

For the purposes of this SEP, stakeholders are defined as individuals, groups, or organizations who have an interest in the Project, or who may be affected by it, directly or indirectly, positively, or negatively. According to International Finance Corporation (IFC) Performance Standard 1 (IFC, 2012), *“stakeholder engagement is the basis for building strong, constructive, and responsive relationships that are essential for the successful management of a project's environmental and social impact”*. The discussion of key project related issues, benefits, concerns, with local communities, their representatives, government and non–governmental organizations (NGOs) is a key step during project planning and feasibility stage, building relationships based on trust. The ESIA process and the RAP, in looking ahead to detailed design and construction, anticipate communication with all stakeholders, providing information on the Project, its impacts and the proposed measures, to obtain input in form of concerns and suggestions to be taken into consideration in decision making processes.

This SEP outlines how stakeholders were previously and will be engaged during the planning and construction stage of the WSD Project in Timor–Leste. Further, it provides information and guidance to BTL for managing and facilitating future stakeholder engagements during operation. It presents the principles underlying effective engagement, based on internationally recognized standards.

The document draws on insights from stakeholder engagement by Tetra Tech (February 2019 to April 2022^a) augmented by further engagement by NOD in November 2023 during project initiation.

1.2 Objectives and Scope of Stakeholder Engagement

The SEP is a tool to plan, record, and manage engagement with governmental and local Project stakeholders through information disclosure, consultation and participation in decision making processes. It will guide the MCA–TL and BTL to define an effective risk mitigation strategy, undertaking meaningful engagement with stakeholders during Project design, implementation and operation.

Key objectives of stakeholder engagement:

- Identify key stakeholders that are interested and affected, and/or able to influence the Project and its activities;
- Assess stakeholders to determine their interest and possible influence on the Project to inform engagement planning and implementation;
- Gather feedback and input from stakeholders on the Project to inform the locally required Environmental Impact Statement (EIS), the Environmental Management Plan (EMP) Reports and the final ESIA report;
- Build good relationships and trust between MCA–TL, Consultants, Contractors and stakeholders;
- Actively manage stakeholder expectations to avoid the creation or development of unrealistic expectations about potential Project benefits;
- Ensure the timely, transparent and accurate disclosure of Project related information;
- Establish a process for informed consultation and participation;
- Provide a simple and accessible communications mechanism for receiving, documenting and addressing any questions, comments or project related grievances in a timely manner.

The stakeholder engagement and consultation aim to open a two–way flow of information and dialogue between MCA–TL, Consultants, Contractors, stakeholders and the public.

The construction activities for the different components of the WSD Project include:

Phase 1

Wastewater treatment facility: Construction of a new 51,044 m³/day Wastewater Treatment Plant (WWTP). This is a discrete site that lies adjacent to the east side of the mouth of the Comoro River. The facility will generate treated liquid effluent and sludge. Treated effluent will be discharged to the ocean through a submarine outfall. Sludge will be trucked to and disposed at the Tibar landfill by GoTL.

Ocean outfall: On the north edge of the site, an ocean outfall will be constructed which will discharge treated wastewater to the ocean. The outfall will extend outward from the shore for approximately 430 meters along the ocean bottom at a maximum depth of approximately 60 meters.

Onsite Sodium hypochlorite generation facility (OSHG): Sodium hypochlorite is needed as a disinfection agent both at the WWTP proposed under the WSD Project and the water supply project, which is an activity separate from the WSD Project.

Phase 2

^a TetraTech, 2022. *Draft Environmental and Social Impact Assessment. Consulting Services for Preparation of the Feasibility Project, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for Water Disinfection, Sanitation and Drainage Program, Timor–Leste Compact.* Prepared for Millennium Challenge Corporation. Order No: 95332420F0044.

Pump stations: At least six pump stations will be designed and constructed to receive raw sewage and direct it to force mains (pressurized pipes) that feed to the WWTP. Pump stations will be sited within the collection network and will include pumphouses and associated facilities on small parcels of land owned by GoTL.

Conventional sewer: Conventional systems include a combination of gravity and force mains to move raw waste WWTP. This consists of two parts: 1) design and construction of a conventional wastewater collection system including approximately 130 km of sewer pipeline in mostly paved public roads with force main, designated as Area 106 and represents the core service area of the collection system, and 2) design of an additional conventional collection system zone in three expansion areas (roughly an additional 30% of the city) that may or may not be constructed under the MCC Compact, but may be constructed with other donor funds.

Simplified gravity sewer: Design and construction of simplified sewer collection system including approximately 60 km of gravity sewer pipeline. This design solution will be located in areas of informal housing without public road access.

Building connections and facilities: The WSD Project intends to provide all house connections in Area 106 and house connections to conventional sewers in priority expansion areas. In addition to household connections, the WSD project plans to provide working toilets at properties that do not have such facilities.

The *WWTP, OSHG facility, the pump stations* and the ocean outfall will be designed to minimize the footprint and therefore the physical displacement. The sewage system will be underground, utilizing roads and footpaths as much as possible to avoid any physical resettlement.

Associated Drainage: Construction of in-street box culverts within the wastewater collection area at specific locations where proposed drainage lines cross the excavation corridor of the wastewater collection lines associated with the sanitation infrastructure development. This is required to prevent conflicts between the sewer lines and stormwater drainage channels at some specific locations.

1.3 Structure of the Stakeholder Engagement Plan

This SEP is organized as follows:

- **Section 2, Regulatory Context** outlines international standards (IFC and MCC) and the national legislative context that will govern how stakeholder engagement.
- **Section 3, Project Stakeholders** provides an overview of project interested and affected parties, including government ministries, parastatals, non-governmental organizations (NGOs) and community-based organizations (CBOs), the business sector, the health and educational sector, as well as individuals and groups who may be interested and affected.
- **Section 4, Stakeholder Engagement Process** sets out the Project stakeholders engagement process.
- **Section 5, Grievance Mechanism** presents a high-level overview of the grievance mechanism that will be developed for the Project.
- **Section 6, Monitoring and Reporting** presents recommendations for periodic reports that describe progress made relating to the Project's management plans on issues that involve ongoing risk to or impacts on affected communities and on issues that the consultation process or grievance mechanism have identified.
- **Section 7, SEP Review** present requirements for SEP revision
- **Section 8, References** provides a list of references cited in this SEP.

2 LEGAL AND REGULATORY FRAMEWORK

The SEP has been developed according to international, national and MCC/MCA-TL principles and good practice standards. IFC Performance Standard 1 is taken as the benchmark for international best practice in stakeholder engagement, as required by MCC Environmental Guidelines.

2.1 MCC and IFC Performance Standards

The MCC Environmental Guidelines require that compact projects are developed and implemented in ways to conform to the IFC Performance Standards on Environmental and Social Sustainability. IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts defines standards guiding the disclosure of project information, the identification and engagement of stakeholders, and on how to allow for meaningful opportunities to participate and express views, and document the results of consultations. Consultation is also an integrated part of other performance standards as IFC PS 5: Land Acquisition and Involuntary Resettlement.

IFC Performance Standard 1 and its associated Guidance Note (IFC, 2012) detail recommendations for assessing and managing environmental and social risks. Stakeholder engagement is identified as a key aspect of the risk assessment and management process. IFC identifies five key elements of stakeholder engagement. These are:

- **Stakeholder analysis and engagement planning:**
 - Identify stakeholders likely to be interested and affected by the project.
 - Plan engagement activities according to stakeholders' respective needs and expectations in relation to the project.
 - Verify (and triangulate) that community representatives (e.g. *Suco*^b and *Aldeia*^c Chiefs) represent the views of affected communities and can be relied upon to truthfully communicate the views of constituents,
 - Ensure active engagement with marginalized or vulnerable groups and individuals by facilitating their participation through additional measures such as providing for special engagement opportunities to ensure meaningful engagement with young people, women, the elderly, the chronically ill or people who speak a minority language.
- **Disclosure of information:**
 - Provide ongoing and regular project planning and progress updates with stakeholders, including structured and *ad hoc* reporting to local government structures, NGOs, CBO's, religious groups, project affected persons and others, to share.
- **Consultation:**
 - Provide affected communities and other stakeholders with opportunities to express their views on project risks, impacts and mitigation measures for the Client's consideration and response.
 - Allow for two-way consultation from project inception to close-out to enable meaningful and informed conversations between MCA-TL and the affected communities regarding identification and management of environmental and social risks and impacts.
 - Ensure that the extent and degree of engagement is commensurate with expected project risks and impacts, and the concerns raised by affected communities.
 - Ensure that information sharing and consultation is carried out in a culturally appropriate local language(s) and format for it to be accessible and understandable to stakeholders and affected communities especially.
 - Ensure all engagements are documented, including photographs.
- **Grievance management mechanism:**
 - Establish a formal, yet simple and accessible communication mechanism and process to enable stakeholders and the public to communicate with the project authority and their representatives, through raising questions, concerns and possible grievances in a structured way.

^b Suco – roughly translated as “village”, consisting of “aldeias”.

^c Aldeia – roughly translated as “community”.

- Ensure that all communications, particularly grievances are captured in writing, and referred to the relevant authority to be addressed in a timely, consistent, and culturally appropriate manner, without impeding stakeholders' access to local judicial or administrative processes.
- Ensure that stakeholders are informed on how and where to use the grievance mechanism throughout the project planning and implementation phases.
- **Ongoing reporting to 'Affected Communities':**
 - MCA–TL with the support of their consultants are responsible to provide periodic progress reports specifically relating to the project's environmental and social management plans, ongoing risks, grievances or impacts on affected communities as identified during the consultation process. The reporting frequency should be proportionate to the interest and concerns of stakeholders, but not less than annually.

2.2 Legal and Policy Context

The implementation and operations of the proposed WSD Project, will be governed by the environmental impact assessment and management context of Timor–Leste. Figure 1 shows the key legal components of the process.



Figure 1. Key legal components of the process

The **WSD Project** is classified as a **Category A project** in terms of Annex I: Table of Classification of Category A Projects of the Decree law 5/2011 Chapter VII: Sanitation Sector as the proposed WWTP will service $\geq 10,000$ families / eq.

Category A projects may potentially cause significant environmental impacts and therefore require an EIS and EMP, therefore, the proponent will prepare a (Project) Scoping and Terms of Reference for consideration and guidance by ANLA on how to proceed with the environmental assessment process. Figure 2 shows the ANLA process.



Figure 2. ANLA environmental Licensing process

The environmental assessment process requires a regulated public consultation process spanning its various phases. This is captured in Ministerial Decision No. 47/2017 on the **Regulation on procedures for Public Consultation and Requirements during the process of environmental assessment**.

The key requirements are:

- Chapter II, **Announcement of the Classification of the Proposed Project**
 - Notification of the applicant of ANLA’s opinion on the classification of the proposed project and publication thereof by way of a site notice within (15 working days)
- Chapter III, **Public Consultation on the Terms of Reference**
 - The project proponent is responsible to issue a public notice (in both official languages of East Timor) on submission of the Scoping and Terms of Reference to ANLA. A copy of which must be submitted to ANLA as proof. Failing to do so will render the scoping phase invalid.
 - Submission of questions and comments by the public and interested and affected parties to ANLA in response to the public notice on the Scoping and Terms of Reference.
- Chapter IV: **Public Consultation during the EIS and EMP study phase**

- Public consultation during the study phase aims at providing and gathering project information from the public. This includes inviting comments on the draft EIS and EMP to incorporate it into the documents before submission to the Client and the environmental authority.
- Public consultation must use appropriate engagement mechanisms and follow local communication and engagement protocols to facilitate engagement with marginalized and vulnerable persons and groups, in particular female headed households (HH), the elderly and disabled, the unemployed, youth and child headed HH amongst others.
- Record keeping of all public consultations including names, contact details and discussion content regarding the environment, socio-economic, land and cultural issues as well as any other comments.
- Distribution for comment of the draft EIS and EMP to the public before document submission to ANLA. This may require providing the EIS, EMP and a Non-Technical Summary (NTS) thereof in Tetum and possibly a second language, if required. Documents to be made available free of charge at the project proponent's head office and on their website, at an accessible public venue such as a church hall, community centre or school, and at project affected *Suco* offices.
- Announcement via radio and television and advertising of public consultation meetings shall be done in at least both official languages, at least two weeks before the consultation will take place, and at least 7 days after the documents have been made available to the public. Suitable meeting venues must be agreed with *Suco* and or *Aldeia* Chiefs.
- Submission of written comments must happen no less than 2 weeks after public consultation meetings or at least 24 days after publication of the Public Consultation notice.
- All costs associated with the public consultation events must be borne by the project proponent, and with due respect for local traditions and customs, If necessary, this should include providing appropriate interpreters.
- The EIS and EMP shall reflect the opinions and comments received from the public. jointly with the applicant's responses.
- **Chapter V: Public Consultation on the EIS and EMP for Category A Projects**
 - After submission of the EIS and EMP to ANLA, the Evaluation Commission shall make it available to the public for comment.
 - Documents shall be made available free of charge at ANLA's head and district offices and on their website, at an accessible public venue for 24 days or until the deadline for public consultation expires.
 - The Evaluation Commission shall issue a notice for the public to advertise the public consultation process. The notice will be posted on ANLA's in both official languages of East Timor and other languages if considered necessary.
 - If the Evaluation Commission considers it necessary, further public consultations may be held to discuss the EIS and EMP. The cost of which will be for the account of the project proponent. Such meetings will be conducted within 14 days of the public consultation period to allow members of the public enough time to submit written comments to the Environmental Authority in writing.
 - Written comments from the public submitted to ANLA, will be submitted to the Evaluation Commission, whose responsibility will be to provide an account thereof in their final technical report and technical opinion on the proposed project.

Important to note is that ANLA, where duly justified, has the authority to extend regulated response timeframes from them to the proponent, by informing the proponent in writing of their reasons for doing so.

3 PROJECT STAKEHOLDERS

Stakeholder identification and analysis aims to help understand the likely relationship between stakeholders and the project and helps to identify appropriate engagement methods for each stakeholder. Stakeholder identification is an ongoing process, which requires regular review as the project progresses.

The main stakeholder groups identified comprise Timor–Leste Government agencies, municipal administration, households and businesses, civil society organizations, multilateral aid agencies, and foreign government agencies.

Stakeholder engagement has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns through key informant interviews and focus group discussions.

The information in this section is based on this stakeholder engagement planning and stakeholder engagement activities conducted to date.

3.1 Stakeholder identification

Stakeholder mapping/identification was conducted to identify key contacts and roles for organizations active in the area (e.g., regulatory institutions at the national, regional and district level), leaders or representatives within affected *Sucos*, who would serve as contact persons during the project lifecycle.

The first step of the stakeholder mapping was a review of existing documents and publicly available information about the project prior to the site visit. The mapping exercise was refined during the field activities in November 2023. However, the engagement for the Project started in February 2020 and extended until April 2022 (with an extended period of limited engagement due to COVID–19). Further engagement activities took place November 2023. Engagement activities included kick–off meetings, key informant interviews, meetings with Project representatives, i.e., MCC, CDT–TL/MCA–TL, MCC Due Diligence Consultant and various stakeholders from government agencies (ANLA, BTL, National Directorate of Land and Property).

Broad stakeholder groups have been identified, based on likely common interests in Timor–Leste’s sanitation and water issues. Table 1 lists these groups along with a brief description of each.

Table 1: Stakeholder groups

Stakeholder Group		Description	Connection to the Project
Timor-Leste agencies	Government	Country-wide government ministries and agencies. It includes Bee Timor–Leste (BTL), Secretary of Land and Registry, the National Authority for Water and Sanitation (ANAS), National Authority for Environmental Licensing (ANLA), Ministry of Public Works, and the Secretariat of State for Vocational Training and Employment (SEFOPE), etc. Some of the previously existing Authorities will need to be verified due to the political change and the possible elimination, like ANAS and others will need to be added.	<ul style="list-style-type: none"> • Of primary political importance to the Project • Giving recommendations and guidance on Timor–Leste regulations, procedures and requirements; • Granting permits and other approvals for the Project, and monitoring and enforcing compliance with local law throughout all stages of the Project life–cycle

Stakeholder Group	Description	Connection to the Project
Municipal administration, Households and businesses	This group includes Municipality, Suco and Aldea authorities. This includes specifically the Dili Municipality Authority, Ermera Municipality Authority, Municipal Planning Agency for Dili Municipality, and Dili Municipality Water and Sanitation Services.	<ul style="list-style-type: none"> • They also hold important baseline data; • They will support the Consultant in the public consultation and participation process; • They will be particularly interested in the environmental and social aspects of the Project, especially its potential impacts on livelihood improvement through the reduction disease burden caused by contaminated water sources as well as the negative impacts mainly occurring during construction.
Affected Sucos, Households and businesses	<ul style="list-style-type: none"> • Sucos, Aldeias in the project area – Suco chiefs and Aldea chiefs acting as representatives of their Communities. • Community based organizations 	<ul style="list-style-type: none"> • Households and businesses that may be directly affected by the Project • Households and businesses that may have expectations regarding development and benefits in their local area • Local organizations representing key interest groups within the Suco • Vulnerable groups that may be disproportionately affected by the Project; their social status may make them harder to engage • Communities/Sucos have limited influence over the Project, but they have the potential to cause delays and disruption, as well as to provide some limited labour and services to it.
Civil society	This group include NGOs (both international and national) involved in the water, sanitation, and hygiene (commonly referred to as 'WASH') sector in Timor–Leste and other NGOs that may have an interest in the Project (e.g., NGOs that support development for women and vulnerable persons as well as Conservation International).	<ul style="list-style-type: none"> • Some NGOs are likely to have a direct interest in the Project, and its social and environmental impacts; they may also have useful data and insight into the Project area and affected Sucos and may be able to become partners to the Project in areas of common interest e.g., educational support
Bilateral and multilateral aid agencies as well as foreign government agencies	International aid organizations, such as UNICEF, the Asian Development Bank and the World Bank as well as Australian Government's Department of Foreign Affairs and Trade, Japanese International Cooperation Agency and USAID, European Investment Bank	<ul style="list-style-type: none"> • They sponsor or implement programs in Timor–Leste. • Special attention to be given to ongoing or planned water and sanitation infrastructure investment project throughout Timor–Leste for coordination of activities

3.2 Stakeholder Registry and Analysis

Based on the groups of stakeholders identified, the preliminary list of Project Stakeholders is mapped out. A preliminary stakeholder registry listing all stakeholders identified to date (December 2023), is provided in Annex A. The database will need to be periodically updated by MCA–TL with support of the Consultants throughout the Project lifetime.

The registry also presents an analysis of the stakeholder, in terms of stakeholder role in the Project, interest and influence, and engagement strategy (e.g., partnership, information gathering, information giving, consultation and dialogue).

The influence (high or low) represents the stakeholder's capacity to influence the Project. Influence (high or low) may derive from their ability to affect decision-making and approvals for the Project, their ability to influence others, their access to information and their role as a key player or partner in the Project. The interest measures the significance of the Project to the stakeholder either because of the Project's direct impact on them or because of a political, financial, social, cultural, scientific or technical interest in the Project.

4 STAKEHOLDER ENGAGEMENT PROGRAM

This section summarizing engagement undertaken for up to now and the issues raised, and then details the engagement to be undertaken during the stages of Project development and implementation.

Further consultations are required and will be planned by NOD for the EIS/EMP and RAP preparation in the next 18 months.

Once the Project design phase and consultations supporting the Detailed Design, the EIS/EMP/RAP and ESIA preparation is complete, the proposed program will assist the MCA-TL, future consultants and BTL managing and facilitating future stakeholder engagements through the various stages of the Project's life cycle.

4.1 Engagement Approach

Deciding the most appropriate approach to engagement for each stakeholder is based on the following considerations:

- The extent to which the stakeholder can influence the Project
- The extent to which the stakeholder can be affected by the Project (positively or negatively)
- The type of stakeholder being engaged as well as the purpose of engagement
- The extent on how many stakeholders (people) need to be reached.

The level of influence of the stakeholder on the project and the extent of impact of the Project on the stakeholder should be considered when deciding the frequency and intensity of engagement. As influence or impact increase, engagement with that stakeholder group should intensify and deepen in terms of the frequency and the intensity of the engagement method used.

Examples of different engagement methods are:

- Correspondence by phone / email / text / instant messaging
- Print media, radio announcements and social media
- One-on-one interviews
- Formal meetings, focus group meetings and public meetings
- Surveys
- Workshops

4.2 Previous consultation

Stakeholder engagement for the Project has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns (February 2020 to March 2022). As part of this stakeholder engagement the MCC ESIA consultant:

- Provided stakeholders with preliminary information regarding the potential project.
- Collected data to support the project deliverables (e.g., Feasibility Study (FS), Preliminary Assessment of Environmental and Social (including gender) Impacts, draft ESIA, Resettlement

Policy Framework (RPF), Social and Gender Assessment) through key informant interviews and focus group discussions.

- Identified and examined existing and potential issues from the perspective of key stakeholders.

The engagement for the Project commenced in February 2020, with kick-off meetings and key informant interviews in Dili. The consultation activities included meetings with the MCC, CDT-TL and Tetra Tech with various stakeholders from government agencies, bilateral and multilateral aid agencies, and civil society. A list of the engagement undertaken is provided in Table 2. The engagement program was put on hold in March 2020 due to the COVID-19 pandemic and recommenced in March 2022.

Table 2: Stakeholder engagement to date (including Kick off meeting period November 2023)

Date	Stakeholder
17-Feb-20	Ministry of Public Works
18-Feb-20	Ministry of Public Works and Housing, National Directorate of Basic Sanitation
18-Feb-20	National Directorate of Water & Sanitation, Japanese International Cooperation Agency
18-Feb-20	Ministry of Public Works and Housing
19-Feb-20	National Authority for Environmental Licensing (ANLA)
20-Feb-20	National Directorate of Land and Property
20-Feb-20	Conservation International
21-Feb-20	National Directorate for Basic Sanitation
21-Feb-20	Inter-ministerial Commission on Expropriation and presentation by Aguas de Portugal
21-Feb-20	National Directorate of Roads, Bridges and Flood Control
24-Feb-20	Aguas de Portugal, Ministry of Public Works and Housing
25-Feb-20	National Directorate of Roads, Bridges and Flood Control
25-Feb-20	Sistema Nacional de Cadastro
25-Feb-20	Timor-Leste's Business Registration and Verification Service
25-Feb-20	Dili's Chefe of Suco and village
27-Feb-20	Aguas de Portugal
27-Feb-20	National Directorate for Basic Sanitation
28-Feb-20	Port of Dili
28-Feb-20	Rede ba Rai Team
28-Feb-20	Pertamina
28-Feb-20	National Development Agency
02-Mar-20	Ministry of Agriculture and Fisheries
03-Mar-20	Sistema Nacional de Cadastro
04-Mar-20	National Directorate of Land and Property
09-Mar-20	Timor-Leste's Business Registration and Verification Service
11-Mar-20	Dili Municipality
11-Mar-20	Suco chiefs
1-Mar-22	Asian Development Bank
3-Mar-22	UNICEF
3-Mar-22	Suco Chief Bebonuk focus group
4-Mar-22	Suco Chief Vila Verde focus group
4-Mar-22	Suco Chief Comoro focus group

Date	Stakeholder
4-Mar-22	Female informal housing area representatives from Suco Vila Verde focus group
4-Mar-22	Female formal housing area representatives from Suco Comoro focus group
4-Mar-22	WaterAid
7 to 18-Mar-22	Female formal business representatives
9-Mar-22	Department of Foreign Affairs and Trade (Australia)
11-Mar-22	Youth representatives focus group
15-Mar-22	Female informal business representatives
24-Mar-22	CODIVA LGBTQIA+ community NGO
30-Mar-22	National Directorate of Housing under the Ministry of Public Works
7-Nov-23	Kick-Off Meeting MCC, MCC DD Consultant, MCA-TL, BTL, Minister of Finance
8-Nov-23	MCC, MCC DD Consultant, MCA-TL, BTL
10-Nov-23	National Authority for Environmental Licensing (ANLA)
13-Nov-23	EnviPro as Local consultant to support with local understanding, culture challenges, etc.
14-Nov-23	MCA-TL, BTL, EnviPro, NOD
15-Nov-23	National Directorate of Land and Property, Director of Cadastral Office
15-Nov-23	Gender Based NGOs (ACbit & Fokupers)
15-Nov-23	Gender Based NGOs (AJAR)
15-Nov-23	National Authority for Environmental Licensing (ANLA), EnviPro, NOD
15-Nov-23	Institute for Statistics
15-Nov-23	Suco Chief Comoro
16-Nov-23	Conservation International
29-Jan-24	AORTIL
30-Jan-24	EDTL
23-Feb-24	Suco Chiefs of Comoro, Vila Verde, Madohi, Motael, Bairo-Pite, Fatu-Hada, Maleuna
27-Feb-24	ANLA
27-Feb-24	Forestry Directorate
04-Mar-24	ANLA
04-Mar-24	National Directorate of Land and Property
05-Mar-24	BTL

As part of the community stakeholder engagement conducted in 2022, there were 69 people who were spoken to in the Suco focus group discussions and business key informant interviews. Of the total, 46% identified as female and 54% male. Of the 69 informants that provided input to this report, their ages ranged from 22 to 73 years of age, and they spoke a range of languages at home including Tetum, Portuguese, Indonesian, Japanese, Mandarin and mother tongues such as Makasae. The informants' household size ranged from 2 to 12 people, with only 7 women (10% of the informants) identifying as the head of their household.

The following Table provides a summary of the main concerns and comments gathered between February 2020 and March 2022.

Table 3: Summary of Stakeholder issues between February 2020 and March 2022

Women and vulnerable groups	Suco chief focus groups	NGO key informants
Water access – How do you access drinking water supplies for your home?		
<p>The majority use bore water (SANYO) to the house and for households that can afford it they buy drinking water. One household reported that they share a bore with three neighbours and fill containers to carry to their house. Some households in the informal areas carry or pump water from the river.</p>	<p>The majority (75%) of residents in Suco's use bore water with only some areas connected to the BTL supply. Most people in the Suco's interviewed rely on bore water because it is more reliable than the BTL supplies. One Suco chief reported <i>'it is very concerning that numbers of population are increasing but the reliability and accessibility to the clean water are decreasing too'</i>.</p>	
Water quality: what can you tell us about the water quality? Have you or your family ever been sick from the water? how bad was this sickness?		
<p>The quality tended to change with the seasons. In the rainy season there were issues with the colour (brown or yellow), salty taste and smell. For those with no job they boil and filter the creek water supplies because they cannot afford to buy water. Other issues related to sand coming through the pipes (creek and bore supplies) to the holding tanks at the house were also reported. Sicknesses related to water quality varied according to its source. For female residents and business owners in the formal settlement areas they did not report sicknesses – <i>'because we consume good water'</i>. However, residents and business owners in the informal areas reported diarrhoea, dengue and malaria related to water supply and clogged waste-water pipes and trash left in the drainage system. In relation to diarrhoea treatment, initially traditional methods are used to treat, and when it is bad they go to the hospital.</p>	<p>The quality of the bore water is dependent upon the depth of the bore. For those who connect to the BTL supply, the quality varies and is very poor in the rainy season (Villa Verde: <i>we suspect the pipe is too old now and should replace to a new one</i>). It was suggested in one of the Suco meetings that the current water pipes have been in place since the Indonesian or even Portuguese time and that the capacity needs to be increased to connect to all the residents. If the new pipes are installed it will <i>'also settle the issue of illegal pipes connected by irresponsible people within our community'</i>.</p>	<p>UNICEF pointed out that residents may not understand the connection between leaking wastewater pipes, full septic tanks, waste disposal and water quality from the boreholes. There is no data on the underground water supplies (quality, quantity, sustainable yield). A key feature of the social and behaviour change program should focus on creating this understanding not only to improve health outcomes through behaviour change, but to also create demand (and willingness to pay) for clean water supplies from BTL.</p>
Water reliability: Are there any issues with the reliability of supply?		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
The main issue with reliability is that piped water is not available to all households and where it is available it is only for certain times of the day. Bore water is used more frequently by all groups (including youth) because it is a more reliable source that can be tapped into from their own land.	The main issue with the government (BTL) supplied water is that there is no schedule for when it will be supplied. Bore water provides a more reliable, but poorer quality supply. Supply varied in the rainy season	Not discussed.
Water supply conflicts		
There were issues related to neighbours refusing to allow water supply pipes to be placed through their own land for other households to access.	Illegal pipes where some people destroy the government pipes and redirect for their sole use. This results in the supply of lean water for those with access and not going to all residents. There was also a report that a business has established a pipe from the supply that was established for the school and its nearby residents.	Not discussed.
Use of nearby water environments: beaches		
Not used for swimming or fishing because there is too much trash in the ocean.	Some swimming and fishing in the Bebonuk beach area.	Flooding creates contaminated surface water flows that affects the creek and beach environments and drinking water quality of underground supplies.
Use of nearby environments: freshwater such as rivers		
Nil reported use of creeks for recreational use. Bathing and showers are done at home.	Concerns that there is not a strong law or regulation to control <i>'our communities to dig their own wells which destroys the environment and quality of land'</i> . Bathing and showers are done at home.	
Toilet facilities at home		
All used private facilities in their home. The design and construction of these varied.	All had private facilities. Most used modern toilets and some used traditional toilet systems (hole in the ground). Most residents have installed a wastewater box (permeable septic tank). The main issues identified with the wastewater box system were construction standards, emptying the tank appropriately when it is full and digging water bores near the toilet system.	Not applicable
Toilet safety issues: using shared facilities in the community or work place		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
<p>The informal female business owners only had access share toilet facilities. These were deemed inaccessible, unsafe, and unhygienic. If they needed to go to the toilet they went home if they could or alternatively went with someone else for security.</p>	<p>Not discussed</p>	<p>There were reports of violence and sexual assault to trans and gender diverse people in public toilets (including at schools) and they were deemed to be unsafe to use. This reduced school attendance which in turn impacts upon their education and employment opportunities in life for trans, gender diverse and people with disabilities.</p>
<p>Design of new shared facilities to improve safety and accessibility.</p>		
<p>To involve the community in the design so that they <i>'may collaborate together'</i>. Other design concerns raised included hygiene and cleanliness of the facility once constructed, to have the water and wastewater properly disposed of, and nothing plastic to be flushed down the toilet.</p>	<p>Not discussed</p>	<p>People with disabilities are unable to access toilets or government buildings as they have not been designed to be universally accessible to people of all abilities. There are no statutory building and plumbing codes to regulate the design of public or private toilet systems. Any new public toilets (including at schools) should include provision for use by people of all abilities, ages and gender identities.</p>
<p>Open defecation or use of canal or waterways</p>		
<p>Not discussed.</p>	<p>Despite all households within each Suco having their own private toilet at their home, open defecation is an ongoing issue within each of the Suco's interviewed. One Chief reported <i>'We have identified those people [who go directly into a canal or waterway], but we can't control – it is related to the capacity of family financial'</i>. The main concern raised was related to where the wastewater is diverted – either into a lake, canal or waterway. The Suco Chiefs understand that this is an issue but are powerless to control. One Suco Chief reported <i>'the issue is that everyone builds their houses depending on their will – we don't have a law to regulate the construction yet and how to regulate the agreement when building a house or to have a design.'</i></p>	<p>Not discussed.</p>
<p>Issues involved in providing sanitation services to households including household barriers to uptake and maintenance of sanitation services.</p>		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
Not discussed.	<ul style="list-style-type: none"> • Need to raise awareness and educate people on sanitation • No building laws to regulate development • Financial because the service is expensive • Waste treatment service can't get to the house where the latrine tank is located (the tube is not long and the pump not strong enough) • Some have no common sense • Local authorities address the complaints, but it continues to happen • People who raise pigs in the resident without proper treatment • No access to private land for maintenance • Reliability and availability of clean water • Proper treatment to the latrine tank • Destroying the water supply pipe and creating illegal connections for their private use • Using the canal or waterway for their wastewater from dishes and laundry • Open defecation in lakes • Those who live in the front create their own wastewater that goes through the houses of people living in the rear. 	<ul style="list-style-type: none"> • Lack of awareness of sanitation and hygiene importance and connection to health and related to that potential community will not value sanitation service. • Maintenance of infrastructure.
Community safety issues associated with sanitation services		
	<ul style="list-style-type: none"> • Using the canal and waterway for their wastewater and rubbish • Land access for the clean water pipes • Odors from full latrine tanks areas. • When new houses are constructed, no space is left for the wastewater and it goes through the neighbour's house 	Access to lots to pump out septic tanks is restricted in some areas by lack of easements and poor lot layout design in informal settlement areas. This lack of access has resulted in some septic tanks being emptied or diverted to drainage canals which in turn spreads through the underground water supply that is the primary water source in most areas.
Opportunities or benefits from improved sanitation services to your Suco		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
Not discussed.	<ul style="list-style-type: none"> • We observe that so far, we don't have strict or proper regulation to apply for controlling safety and healthy environment • Regulate wastewater from people who are living near the sea • Creating building laws • Education and engagement of the community with the government • Maintenance of the canals and waterways • Built drainage 	Not discussed.
Proportion of houses suffer from diarrheal disease in the past 6 months		
Not discussed.	<ul style="list-style-type: none"> • In the rainy season everyone gets diarrhoea due to the quality of the water • When it is dusty people get diarrhoea • Diarrhoea is a common disease that everyone has and it is not serious. • We are concerned about dengue and the number of children that have passed away because of dengue recently. 	Not discussed.
What causes diarrheal disease		
	<ul style="list-style-type: none"> • Poor living conditions or sanitation in the Suco. • Consuming contaminated water. • Canal is filled with rubbish and wastewater from dishes, laundry or toilet. • A child passed away we suspect it was due to diarrhoea because of consuming the contaminated water from the lake. • People raise pigs and dirty waste from the pigs is not cleaned. • Children poop everywhere. 	
Past experience with infrastructure projects: what has been good or bad		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
<p>The past experiences shared included: incomplete projects; dust in the dry and mud from the rain; concerns about the quality of the final works - one example was that in the construction phase of a drainage project the community had to build their own cover over an open drain to create a walkway through the construction area. The main message was to <i>'engage with community so that they co-operate and use the infrastructure correctly'</i>.</p>	<p>All reported that it was critical to engage with the community about the project before it starts and throughout the project stages. Other considerations from their past experience:</p> <ul style="list-style-type: none"> • Take care of the resettlement and compensation • Pay attention to the quality of the works • Control the contractor, select qualified contractors who have discipline and financial capacity to implement the project • Many complaints about works left unfinished without any clarity about project continuation. 	<p>Several issues were raised about the capacity of the GoTL to manage, deliver and maintain the project once built. These included:</p> <ul style="list-style-type: none"> • BTL being poorly funded and under resourced • Lack of building and plumbing regulations to manage growth and impacts of development • Capacity of BTL to maintain <p>Other concerns included:</p> <ul style="list-style-type: none"> • Poor record of construction safety practices, including the death of a child during construction of an infrastructure project (pit was left open and the child fell in and died). • Lack of locally sourced materials such as pipes for the project and bathroom accessories must be imported as there is a lack of manufacturing industries in Timor-Leste. This will create cost and timing implications to the project. • Lack of funding for operations and maintenance once constructed. • There are few construction companies who have the capacity to meet all of the prequalification standards often required to building infrastructure of this magnitude. • In country experience is weak and need to be enhanced.
Recommendations to reduce impacts of the project during construction		
<p>Consultation:</p> <ul style="list-style-type: none"> • To avoid conflicts • So everyone understands the project • So that everyone works together • To discuss compensation if businesses need to close 	<p>All the Suco workshop participants emphasized the importance of engaging with the community and local authorities throughout the project stages particularly in relation to resettlement and compensation.</p> <p>Inclusive engagement (representatives of youth, traditional leaders and elders).</p>	<p>Engagement throughout the project cycle was identified by each of the NGO/government informants. One informant advised <i>'consult, consult and consult with the community about the project'</i>.</p> <p>Create opportunities for youth to be trained in masonry and plumbing skills, building and installing latrines.</p>

Women and vulnerable groups	Suco chief focus groups	NGO key informants
<p>Other recommendations highlighted concerns for safety measures:</p> <ul style="list-style-type: none"> To avoid sickness and death in the community Provide safety equipment for workers including portable toilets for the workers Safety for children including keeping materials secured <p>Provide jobs to local people, give jobs to local people.</p>	<p>'Control the contractors to not abandon their jobs or leave things undone'.</p>	<p>Employ educated youth in the design of the infrastructure such as involving young engineers and the women's engineering group. Discussions about resettlement and compensation need throughout the stages need to be considered. Concern was raised by one informant that the GoTL paid below unit rates compensation and this created conflict.</p>

The main purpose of the stakeholder engagement activities in November 2023 was the introduction of the new team working on the project

4.3 Next steps for the Basic Design, Detailed Design and EIS/ESIA study

After this second initial engagement with stakeholders, to introduce the team, NOD is currently planning the next phase of stakeholder engagement, which on one hand is the regulatory required Stakeholder engagement on the ToR taking place after the approval of the TOR by MCA-TL and ANLA and on the other hand the baseline data collection for the detailed design. Following stakeholder activities will take place in the first quarter of 2024

- Government (formal meetings, workshop): information of all relevant governmental stakeholders to inform them about the next steps of project implementation and to encourage them to support the consultant as much as possible in relation to data collection.
- Municipality, Suco and Aldea (public meetings) in all affected Sucos to inform the community representatives about the project and upcoming surveys. Preparation of PowerPoint Presentations, handouts and brochures. It will be further assess and consulted on how to best reach the majority of the population (social media, print media, radio). The public meetings will be carried out in close cooperation with MCA-TL, the Suco chiefs and Aldeia representatives.
- Public Meeting with the Comoro Suco to identify possibly impacted people by the Ocean outfall construction.
- Small RAP Survey (one-to-one interviews for baseline data collection) at the Ocean Outfall area, if required
- Design survey (short one-to-one interviews baseline data collection) of all houses/properties to be connected to the Wastewater Collection Network.
- Key Informant Interviews (e.g., local authorities, health sector, education sector, business owners, vulnerable people, land ownership and land tenure and other). and Focus Group Discussions (Allows a smaller group of between 8 and 15 people to provide their views and opinions of targeted baseline information e.g. TIP and GSI)

After this set of stakeholder engagement the need for further consultations to inform the ESIA study will be evaluated by NOD during the EIS preparation to inform later Public consultation and Stakeholder engagement for the RAP Survey (Project Affected Person (PAP) census, socio-economic, asset identification and evaluation questionnaire). The preliminary Stakeholder Registry will be kept regularly updated and will be used as the basis for planning stakeholder engagement activities.

Priority will be given to the engagement with the ANLA. Engagement with affected communities will be largely limited to Suco leaders and community representatives as well as the PAP. The community representatives will be also engaged to large parts in information enrolment and data collection activities.

4.4 Ongoing and Future Stakeholder Engagement during Project Implementation

As discussed, this SEP is concerned with engagement undertaken as part of the ESIA study. It is important, however, that the Project Proponent builds on and maintains the relationships that will develop during the ESIA process. Stakeholder engagement will continue to be used as a tool to manage social risk and address key community issues throughout the Project construction by MCA-TL and should be carried out by the Project proponent throughout Project life cycle. This will be achieved by maintaining and strengthening relationships with stakeholders through an ongoing process of information disclosure, consultation and dialogue.

The Project Proponent will continue to develop contacts with a wide range of sectors, including public relations officers, project focal points in the various government line departments, district administration, and agencies, political representatives, civil society, communities, consultants, women and vulnerable groups during the Project's life cycle. The Project Proponent will work with

communities to put in place Community stakeholder liaisons and Community liaison team to keep in regular contacts with them.

As the Project progresses, stakeholders should be kept updated on the following:

- Project impacts
- Management of environmental, social and health issues including results of monitoring
- Employment and economic opportunities
- Activities about to commence in their area of interest (e.g., traffic police, road users, etc.)
- Project schedule and delays
- Changes to the project
- Project progress and outcomes
- Future stages of development – preparation for this and what it will involve

Meetings with key stakeholders will be organized as and when required to share significant Project updates. Most importantly, besides of continuing contacts to institutions, the contact with Project Affected Communities will be carried out in two main ways:

- Direct contacts to affected communities and households, considering also the future preparatory work for the RAP and construction (socio-economic survey of economical affected households)
- Upcoming public meetings in the project area for discussing the ESIA and related issues, as part of the official ESIA procedure

5 GRIEVANCE MECHANISM

A grievance mechanism or process is a cornerstone of international good practice in stakeholder engagement.

A grievance is a concern or complaint from anyone affected by a project about project activities, or perceived project incidents or impacts. Grievances maybe raised at different stages of the project cycle. A grievance mechanism is a process for receiving, evaluating, and addressing project-related grievances from affected communities or other stakeholders.

5.1 Grievance Principles

The Project feedback and grievance mechanism will be developed to align with the World Bank's (WB) Environmental and Social Standard (ESS) 10.. The key requirements are as follows:

- Be appropriate to the scale of impacts and risks presented by the Project
- Be communicated to stakeholders as early as possible in the engagement process
- Show transparency, clarity in procedures, processes
- Be accessible to all affected parties, including vulnerable groups, without cost
- Enable affected persons to raise grievances confidentially without retribution
- Not impede access to judicial or administrative processes
- Address grievances promptly, in a reasonable time frame that prevents grievances from dragging on unresolved, and in a manner that is transparent and understandable to the affected party
- Show any evidence of social and cultural appropriateness of the systems, approaches, and methods adopted
- Have flexibility in decision-making processes, considering the unique and diverse character of grievances
- Record in writing including the date and nature of the complaint, any follow up actions taken, the final decision and how this was communicated to the stakeholder
- Where grievances are unresolved, allow the affected party to redirect the grievance through a formal route to external or neutral experts to address

5.2 Grievance Mechanism Process

Complainants should be able to submit grievances directly to Project Proponent, in writing (including letter or email), over the phone or in person. Individuals will also have the option of raising their grievance with a community representative who can then forward the issue to the Project Proponent on the individual's behalf.

The Project Proponent will record the grievance in a Grievance Register on the day of receipt and a named person within the company will be allocated to it. An acknowledgement will be sent to the complainant within 5 working days of the grievance being received, with an explanation of the process to be undertaken and the expected response period. Each grievance will have a tracking number that will be shared with the complainant.

The Project Proponent will investigate the grievance and formulate an appropriate response that will be shared with the complainant in no more than 4 weeks from receipt of the grievance. The investigation period may necessitate meetings with the complainant or other parties. Grievances that require more urgent attention will be prioritized and if necessary, the response time may be shortened.

The response of the complainant will be recorded to help assess whether the grievance is closed or whether further action is required. Where it has not been possible to resolve the grievance, the grievance will be re-investigated and both the complainant and the Project Proponent will have the right to redirect the grievance to an external body to seek a resolution. The final documentation on the Project Proponent's and the complainant's response will be agreed and signed off by both the company and the individual that submitted the grievance to ensure that all parties are satisfied that the grievance has been resolved.

The Project Proponent will also have the responsibility for giving regular feedback to the complainants about the progress of the grievance process. The monitoring will include the progress of implementation of grievance resolutions and the timeliness of grievance redress, follow up grievances to be sure they are attended to, and document details of complaints received and the progress in solving them. All grievances and the Project Proponent and complainant responses will be recorded in a grievance database to ensure that there is a record of every grievance.

It is recommended that the Project Proponent sets up and maintains a database of all grievances received and the actions taken to resolve them. It will record the following:

- The grievance that has been raised by the complainant
- Date the grievance was submitted
- Name and contact details of the complainant if possible (Note: in some cases, the complainant may wish to submit a grievance anonymously. Such grievances will still be logged and investigated. However, where possible, the complainant will be informed that without contact details it will not be possible to provide information about action taken to resolve the grievance.)
- Information about any proposed corrective action communicated to complainant
- Date of response from the Project Proponent
- Record of any correspondence between the complainant and the Project Proponent
- Whether further action is required
- The date the grievance was closed out

A grievance sheet template and a register is provided in Annex B

6 MONITORING AND REPORTING

6.1 Monitoring

The Project Proponent should maintain a record of all public consultation, disclosure information and grievances collected throughout the Project using the following tools:

- Stakeholder Registry: The Stakeholder Registry (Annex 1) should continue to be used to keep a record of all stakeholders and track consultation activities that have been undertaken.
- Meeting Record: To ensure that an accurate and detailed record of information and views is gathered at every stakeholder meeting, a meeting record (Annex 2) should be saved with the Stakeholder Engagement Plan.
- Commitment Register: A commitment register should be established to record any public commitments made by the Project or public concerns raised about the Project that require action. This register should be in addition to the grievance register (Annex 3).
- Grievance mechanism: A Complaint and Grievance Procedure provides a mechanism for communities and affected parties to raise complaints and grievances and allows the project to respond to and resolve the issues in an appropriate manner.
- Reporting Back to Community: A registry developed under the Grievance Mechanism will be used to capture all grievances (Annex 3). Communications will use the stakeholder consultation forums to also report back to the community on project management feedback, the number of complaints received, reviewed or resolved and finally pending.

Stakeholder engagement should be periodically evaluated by the Project Proponent, assisted by the team responsible for SEP implementation. The effectiveness of consultation activities will be evaluated against the objectives of the SEP. The results and any lessons learned will then be incorporated into further updates of the SEP as the project evolves.

Suggested indicators to be used in the evaluation will include, but not be limited to, the following:

- The extent to which activities were implemented against what was planned in the SEP
- Level of understanding of the Project amongst stakeholders
- Monthly grievances received and how they have been addressed
- Stakeholder perceptions on the efficacy of the grievance mechanism
- Employee awareness of the grievance mechanism process
- Attendance at public meetings

To measure these indicators, the following data will be used:

- Issues and management responses linked to meeting minutes
- Monthly reports
- Feedback from primary stakeholder groups (through interviews with sample of affected people)
- Commitment and concerns registered
- Grievance registered

6.2 Reporting

Reporting is an essential step in building stakeholder trust and promoting understanding between a project and the public. Both internal and external reporting will be required during entire Project's life cycle.

Programming regular reporting to external stakeholders is a key part of ongoing and future stakeholder engagement during Project implementation e.g. quarterly reports to MCA-TL. Reporting should use a combination of the methods and be both formal, through periodic Project information releases that provide an update on Project activities, and informal or ad hoc, through meetings and

one-to-one correspondence with key stakeholders on specific issues. Reporting should provide information on:

- Project updates
- Results of monitoring and evaluation on implementation of environmental and social management measures
- Follow-up actions taken since any previous stakeholder meetings
- Progress update on any public commitments made

7 SEP REVIEW

At a minimum, this document will be reviewed on the following occasions:

- When ongoing stakeholder engagement provides new information or requires a change in strategy or approach
- When Project Proponent and key Project milestones change
- On completion of key stages in the Project
- Following changes in applicable national legislation and/or regulatory requirements for the Project
- Following changes in applicable international standards (IFC Performance Standards)

8 REFERENCES

International Finance Corporation (IFC). 2007. Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets.

International Finance Corporation (IFC). 2012. Performance Standards on Environmental and Social Sustainability.

TetraTech, 2022a. Draft Environmental and Social Impact Assessment. Consulting Services for Preparation of the Feasibility Project, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for Water Disinfection, Sanitation and Drainage Program, Timor–Leste Compact. Prepared for Millennium Challenge Corporation. Order No: 95332420F0044. 2022.

ANNEX 1: STAKEHOLDER REGISTER

Stakeholder Key Informant	Execution Function			Level of		Role in the Project	Engagement Strategy	Medium of Communication	Type of Activity
	Input	Appr.	Monitor	Interest	Influence				
Internal Stakeholders									
MCA-TL	X	X	X	High	High	Forward thinking risk analysis and oversight of mobilization of resources to meet milestones and project deadlines and required approvals processes. Provide technical, operational and policy guidance and approvals for Project deliverables.	Partnership, Participation, Consultation, Push Communication, Pull communication, Negotiations	Formal report and deliverables submissions via email, routine coordination and technical correspondence via Emails, Video /Teleconferencing.	several meetings
Principal External Stakeholders									
Provincial Public Utility Corporations									
BTL	X	X	X	High	High	BTL will supervise the PIC and will take over the operation and maintenance of the Sewage System once constructed and trained in operation.	Partnership, Participation, Consultation, Information Gathering, Dialogue	One-on-one interviews, Formal Meetings, Email, Phone	Meeting
Provincial Agencies									
ANLA	X	X	X	High	High	ANLA serves as the principal authority for managing and regulating environmental quality, including environmental and social impact assessments process.	Information Disclosure and Partnership, Information Gathering, consultation on ESIA procedure.	One-on-one interviews, Formal Meetings, Email, Phone	Meeting with representatives
National Directorate of Land and Property, Director of Cadastral Office	X	X	X	High	High	Understand land allocation system; Will be part of the process. Defines easement regulation where not clear.	Information Disclosure and Partnership, Information Gathering and consultation on any land aspects, dialogue	One-on-one interviews, Formal Meetings, Email, Phone	contacted
Local Government Institutions									
Municipality, Sucos and Aldeias	X			High	High	Engage local stakeholder on the Project site for consultations and data collection	Information Disclosure, Information Gathering, consultation, dialogue	One-on-one interviews, Formal Meetings, Phone	Public meeting,
Community based organizations and associations									
WASH and SWD Group	X			High	Low	Engage local stakeholder on the Project site	Information Gathering, Information Giving, Dialogue	Public Meetings with representatives; Surveys; Posters, pamphlets in local language to disseminate to the whole community; Focus Groups; Workshop.	Public meeting
Youth Groups	X			High	Low				
Gender based Groups	X			High	Low				
Religious based Groups	X			High	Low				
Business and Trade Groups	X			High	Low				
PAPs - Direct and Indirect									
PAPs	X			High	High	Engage local stakeholder on the Project site – direct affected Aldeias/Sucos	Information Gathering, Information Giving, Dialogue	Public meeting, focus groups e.g., for vulnerable people	Public meeting, focus groups, Field survey

ANNEX 2: MEETING REGISTER

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
2023-11-07	Kumar Ranganthan Patrick Davis Shajan Jojrutoj Mariano Carmo Placido Pereira Hergui Livina F.Alves Constâncio Pinto Carlito Armara Beatriz Pereira Almeida Boavida Sidónio Freitas Carlos Dus Reis Peloi João Cardoso Roberto Rodrigues	MCC Senior Director H&S / MCC Due Diligence Engineers H&S / MCC Due Diligence Engineers MCA-TL Vice President MCA-TL WSD Specialist MCA-TL EP Senior Advisor MCA-TL Coordinator Bee-TL Environmental Specialist Ministry of Finance Bee-TL Manager Bee-TL Director Bee-TL Presidente Bee-TL Director Bee-TL	Terry O'Flanagan (NOD Project Director) Sean Cleary (NOD Team Leader) Mafalda Pinto (NOD Deputy Project Manager) Michel Davitt (NOD Director) Maria Panjaitan (NOD Administrator) Ronan McGee (NOD Administrator Project Engineer) Carlos Hurtado (NOD Administrator Project Engineer) Demir Muftuoglu (NOD Lead WWTP) Georgios Kazantzis (NOD Lead Sewer Network) Britta Lammers (NOD/KIMA- ESIA specialist)	The Consultant elaborated on a presentation of the Preliminary Work Plan: <ul style="list-style-type: none"> • Scope and Objectives • Task 1 – Project Initiation • Task 2 – Field Surveys • Task 3 – Basic Design • Task 4 – EIS/EMP and ESIA • Task 5 – Resettlement Action Plan • Task 6 – Contractor PQQ • Preliminary Schedule • Staffing Plan • Potential Impediments Key aspects discussed: <ul style="list-style-type: none"> • When will the Consultant deploy all Key Experts? 3 of the 4 Key Experts are in attendance; the remaining one has already been provided with available data. • Does the Consultant have a timeline for completing the environmental procedures with ANLA? A Meeting is organised for the 10.11.2023. Project has been classified as Category A. • What provisions is the Consultant making for the O&M training? Requirements of the Contract will be implemented, more hands-on training will be provided under the Works Contract. • Is the Consultant experienced in seismic design? Yes • The acquisition of the Pumping Stations sites is almost concluded and that any changes to location and size could prove problematic. • Timelines for implementation of works contracts? The Design-Build Contract to be submitted by mid-December 2023, the Employer's Design the following month • Sea Outfall: how are you ensuring, suitably competent contractors were prequalified and selected? The prequalification assessment matrix will be designed to ensure that previous experience on deep sea outfalls, is essential.
2023-11-10	Salvador S Ximenes	Director Environmental Licensing Unit	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator)	<ul style="list-style-type: none"> • Introduction of the NOD Environmental person in country • Short discussion on the project, explanation of the main aspects.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
	Heider Juvencio Da Costa Amaral Antonio dos Santos	Professional Technician, HR & Procurement	Mafalda Pinto (NOD Deputy Team Leader)	<ul style="list-style-type: none"> • Clarification that both parts are classified category A. • Requirement on two scoping documents and EIS/EMP Documents for Licencing process. • Next step is the development of the Terms of Reference. Agreement on the TOC of the TOR. ToR need to contain the methodology used to assess the different receptors. • Agreement on workshop in relation to EMP implementation after approval of the EIS. • Agreement to introduce the local consultant as soon as EnviPro is on Board
2023-11-14	Carlito Amaral Mariano Carmo Placido Pereira	Bee-TL, Environ. Specialist MCA-TL, Vice President MCA-TL, WSD Specialist	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Quirmado A. Pinto (EnviPro-Team) Marcio da Piedade (TIP Expert) Francisco Neto (EnviPro-ESIA Sp.) Arsenia Da Cruz (Waste Manag. Sp.) Noelia Pereira (EnviPro team) Fedra da Costa (EnviPro team)	<p>Aspects discussed</p> <ol style="list-style-type: none"> 1.1. Introduction of EnviPro to MCA-TL 1.2. Agreement on communication chain 1.3. Update on the RAP aspects for the WWTP 1.4. Explanation by BTL of the project 1.5. Request for any available data in relation to the RAP 1.6. Request for any available data from BTL in relation to the existing water treatment plant and solid waste plant as well as recycling of old oil <p>Issues arising from other Meetings:</p> <ol style="list-style-type: none"> 1.7. Scoping and ToR of the EIS 1.8. Missing public Notification of classification
2023-11-15	Nuncio T.C.P Nestre Alfonso Dn.C Bolo	National Directorate of Land and Property, Director of Cadastral Office Chefe Cadastro	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Fedra da Costa (EnviPro team) Noelia Pereira (EnviPro team) Marcio da Piedade (TIP Expert)	<ul style="list-style-type: none"> • Short introduction • National Directorate of Land and Property requested presence of BTL and MCA in the future meeting, to ensure same information has been communicated among the relevant parties • There is no official cadastral map available at the moment for the drainage network in Dili • National Directorate of Land and Property are currently in discussion with BTL only about the land to be used for the wastewater treatment plant, not about the wastewater network • National Directorate of Land and Property has a draft of the cadastral map for Dili, but it has not being publicized yet • Graves in private property in Dili have not been mapped, hence NOD will need to identify them • They also provide a list of laws that are relevant to land

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
2023-11-15	Judith Ribeiro Conceicao (FOKUPERS) Maria Manuela Leong Pereira (ACbit)	Gender Based NGOs (ACbit & Fokupers)	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Fedra da Costa (EnviPro team) Noelia Pereira (EnviPro team) Marcio da Piedade (TIP Expert)	<ul style="list-style-type: none"> Short introduction FOKUPERS is the first organization in Timor-Leste looking after women's Rights FOKUPERS have four (4) specific program that include: (1) Raising awareness and advocacy; (2) early Childhood education; (3) Victim Assistance/Survivor empowerment (Iconic program); (4) audit (focusing on sanitation program) In relation to sanitation, the public toilet construction has big impact on community, particularly for pregnant and adolescent women There is around 250-300 cases per year of gender-based violence reported Both FOKUPERS and ACbit will provide any additional information required by NOD in the future, that is deemed relevant to the project
2023-11-15	Jose Luis de Olivem	Gender Based NGOs (AJAR) Director	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Fedra da Costa (EnviPro team) Noelia Pereira (EnviPro team) Marcio da Piedade (TIP Expert)	<ul style="list-style-type: none"> Short Introduction AJAR did not have prior context regarding the project and objective of the meeting, hence they were not able to provide much information during the meeting AJAR's work was mainly related to justice related work They will assist NOD in the future, with any information they have that may be relevant to the project
2023-11-15	Antonio Lelo Taci (President of ANLA) Salvador Ximenes (Director of Environmental Licencing) Rafael Do Carmo (Secretary General of ANLA) Anibal (Director of Monitoring and Evaluation)	ANLA	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Francisco Neto (RAP Specialist) Arsenia Da Cruz (Environmental Sp.) Fedra da Costa (EnviPro team)	<ul style="list-style-type: none"> Short Introduction NOD to submit the ToR to ANLA on 19th December 2023 For ANLA, there will be two ESIA documents submitted, as for MCC there will be only one ESIA document submitted TOR "Scoping Document" will include methodology on how to carry out the survey, data collection for primary data and secondary data ANLA is under the Ministry of Tourism and Environment and this Higher Environment Authority i.e. Ministry will approve the document ANLA's organic Structure/organogram is described in the Decree law no.41/2022 President of ANLA suggested to contact Dili Municipality Administration for community structure mapping and Ministry of Strategic Planning and Investment for further consultation for information on urban planning

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> ANLA suggested to organize Public consultation workshop
2023-11-15	Silvino Lopes	Institute for Statistics Director of system and Report	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Arsenia Da Cruz (Environmental Sp.) Fedra da Costa (EnviPro team)	<ul style="list-style-type: none"> Short introduction Social survey and maps availability All census data can be provided by Instituto Nacional Estatistica Timor-Leste-INETL, IP., upon request by email Geo-references are not published yet with specific details on Suco level, therefore can be requested to the INETL, IP. Statistics mapping team INETL, IP is still under the Ministry of Finance administratively, thus might require letter of acknowledgement to the ministry 452 Sucos/villages report are available each Suco and can be requested including infrastructures mapping such as health centre, schools and other facilities Raw data also are available for analysis even in shape file or kmz file NOD can make a list of data and information needed to INETL, IP. And directly to Director Silvino in the Statistics Directorate
2023-11-15	Enrico da Costa de Jesus	Former Suco Chief Comoro	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator)	<ol style="list-style-type: none"> Short introduction Discussion on the current political situation and that a new Suco chief has been elected He will help to support the new Suco Chief to support NOD during the required surveys
2023-11-16	Arimesh Kar Natalino Baboo Mortines	Conservation International Program Manager Deputy Program Manager	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Quirmado A. Pinto (EnviPro team) Fedra da Costa (EnviPro team)	<ul style="list-style-type: none"> Short introduction CI-TL's focus in TL is on the protected area and biodiversity There are currently 44 terrestrial protected areas and 23 marine protected areas Some of the protected areas are currently being occupied by the local community
2024-01-29		APOINTIL	Sean Cleary (NOD) Mathew Holmes (NOD) Admas Mekonner (NOD)	<ul style="list-style-type: none"> Short introduction Outline of the scope and Timing Apointil advised that DNTM will be the primary governmental agency dealing with this matter Consultant will provide Coordinates for the undersee corridor to APOINTIL APOINTIL will advice on limitations on design, construction and operation

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> NOD will provide the Feasibility report on the Ocean outfall It was agreed that regular meetings will take place to keep the information flow going It was noted that the Harbourmasters should be invited to the next meeting
2024-01-30	XXisto Caetano Ximines Paulo Da Silva Gilberto C. De. Jesus	EDTJ PCE DPSE	Sean Cleary(NOD) Mathew Holmes (NOD) Georgeos Kazantzis (NOD) Carlos Hurtado (NOD) Placido da Silva (MCA_TL)	<ul style="list-style-type: none"> Short introduction Outline of the scope and proposed sit locations and preliminary electric load estimates Query related EDTL's requirements for the application of ne connections for project components Final Version of the Basic Design should be provided to EDTL EDTL will provide a quotation Power supply regulations Sub Stations
2024-02-23	Mr. Eligio J.S. Marcal Mr. Abdul M. Arrnahado Mr. Serafin Masado Mr. Martinho E.D.S. Mr. Bernadino da Costa.F Mr. Jacob Tilman Soares	MCA MCC BTL EP Suco Comoro Suco Vila-Verde Suco Bebonuk Aldeia Chief, Suco Bebonuk Suco Madohi Representative of Suco Motael Representative Suco Bairo-Pite Representative Suco Fatu-Hada Suco Manleuna Representative o Ministry of Finance.	Mr. Constancio Pinto (MCA-TL) Fedra Costa (Environmental Assistant) Bendita Pereira (Social/Gender Sp.) Marciano Ximenes (Environmental Sp.) Francisco Neto (RAP Sp.)	<ul style="list-style-type: none"> Introduction Power Point Presentation to introduce the project and to explain the large technical survey All Suco chiefs affirmed their support to the project <p>Mr. Eligio J.S. Marcal: Fear of mobilization and economic difficulties during construction period.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> provide maps outlining the construction timeline for each Suco to have early communication and ease movement in their communities information should be shared to community members regarding the project or census by means of social media, radio (highly recommended), brochure/pamphlet/poster, and TV. <p>Mr. Martinho E.D.S. (Aldeia Chief, Suco Bebonuk): Bebonuk community will be most affected by this project, specifically Lekin Satu sub-village.</p> <p>Concerns</p> <ul style="list-style-type: none"> some communities will cooperate throughout the project, others may not, particularly those whose properties will be impacted.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<p>Suggestions</p> <ul style="list-style-type: none"> proper mechanism to compensate properties affected by WWTP is required recruitment of enumerators shall include youth members from each affected Sucos as they know the area better. <p>Mr. Bernadino da Costa.F (Suco Chiefs Madohi): the communities are informed, it is time to implement the project.</p> <p>Concerns</p> <ul style="list-style-type: none"> The environment That the GOTL is not listening to the communities <p>Suggestions</p> <ul style="list-style-type: none"> Facilitation of the dissemination of information to the communities as long as brochures are prepared and distributed to them. Land acquisition: follow those references of previous project <p>Mr. Jacob Tilman Soares (Manleuna Suco Chief): Three meetings since 2019 and nothing has moved forward</p> <p>Concerns</p> <ul style="list-style-type: none"> Dili is suffering from flooding there is no drainages system. When that happened, disease also quickly spread due to poor sanitation. <p>Mr. Serafin Masado (Suco chief of Bebonuk): the main problem is the land acquisition for the project especially in his community.</p> <p>Concerns:</p> <ul style="list-style-type: none"> Some families owned the land but they are not living in Timor–Leste. Some bought the land during the time Bebonuk was still part of Suco Comoro. At present, BTL has not been able to identify these owners. Environmental problems associated with the WWTP e.g. odor to the surroundings . <p>Suggestions</p>

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> • MCA-TL should work closely with the central government to address the compensation approach to those community members who have agreed to relocate. • The consultant needs to prepare detailed engineering design when introducing/ talking to the community. <p>Several questions in relation to minimization of impacts and risk to the people and the environment</p> <p>Mr. Abdul Mancoli Arrnahado (suco chief of Vila Verde): Congratulates GOTL for signing the agreement with the American government.</p> <ul style="list-style-type: none"> • Vila Verde has 9 sub-villages (Aldeia) and many of his community members live up on the hills. Will they be part of this project as well? • He is willing to mediate discussions. <p>Delegado from Motael recommended that this project must be carried out well. It is important to anticipate for mitigating the negative environmental impacts to people and nature. The government and companies must work together with local authorities to engage and recruit young Timorese to work together.</p> <p>Mr. Marcio informs that this discussion will focus mainly on the survey part. However, team will try our best to respond to other concerns as well.</p> <ul style="list-style-type: none"> • The consultant kindly asked any Sucos to volunteer to be part of the pilot survey that will take place soon. Four sucos agreed to be part for the pilot survey. They are Motael, Vila-Verde, Madohi and Bebonuk <p>Mr. Francisco informed that the concerns about environmental impact raised by the Suco chiefs will be addressed in stages forward:</p> <ul style="list-style-type: none"> • through meetings and informative brochures distributed to the communities and stakeholders as well as by public consultations on the ToR, EIS for Environmental Licensing. • The communities will be given access to the ToR, comments will be discussed, addressed and included the final ToR. <p>Mr. Constancio Pinto addressed the concerns of the Suco Chiefs:.</p>

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> • The MCA, MCC and GOTL will conduct most rapid implementation, as we work on a timeline set by MCC. • We need data and information to help implement the project and require your full support and cooperation along the way by facilitating and providing us the data we may need such as with the upcoming survey. • MCC has a strict timeline of 5 years for this project. Therefore, we can't afford any delay. • The project will create temporary job opportunities to the locals. • Odor will be minimum and that the direction of the wind will blow to the direction of the sea. • Concern in regards to equipment failure is valid, however this particular project will use state-of-the-art technology and hence there is no need to worry about equipment failure or even explosion. • Communities in Suco Vila-Verde who live up on the hill, will not be part of the current project. They will however be included at the later stage after the conclusion of this project. • Survey is very important and local authorities must actively support it. • Enumerators will also come from the 11 Sucos. • Thanks for the willingness of the Suco Chiefs for this project.
2024-02-27	Salvador S. Ximenes Anibal A. Soares	Director of Environmental Licencing ANLA Director of Monitoring and Evaluation ANLA	Julião de Jesus (NOD) Marciano B. Ximenes (EnviPro) Francisco Neto (EnviPro) Fedra da Costa (-EnviPro)	<ul style="list-style-type: none"> • Short introduction • Objective: The mechanisms of TOR submission and Public Consultation • Main Challenge: Approval of TOR and conduct Public Consultation. While timeline is defined clearly within the law, however, expect some delay along the way. • Submission of the ToR together with the Public Notice • ANLA suggests that public notice may be published through several ways, as websites, social media platform, directly to Chefe Sucos/Aldeia, and through BTL and MCA/MCC websites. Apart of that, ANLA will also publish via their Facebook page. • Comments on ToRs shall be submitted to ANLA for track record. • Information from the census will contribute to the design phase, can we conduct the census prior to the approval of the ToR? Yes, that is totally fine.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> Who will be organizing the PCs? According to the Decree Law 05/2011 (39/2022), the proponent will organize both PCs in coordination with ANLA. For PC on ToR, since there are 11 affected Sucos, we are planning to group 2 Sucos for one meeting. ANLA will advice based on the information on the ToR. The Authority needs to verify the impact radius from both the WWTP and the network lines so to include not only the 11 proposed sucos. Director Salvador's highlight that to proceed with the census might be a good approach so to identify challenges in regards to how to distribute pipes in people's house especially in the areas that are disorganized. Mr. Anibal informed that it is very important for consultant to discuss with ANLA on the list of the participants who are involved in the public consultation. This is done to make sure that we receive relevant inputs from the relevant stakeholders. Mr. Anibal pointed out that there should be a proper mechanism to minimize impacts from construction of the network lines which can disrupts movements and businesses. Mr. Anibal recommended that proponent should make sure to involve relevant ministries, such as Public Works, Land & Properties, etc...
2024-02-27	Pedro Pinto	Diretor Nacional de Floresta	Marciano Borges Ximenes (EnviPro) Bendita Ximenes (EnviPro)	<ul style="list-style-type: none"> Short introduction Information regarding the pump station # 07 that located in the protected area Main Challenge: The pump station # 07 close to runway extension and the sea animals surrounding the proposed location. Can we place Pump stations #07 in the Tasi Tolu Protected area? There is no problem if only the pump station is placed there, there was already and Feasibility study conducted by the project company. The most important thing is how the project proponent conducts mitigation and gives solution to the environmental impact. This area is close to the President Nicolao Lobato International Airport Expansion project the Government already planned it, we suggest you to confirm at the Air Navigation Administration Timor-Leste (ANATL).

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> • Communicate with the ANPM, I.P./IGTL, I.P. in case if there is any indication of oil or mineral. Because the temperature and pressure in the ground is different. Wrong drilling will cause something undesirable/unexpected will happen. • There are few areas that categorized as protected area in Dili Municipality including Lagoa Tasi Tolu, Cristo Rei, Manucoco Mount in Atauro, Aquatic Nature Reserve in Atauro, Mangrove Area in Hera and Metinaro. Can you provide us the updated location of the protected area in the Dili Municipality? • The Director said that the updating of protected area still in draft. And the Director will looking for it and will share to project proponent when the map is available. • The sewer line/connection must pay attention during the construction in order to prevent the leaking of the sewage when connecting household this can lead to soil contamination. • In the WWTP area, pay attention to spotlights because they can interfere with navigation if faced with aircraft comes from the east or west of airport during take-off and arrival. And in the evening do not expose spotlights to the sea because the light can damage the marine ecosystem. • Plant more trees in the WWTP area. We are not only focus on the plant itself but we also improve the beauty of the beach because the plant located close to the beach. • Raises the awareness of the community when dispose the solid waste so cannot obstruct or stuck in the pipes. • Fully involvement of the Sucos and Aldeias Chiefs to share the information regarding the project activity. • We need the primary data during preparation of documents, the project proponents use mainly secondary data in elaborating their documents. • The National Directorate for Forestry will be involve in Evaluation Committee to assess and analyse the EIS and EMP documents, that is the reason we stick on primary data.
2024-03-04	Salvador S. Ximenes	Diretor da Unidade de Licenciamento Ambiental/ANLA	Marciano Borges Ximenes (EnviPro) Fedra da Costa (EnviPro)	Consultation on preparation and progress for TOR Submission and Public Consultation.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
			Moises Gonçalves Soares (EnviPro)	<ul style="list-style-type: none"> • Is it correct that the TORs must be submitted at the same time as the public notice and that all documents must be published on the BTL/MCA-TL website and should be available in hard copy at the Suco offices? • After the TOR submitted, the project proponent in coordination with ANLA can publish the public notice via BTL-MCA-TL websites and the hardcopy can be placed in Sucos office especially Bebonuk Suco because this Suco most affected by the project. • As requested at the last meeting, which social media are recommended? TV, newspapers, Facebook etc.? We would like to select a maximum of two platforms in addition to BTL's website, is that acceptable? • Be'e TL website is already sufficient. From ANLA, we highly requested the talk show through TV so everyone can easily access. We recommended the project proponent can invite the president of BTL and the president of ANLA and also NOD-EnviPro to share the information and knowledge regarding this project so people can understand and aware to this project. • When should we schedule the public consultation, 7 days after submission of the ToR or later? • The public consultations must not take place before 7 days after the documents has been made available to public. Two weeks before the date of public consultation, the project proponent can announce the through the radio or TV and also placed it in the sucos office. • We have planned to invite the stakeholders to participate in the public consultation, such as; ANLA, MCA, MCC, BTL, Chief of Dili Municipality, Health Sector, Cultural Sector, Forest Sector (Protected Area), Infrastructure Sector, and Land Property, Chief of Administrative Post. • We advised your part to send us the soft copy of participants list first, and we will decide whether we approve it or we can suggest adding the stakeholders. • There are 11 sucos with its aldeias that will affected by the project, How can we organize this sucos, aldeia and community to participate in the public consultation?

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> We suggest that the Suco Chief decide it in selecting their own community, as they know well their community life, but for the amount of the community that will participate you can decide it. This would be in total 6 public consultations meeting of 11 sucos, would this be accepted by ANLA? The Director said that it is depend on project proponent. Can we include the ANLA email in the public notice for comments and suggestions by public? Please ask ANLA for an email to be included in the public notice for comments and suggestions Yes, just put the official email of ANLA. And public notice must be signed by the President of BTL because the project proponent.
2024-03-04	Paulino da Cruz	National Director of Mapping, Land and Property	Marciano Borges Ximenes (EnviPro) Fedra da Costa (EnviPro) Moises Gonçalves Soares (EnviPro)	<ul style="list-style-type: none"> Short introduction Confirmation of mapping for Dili Municipality, Sucos and Aldeias as well as the status of the land affected for the Bebonuk Suco. We want to requested for the map of Dili Municipality, Suco and Aldeia boundaries? For Dili and Suco maps can be accessed through the website; https://mj.gov.tl/ However, for Aldeias a map cannot be provide yet. In the future we want to make it complete and available in the website so the community just access in the website and no need to come to the office. Can you provide us with the land status for the development of the WWTP project? Currently, this information is on the preliminary data so we cannot provide it.




ANNEX 3: GRIEVANCE RECORD SHEET TEMPLATE

Nature of Submission	Personal: <input type="checkbox"/>	Letter: <input type="checkbox"/>	Phone: <input type="checkbox"/>	E-mail: <input type="checkbox"/>				
Reference / Complaint number	e.g. 001							
Full Name								
Sex								
Age								
Phone number								
Address								
Type of Grievance	Noise	Dust	Environ	Property damage	Conduct	H&S	Employment	Other (specify)
Grievance Description								
Date of visit with complainant:								
Photograph taken or supporting documents								
Name & Signature of Contractor or consultant								
Nature of response	Personal: <input type="checkbox"/>	Letter: <input type="checkbox"/>	Phone: <input type="checkbox"/>	E-mail: <input type="checkbox"/>				
Response								
Date								
Next steps								
Grievance closure	Date:		Signature:					

ANNEX 4: EXAMPLE FOR A GRIEVANCE REGISTER

#	Suco/Aldea	Name, contact and ID of grieved Individual	Residential Address	Gender		Brief Background and status of Grievance (including picture)	Date grievance occurred	Date grievance received	Actions Required to Resolve	Name of Person responsible for resolving	Status of Grievance and Date of resolution	Date Resolved/Closure of Grievance	If not resolved, Why?
				M	F								
1	XXXXX	XXXX (contact attached on GRS 001)	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX	X		Refer to Grievance Record Sheet 001	XX.XX.XXX X	13.04.2020	Repair of cut power cable		Closed – 13/04/2020	13.04.2020	
2	XXXX	XXXX (contact attached on GRS 002)	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX	X		Refer to Grievance Record Sheet 002	27.04.2020	27.04.2020	Pull stockpiled excavated material within the 36m RoW		Closed – 03/06/2020	03.06.2020	
3	XXX	XXX (contact attached on GRS 003)	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX	X		Refer to Grievance Record Sheet 003	28.04.2020	28.04.2020	Create temporary water passage on the creek		Closed – 28/04/2020	28.04.2020	

ANNEX 5: PICTURES

	<p>Kick-off Meeting Date :07.11.2023</p>
	<p>Short introduction of NOD to Enrico da Costa de Jesus the former Suco Chief of Comoro. Date 15.11.2023</p>
	<p>Meeting with ACbit & Fokupers Date 15.11.2023</p>
	<p>Meeting with AJAR Date 15.11.2023</p>



Meeting with ANLA
Date 15.11.2023



Meeting with Institute for
Statistics Director of system
and Report
Date 15.11.2023



Meeting with CI-TL
Date 16.11.2023



Meeting with Land and Property
Date: 15.11.2023



MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA



TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

TERMS OF REFERENCE FOR ENVIRONMENTAL IMPACT STATEMENT WASTE WATER COLLECTION SYSTEM (PHASE 2)



MCA – TIMOR-LESTE

TIMOR-LEST WATER, SANITATION AND DRAINAGE PROJECT

TERMS OF REFERENCE FOR ENVIRONMENTAL IMPACT STATEMENT WASTE WATER COLLECTION SYSTEM (PHASE 2)

REF: 20960.240301.NOD.REP.016

Nicholas O’Dwyer Ltd
Consulting Engineers
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Dublin

March 2024

PROJECT NO. 20960					
Revision	Reason for Revision	Prepared by	Reviewed by	Approved by	Issue Date
-	First Issue	B. Lammers	C. Young	T. O’Flanagan	22 Jan 2024
A	Client’s comments	B. Lammers	C. Young	T. O’Flanagan	23 Feb 2024
B	Client’s comments	B. Lammers M. Holmes	M. Hickey	T. O’Flanagan	06 Mar 2024
C					
D					

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ANNEX 2. PROJECT CLASSIFICATION DOCUMENT

ANNEX 3: STAKEHOLDER ENGAGEMENT PLAN

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym/ Abbreviation	Definition
ADB	Asian Development Bank
ANLA	Autoridade Nacional de Licenciamento Ambiental
BFP	Belt Filter Press
BOD	Biochemical Oxygen Demand
BTL	BTL, E.P Bee Timor-Leste Empresa Publica
CDT	Compact Development Team
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DAF	Design Average Flow
DBR	Disease Burden Reduction
DDIUP	Dili Drainage Infrastructure Upgrading Project
DL	Decree Law
E&S	Environmental and Social
EIF	Entry into Force
EIS	Environmental Impact Statement
ESIA	Environmental and Social Impact Assessment
EMP	Environmental Management Plan
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
CED	Compact End Date
CESMP	Contractor's Environmental and Social Management Plan
ESCAP	Environmental and Social Commission for Asia and the Pacific
FIDIC	International Federation of Consulting Engineers (acronym in French)
FS	Feasibility Study
FSC	Feasibility Study Consultant
GAC	Granular Activated Carbon
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GoTL	Government of Timor-Leste
ha	Hectare
HSMP	Health and Safety Management Plan
HDPE	High Density Polyethylene
HEC-RAS	Hydrologic Engineering Center's River Analysis System
HSE	Health, Safety, and Environmental
IDR	Investment Decision Report
IFC	International Finance Corporation
IFC PS	International Finance Corporation Performance Standard
IFC ESBS	International Finance Corporation Environmental & Social Baseline Study
ILO	International Labor Organization
ITR	Independent Technical Review
IUCN	International Union for Conservation of Nature
kg	Kilogram
km	Kilometre
l	Liter

Acronym/ Abbreviation	Definition
LOE	Level of Effort
m	Meter
m ²	Square meter
m ³	Cubic meter
m ³ /day	Meters cubed (or cubic meters) per day
MCA-TL	Millennium Challenge Account-Timor-Leste
MCC	Millennium Challenge Corporation
MCDA	Multi Criteria Decision Analysis
mg/l	Milligrams per litre
NAG	Net acid generating
NATA	National Association of Testing Authorities (Australia)
NOD	Nicholas O'Dwyer, Ltd.
OSHG	On-site Sodium Hypochlorite Generation
NGO	Non-government organization
PESA	Preliminary Environmental and Social Assessment
PAP	Project-Affected Person
ppm	Parts per million
ppt	Parts per thousand
PVC	Polyvinyl chloride
QA	Quality Assurance
QC	Quality Control
RAP	Resettlement Action Plan
RFI	Request for Information
RPF	Resettlement Policy Framework
SWMM	Storm Water Management Model
t	Tonne (metric ton)
TIP	Trafficking in Persons
TDS	Total dissolved solids
ToR	Terms of Reference
TSS	Total suspended solids
UASB	Upflow anaerobic sludge blanket
UN	United Nations
USCS	Unified Soil Classification System
WHO	World Health Organization
WSD	Water, Sanitation and Drainage
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

1.1 Purpose of the Terms of Reference

MCA-TL has appointed a Consultant, Nicholas O'Dwyer Consulting Engineers, to undertake the Preparation of Designs, Tender Documents, Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for the WSD Project. This document was prepared pursuant to National Environmental Licensing Authority, I.P. (ANLA) regulations and consultation and contains the Terms of Reference (ToR) for the Environmental Impact Statement (EIS) for the waste water collection system. This document provides the Government of Timor-Leste (GoTL) and ANLA with a project description, study area delineation, a summary of existing and missing baseline data, a summary of studies completed to date, and a preliminary discussion of impacts.

The Project is for the **Water, Sanitation, and Drainage** (WSD) Project of the Millennium Challenge Corporation (MCC) Compact between the United States of America acting through the MCC and the GoTL, which was executed in July 2022 (MCC, 2022), after a three-year Compact Development process. Through the Compact, GoTL has established the Millennium Challenge Account-Timor-Leste (MCA-TL), which is the Timor-Leste government entity that executes and manages the Compact.

This ToR provides:

- Project background, context, and purpose;
- Project description;
- Summary of applicable laws, legislation, regulations and policies of Timor-Leste as well as MCC and other applicable international standards;
- The methodology for additional studies required to fill baseline data gaps;
- Enumeration of activities that may affect receptors;
- Discussion of alternatives, including "do nothing"/"no action";
- Preliminary enumeration and assessment of impacts and benefits, including those impacts that have been previously identified and documented;
- Impact Assessment Methodology; and
- Discussion of the approach to avoidance, minimization and mitigation of significant impacts.

2 BACKGROUND INFORMATION

2.1 Objective and Scope of Program

The MCC Compact defined the objective of the WSD project as “reduce faecal pathogens in piped and stored drinking water and groundwater” (MCC, 2022). To this end, MCC and GoTL determined that a wastewater collection and treatment system, serving key areas of Dili would;

- i. largely eliminate the source of contamination to surface water and groundwater currently caused by on-site sanitation systems and to some extent, other contributing practices and
- ii. result in a reduction in water-borne disease and other impacts of poor sanitation.

In addition, the Compact will provide an On-site Sodium Hypochlorite Generation (OSHG) Facility that will provide bulk disinfectant to ensure appropriate treatment both for ocean disposal of wastewater effluent and for the Dili water distribution system (proposed under a separate project).

2.1.1 Larger Context

The WSD Project is one part of the MCC Compact program and is the result of approximately three years of negotiations, economic studies, policy studies, scoping, alternatives analysis, engineering studies, environmental studies, and social studies (pre-Compact) conducted in consultation and cooperation with the GoTL. The MCC Compact is a fixed, five-year period that begins at Entry into Force (EIF) of the Compact. This work is being conducted prior to EIF to ensure that the construction can be completed within the five-year Compact term.

The MCC Compact is also part of a wider national program that includes other funding sources and other project proponents that are not constrained by the MCC Compact funding and schedule. As part of the Compact, the GoTL established a new government agency: MCA-TL which is responsible for executing and managing the Compact.

The Compact program is designed to achieve its objective of health and skills improvement in Timor-Leste through two primary projects:

- Water, Sanitation, and Drainage (WSD) Project and
- Teaching and Leading the Next Generation of Timorese (TALENT) Project.

Figure 2-1 shows the Compact Program. This ToR addresses the WSD Project, Sanitation Activity, which has been further subdivided into two phases that have concurrent schedules:

- **Waster Water Treatment Plant Phase 1:** includes the WWTP, ocean outfall and an OSHG facility, which is part of the WWTP site and will also service the Water Disinfection Activity, which is a separate Compact workstream.
- **Waste Water Collection System Phase 2:** includes the sewer network, which comprises a conventional sewer system, a simplified gravity sewer system, pump stations, and associated drainage activities. House and business connections are also assessed in the EIS as well as if required toilet facilities and the decommissioning / bypassing of existing septic tanks.

The division into the two phases is required because;

- The tendering for the WWTP construction must be begin earlier than the sewers to ensure both are complete before the Compact End Date (CED);
- The impact assessment of the sewer network can only begin once the designs are further advanced, which has a longer schedule due to 1) the size of the service area and 2) the schedule of the studies needed before design; and
- Because of the two points above, ANLA requires two separate environmental licenses.



Figure 2-1. Scope of EISs relative to MCC Compact

2.1.2 Previous studies and documentation

Since initiation of the Compact development, many studies have been completed including field studies, desktop studies, engineering studies, environmental studies, social studies and economic studies. Building on the overall program documentation, the primary investigations and reports include:

Consulting Services for Preparation of the Feasibility Study, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for a Water Disinfection, Sanitation and Drainage Program, Tetra Tech, June 2022. This report includes the following annexes and companion reports:

- Annex A: Disinfection Feasibility Report - Tetra Tech, June 2022
- Annex B: Wastewater Treatment Plant (WWTP) Feasibility
- Annex C: Ocean Outfall Feasibility Report
- Annex D: Wastewater Collection System Feasibility Report
- Annex E: Key Conventional Gravity Sewer Feasibility Drawings
- Annex F: Cost Estimate Report
- Annex G: Risk Register
- Annex H: Monitoring & Evaluation Report
- Draft Environmental and Social Impact Assessment
- Resettlement Policy Framework (RPF)
- Social and Gender Assessment.

Data studies and resources that informed this report include:

- Bathymetric Surveys
- Oceanic Data – Monthly Reports
- Sewer Network GIS Data

- Dili Contour Lines
- Cadastral Map Drawings
- CORMIX hydraulic model files
- Satellite Imagery
- Implementation of the Dili Sanitation and Drainage Masterplan – Phase 2 D8-D11, D17 & D19 reports and drawings
- Dili Collection System Hydraulic Model
- Operation & Maintenance Costs
- WWTP Hydraulic Profile Drawings
- WWTP Boundary Survey Drawings

Draft Final Report - *Consulting Services for Detailed Engineering Design of Dili Urban Water Supply*, Donsung Engineering, December 2021. This report includes the following annexes:

- *Initial Environmental Examination* – Timor-Leste Dili West Water Supply Project. Ministry of Public Works for ADB
- *Resettlement Action Plan* – Timor-Leste Dili West Water Supply Project. Ministry of Public Works for ADB
- *Stakeholder Engagement Plan* – Timor-Leste Dili West Water Supply Project. Ministry of Public Works for ADB

2.1.3 Context of this Scope

The people of Timor-Leste have a high incidence of waterborne illness driven by poor sanitation. High rates of disease, coupled with a growing urban population, further highlight the need for improved wastewater management in Timor-Leste.

The **primary** objective of the WSD Project is to reduce fecal pathogens in piped and stored drinking water, and groundwater. The project proposes to achieve this by providing access to a wastewater collection, treatment and disposal system to the majority of buildings in Area 106 (population 106,165) and the priority expansion areas of: Hallibur, Lorio, Moris Ba Dame, Terra Santa, Golgota, and 12 de Outubro. Note: these priority expansion areas will only be developed if funding is available. They are, however, included in the EISs to ensure that an environmental license is available, should funding become available.

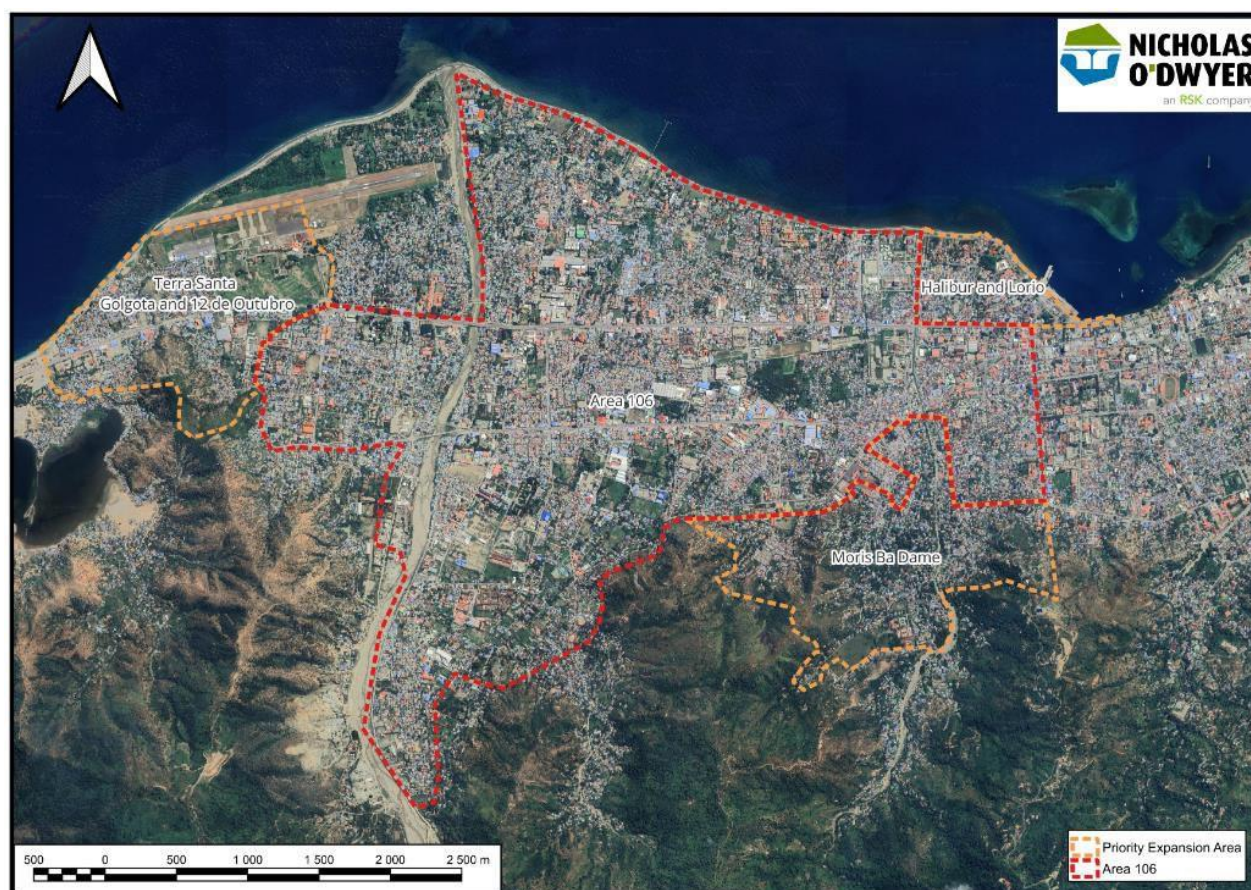


Figure 2-2: Area 106 and three priority expansion areas

In doing so, the project has a number of **secondary** objectives including:

- Improved public health due to reduced incidents of waterborne disease;
- Overall improvement in living conditions including, but not limited to **reducing**: waste, odour, contamination of surface water and groundwater, and mosquito breeding habitat;
- Protection of water supplies from contamination from pit latrines;
- Protection of the environment through the safe discharge of treated wastewater and safe management of process sludge; and
- Benefit to local economy through job creation and increase in economic activity because of improved conditions from the wastewater management amenity.

This ToR is for the EIS and EMP for **Phase 1** of the WSD Project, Sanitation Activity. Originally, the Project was to be done as a single EIS that included the 1) WWTP, 2) OSHG facility, 3) ocean outfall, 4) pump stations, 5) wastewater collection network, 6) building connections, and 7) associated drainage. During consultation with MCA-TL, it was decided that the Project needed to be done in two phases because of schedule constraints driven by the strict five-year Compact limit (beginning from the Entry into Force (EIF) date).

The current construction contracting plan has two components that will be contracted according to International Federation of Consulting Engineers (FIDIC) Design-Build (Yellow Book) Contract and Design-Bid-Build (Red Book) Contract. The Consultants services contract will produce design documentation sufficient for construction contract bidders to respond to tenders. The two Phases are:

- **Phase 1 (FIDIC Yellow Book)**. Wastewater treatment plant, on-site sodium hypochlorite generation facility, and ocean outfall, and

- **Phase 2 (FIDIC Red Book).** Wastewater collection network (sewers, pump stations, building connections, and associated drainage).

As the tendering and construction of Phase 1 must start earlier than Phase 2, the Project Proponent, Bee Timor-Leste, Empresa Publica (BTL) has submitted two separate project documents to ANLA. As a result, ANLA now requires a separate ToR, EIS, EMP and a separate approval process for each phase. However, these two Phases are not separate projects and are also connected to other overall program activities. It is important to retain this context of the Phasing throughout this process because:

- The severing of the Project into two EISs/EMPs (and two RAPs) is necessary for administrative purposes but not indicative of separate physical projects;
- Communicating the separate Phases as separate projects could confuse stakeholders and the community at large; and
- Severing a large project into small units is against International Best Practices including International Finance Corporation (IFC) Performance Standard 1 (IFC PS1).

Table 2-1 below summarizes the constructed elements of the overall project and Figure 2-1 shows the overall program and responsibilities.

It will be important during stakeholder engagement and community communications to clearly describe how this Phase and the two EISs relate to the overall program to avoid misunderstandings about the limitations of this Phase.

Table 2-1: Construction components of the overall program and scope of the Phase 1 and Phase 2

Construction Element	Sanitation Activity Phase 1 EIS (FIDIC Yellow Book)	Sanitation Activity Phase 2 EIS (FIDIC Red Book)	Other MCC funded workstreams
WWTP	Yes		
Ocean outfall	Yes		
Pump Stations		Yes	
Collection network		Yes	
OSHG facility	Yes		Yes
Individual building connections to wastewater system		Assessment and discussion in EIS, construction implementation included in the Phase 2 construction, but funded separately from MCC Compact.	
Water disinfection	On-site Sodium hypochlorite (disinfectant) facility and delivery tanker trucks		
Associated drainage	Partial	Yes	
Household water and hygiene			Separate process

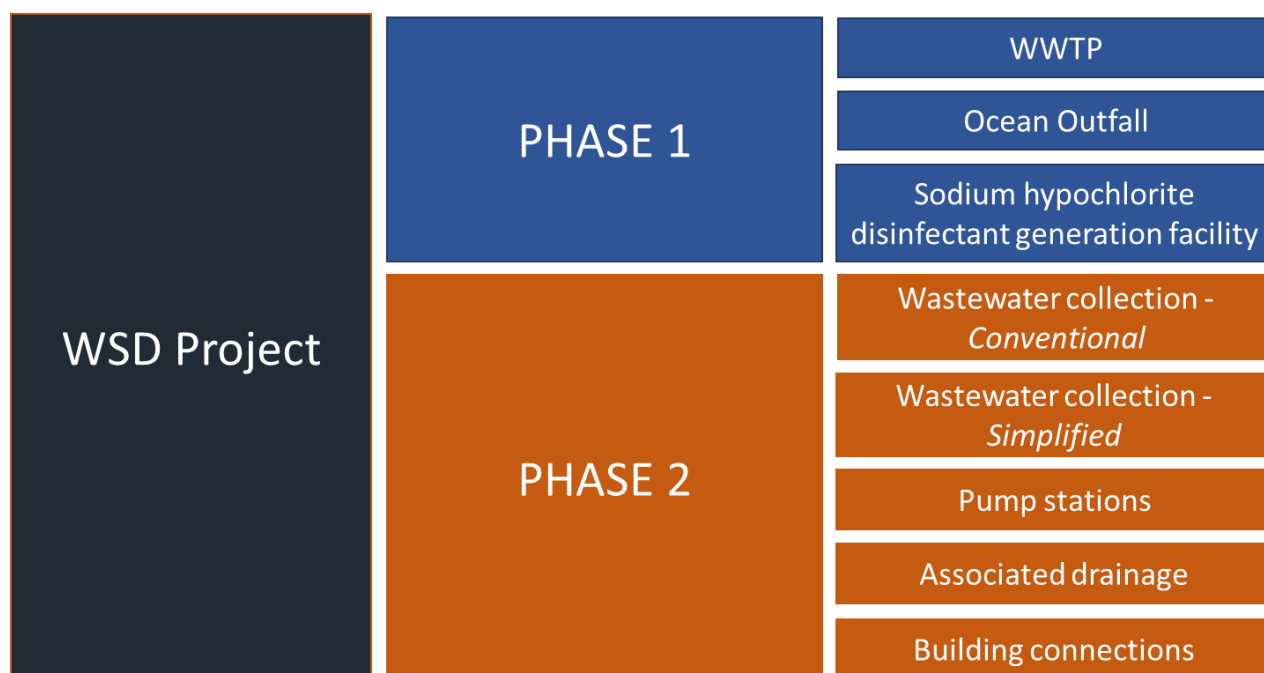


Figure 2-3: WSD Project elements

2.1.4 Phase 2

This portion of the WSD Project includes the following elements;

1. Conventional Gravity Network
2. Simplified Gravity Network
3. Pumping Stations and Force Mains
4. Building Connections
5. Communal Toilet Blocks
6. Associated Drainage Activity

Area 106 (within dashed red boundary in Figure 2-4) was selected for Compact funding based on the disease burden modelling and analyses performed during the feasibility studies. Three adjacent service areas were also selected for basic and detailed design, if funding is available then the networks associated with some of these areas may also be delivered as part of the Compact.

Refer to Section 7 for additional details associated with the Phase 2 elements.

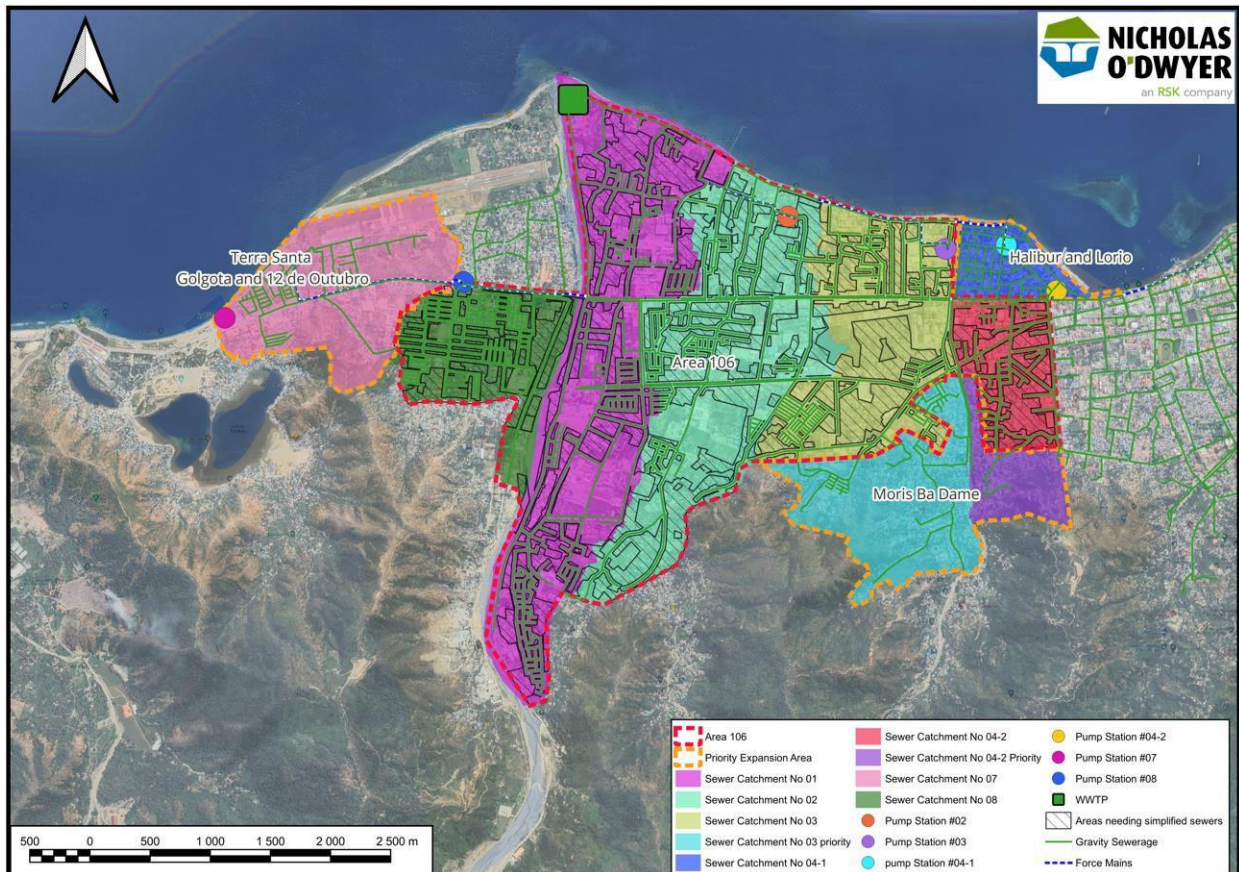


Figure 2-4: Geographic location of project area (Area 106 plus Priority Areas)

The sewage system will be underground, using roads and footpaths as much as possible to avoid any resettlement-related impacts.

2.2 Need for the Environmental Study

The Project Documents (PD) were submitted by BTL to ANLA on 18 July 2023, ANLA provided technical comments of the PD on 16 August 2023, BTL re-submitted the PD to ANLA on 15 September 2023. **Following this process, all components of the Water, Sanitation and Drainage Project were classified as Category A project on 2 October 2023 in accordance with Article 4 and Annex 1 of Decree-Law No. 39/2022** (1st amendment to Decree-Law No. 5/2011 on the Environmental Authorization Act) (see **Annex 2**) and are subject to the EIS procedures established in Ministerial Diploma No. 44-47/2017. The Class A designation indicates that nature and characteristics of the proposed project tend to have significant impacts on the physical, biological and/or human environment that require avoidance, minimization and/or mitigation and management measures specific to the impact. The EIS will document impacts as well as these avoidance and control measures.

3 PROJECT PROPONENT

The Ministry of Public Works (MPW), through Bee Timor-Leste, Empresa Publica (BTL) is the proponent of the Water, Sanitation and Drainage (WSD) project). Meanwhile, the Management, Supervision and the Implementation (Project Management) of the WSD project will be the responsibility of MCA-TL. Table 3-1 shows the project proponent and representative contact details.

Table 3-1: Project Proponent and Project Management

Contact data	Proponent	Project Management
Entity name	Bee Timor-Leste (BTL)	Millennium Challenge Account-Timor-Leste
Responsible person	Mr. Carlos dos Reis	President Ambassador Constâncio da Conceição Pinto
Address 1	BTL Compound Level 5	CBD 3, Timor Plaza
Address 2	Avenida 20 de Maio	Avenida Presidente Nicolau Lobato
Address 3	Caicoli, Dili, Timor-Leste	Comoro, Dili, Timor-Leste
Telephone number	Telephone: +670 780010	Telephone: +670 77045017
Email address	email: cdosreis@gmail.com	email: constanciopinto@gmail.com

4 PROJECT TEAM

Table 4-1 shows Consultant's core team.

Table 4-1: Environmental and Social Project Team

Name	Position
Sean Cleary	Team Lead & Design Manager
Carol Young	Environmental and Engineering Lead
Dr. George Krallis	ESIA Specialist
Liza Van De Merwe	GSI Lead Specialist, Social and Resettlement
Marta Patallo	TIP Lead Specialist
Britta Lammers	RAP Lead Specialist, Deputy Team Leader ESIA, ESMP, RAP
Marcio Da Piedade	TIP Expert
Benedita Ximenes Pereira	ESP Specialist Social / Gender
Francisco Neto	RAP Specialist
Marciano Borges Ximenes	Environmental Specialist

5 LEGAL AND ADMINISTRATIVE FRAMEWORK

5.1 National Policy and Administrative Framework

The Constitution of Timor-Leste declares the importance of protecting the environment and that a healthy environment is a constitutional right of the people. The Constitution stipulates that:

- Everyone has the right to a humane, healthy, and ecologically balanced environment and the duty to protect it and improve it for the benefit of the future generations;
- The State shall recognize the need to preserve and rationalize natural resources; and
- The State should promote actions aimed at protecting the environment and safeguarding the sustainable development of the economy.

Table 5-1: Laws and Regulations regarding the execution of environmental studies

Laws	Summary of Core Requirements
Decree 5-2011 Environmental licensing Decree-Law No. 39/2022 1st amendment to Decree-Law No. 5/2011 on Environmental Licensing	<p>This Decree-Law created the environmental licensing system for public or private projects. Environmental licensing is based on environmental assessments that provide a Certificate of Environmental Impact (EIS) and an Environmental Management Plan (EMP). The EIA is used to determine the category of the project: A, B, or C, based on the severity of the potential environmental impact. A Certificate of Environmental Impact is prepared by the Applicant and is based on technical studies and consultations with stakeholders.</p> <p>The Decree is supported by the following Ministerial Diplomas:</p> <ul style="list-style-type: none"> • Ministerial Diploma no. 44/2017, of 2nd August - Regulation on Impact and Benefits Agreement • Ministerial Diploma no. 45/2017, of 2nd August - Regulation on the Statute and Rules of procedure for the Evaluation Committee for the Management of the Environmental Assessment Process for Category A projects • Ministerial Diploma no. 46/2017, of 2nd August - Regulation on the Detailed Requirements for Screening (Project Document [PD]), Scoping and the Terms of Reference (TOR), Environmental Impact Statements (EIS), Simplified Environmental Impact Statements (SEIS) and Environmental Management Plan (EMP) for Environmental Assessment. English translations of the relevant Annexes to this diploma are included in Appendix B of this document. • Ministerial Diploma no. 47/2017, of 2nd August - Regulation on the Public Participation Procedures and Requirements During the Environmental Assessment Process.
Law No. 3/2012 on the legal authorization for Environmental Basic Legislation	This Law established the legal authorization for the production of the Environmental Basic Legislation.
Decree 26-2012 basic environmental law	<p>This Decree-Law established the Environmental Basic Legislation in conjunction with 3/2012. Pursuant to Article regarding pollution prevention and control technologies and practices, the GoTL has yet to implement their National Standards (for Air, Water, Noise, etc.) and therefore, under the legal requirements of the Base Law for Environment, these minimum requirements are safeguarded by the use of WHO guidelines. The following are relevant to the project:</p> <ul style="list-style-type: none"> • WHO Guidelines 1999 - Community Noise. • WHO Guidelines 2005 - Air Quality guidelines for particulate matter, ozone, nitrogen dioxide, and Sulphur dioxide. • WHO Guidelines 2003 - Water Quality – Guidelines for safe recreational water environments: Volume 1 - Coastal and Fresh Waters. • WHO Guidelines 2017 – Surface and/or Groundwater Sources for Water Consumption Use: WHO 2017 Guidelines for drinking-water quality: fourth edition incorporating the first addendum. Used in

Laws	Summary of Core Requirements
	conjunction with DL 31/2020 – Water Quality Control for Human Consumption.
Decree Law 41/2022 that Creates the National Environmental Licensing Authority, I.P., and approves the respective statutes	States that "the National Environmental Licensing Agency, abbreviated to ANLA, is part of the State's indirect administration. ANLA ensures "the implementation of legislation on environmental licensing", and is responsible for "evaluating projects, classifying, issuing environmental licenses and monitoring the activities of public and private entities in general, thus becoming the main environmental regulator in the country. Environmental licensing is an essential process to ensure the principle of prevention laid down in the Basic Law on the Environment (Decree-Law no. 26/2012, of July 4). In turn, the creation of a specialized authority, endowed with technical, administrative and financial autonomy and its own assets, ensures the transparency of environmental licensing procedures, as well as the necessary technical capacity.

Table 5-2: Other project relevant laws and regulations

Laws	Summary of Core Requirements
Law No. 6/2017 on Basic Law of Land Use Planning	Sets targets and objectives for Municipalities to present their respective urban mobility plans in order to facilitate and coordinate city growth in a sustained and planned manner, with improvement of living conditions for citizens. Establishes the different soil uses (Article 8) and the Municipal Territory Plan and the Land Use Plan (Article 17). Land use planning is subject to the following general principles: <ul style="list-style-type: none"> • Coordination of the various public interventions with a territorial impact and a fair balance between public and private interests; • Sustainability of the solutions contained in the instruments of territorial planning, with due attention given to the economic, social, cultural, and environmental dimensions.
Decree-Law no. 3/2016 – Municipal Administration Statutes	The DL gives local government the functions, duties and powers to, among others: (i) conserve and protect their local environment and natural resources; (ii) plan, implement and/or operate and maintain local water supply projects; (iii) implement or arrange for implementation local sanitation/sewerage/solid waste and drainage projects; (iv) protect cultural heritage and religious sites; and/or (v) monitor project activities within their jurisdictions.
Law 01/2003 - Land Law (the Juridical Regime of Real Estate)	This first Land Law of Timor-Leste was designed to serve as an umbrella law for the rest of the land and property regime. The law established the National Directorate for Land and Property Cadastral Survey (NDLPCS) as a legal entity and defined its jurisdiction and articulated general rules concerning land tenure and property rights to be further developed by ensuing legislation. Moreover, this law established a one-year period for both nationals and non-nationals to register their land claims. The Land Law 2003 vests all land that belonged to the Portuguese state, and all state property acquired or built by the Indonesian regime, in the new state of Timor-Leste.
Law 10/2011 approves the Civil Code	Regulates the legal relations among private entities across a variety of categories, including real estate and the principles governing the ownership, management, and transactions thereof. Chapter II, Section I, Article 3 states that "the rights over real estate shall be governed by the provisions of the Civil Code after recognition or issuance of the first legal deeds by the Democratic Republic of Timor-Leste over such property". Because the article implies that the Civil Code governs real estate rights after the issuance of a legal deed to the real estate in question, this has the potential to introduce some discrepancy over the Civil Code's applicability in certain situations where land may be disputed due to overlaps in titles issued by Portugal and Indonesia for the same land. This same issue is further complicated due to the fact that Law 13/2017 (Special Scheme for Defining the Holding of Real Estate)

Laws	Summary of Core Requirements
Decree Law No. 6/2011 - Compensation for Evacuating State Land	This Law deals with State property that is illegitimately or unlawfully occupied. It allows for compensation for relocation of unlawful occupants who have remained on the land for a certain period of time and where their humanitarian condition justifies granting compensation. The Law also specifies the criteria used to establish the compensation.
Decree Law No. 27/2011 - Regime to Regulate Ownership of Real Estate in Undisputed Cases	This law specifies that, since October 2008, the National Directorate of Land, Property and Cadastral Services of the Ministry of Justice has collected information on ownership of real estate with the objective of establishing the National Register of Property ²¹ and clarifying the factual and legal situation of real estate in Timor-Leste. In April 2011, after surveying more than 35,000 pieces of real estate – the Government was able to verify that 92% of cases had no disputes regarding ownership. This law describes the National Property Cadastre database and the property registry database. It also establishes the equality of rights – right of ownership is assured equally to men and women. For undisputed cases, the law states that ownership certificates shall be regulated by Ministerial Order.
Law No. 8/2017 on Land Expropriation for Public Utility:	This Law sets out the rules and procedures for the expropriation of private property for public utility (i.e., acquisition of property for use in the public interest) by public entities under direct administration of the State. The law is consistent with international laws that Timor-Leste are a party to, including the Universal Declaration of Human Rights, and the International Covenant on the Elimination of All Forms of Discrimination Against Women. The law includes the rights of affected people to fair compensation, which is based on market value of the land and the cost of replacing any buildings or plantations. The law prescribes that during the planning phase of the expropriation of property, a social impact assessment must be conducted, and a resettlement plan must be developed, if the property being expropriated is currently being used for residential purposes.
Decree Law 13/2017 - Special Scheme for Defining the Holding of Real Estate	<p>Defines the rules on land ownership, provides avenue for legal clarification of ownership and promotion of distribution and access to land, as well as being the figure of community property/land. Relevant to the negotiation procedure of the parcels of land under conflict, related to resettlement and/or compensation.</p> <p>This law includes the definition of what is Public Domain, which is particularly important for Rights of Way (ROW) (marine, water, sanitation, roads, drainage, etc.), which has relevance to drainage and sanitation ROWs but also in determining what other installations that are considered Public Domain (e.g., public cemeteries, monuments, buildings, etc.). The types of public domain of particular relevance for the project (Article 8, number 3) are:</p> <ul style="list-style-type: none"> a) Coastal and territorial waters, inland waters, as well as their beds, and banks, observing an adequate protection strip and the continental shelf. d) The beaches and the strip of the seafloor and the contour of islands, islets, bays and estuaries, measured from the line of the maximum high tides, observing a protection strip of 50 meters towards the interior of the territory. e) River and lacustrine waters, lakes and lagoons and related land, with the exception of waters considered private or community under the terms of the Civil Code. j) Artificial ports and docks of public interest, observing an adequate confining protection strip. l) The road network, which includes, namely, roads, streets, public paths, squares, green spaces, as well as its accessories and works of art, observing an adequate bordering protection strip. m) Public cemeteries and the Gardens of Heroes. <p>More importantly, the identification, determination of tracts/strips/etc. of and the regime for using the State's public domain are to be regulated by subsequent laws that have yet to be drafted and enacted, leaving a legal hole regarding regulatory compliance for drainage, sanitation, and/or water distribution ROW protection strips.</p>

Laws	Summary of Core Requirements
Decree Law 14/2022 - Approves the Land Registry Code	The law regulating the registration of the legal status of real estate is necessary, since any real estate investment depends on a secure and credible land registry system. It is clear that the land registry in East Timor not only has the function of publicizing the legal status of properties with a view to securing the legal trade in real estate, but also, and at the same time, albeit incidentally, has the function of protecting these properties from the pressure that the real estate market may exert on them.
Decree Law 65/2022 – Cadastral Information Code	Knowledge of the identification and composition of immovable property, as well as the holders of rights over it, is essential for planning, management and decision-making on land use and occupation policies, as well as for the control, protection and management of natural resources, protected areas and properties of economic interest to local communities. Cadastral data and the definition of ownership of property rights are an indispensable tool for political decision-making on land use planning, the environment, the economy, public works and traditional livelihood mechanisms for local communities.
Decree Law 5/2016 - National System of Protected Areas	It is the legal instruments for the protection of sensitive ecological areas in Timor-Leste and their categorization. It establishes the legal instruments for the protection of declared sensitive ecological areas in Timor-Leste (Article 11) and their allowed and prohibited activities. It provides for a List of Established Protected Areas (Article 50 and Annex I), their typology (Article 12) and geographical demarcation (Article 17)
Decree No. 14/2017 Procedures on Submitting Proposals for the Classification of Protected Area:	This Decree Law established the applicable procedures for submitting a proposal for the classification of protected areas.
Decree Law 6/2020 on Protection and Conservation of Biodiversity	This Decree-Law establishes the components to be considered in the Environmental Evaluation, namely the identification and description of adverse effects for the conservation of biodiversity and appropriate measures proposed to prevent, minimize and mitigate the identified impacts. It Includes the List of Protected (Annex I) and Exotic/Invasive Species (Annex II) and the rules and prohibited activities for their management. It also establishes the considerations to be taken in Environmental Impact Evaluations, namely identification and description of adverse effects and appropriate measures proposed to prevent, minimize and mitigate the identified impacts, directly relevant to the present Project.
Law no. 14/2017 – General Framework for Forestry	Defines the fundamental principles and norms regarding management, protection, conservation and sustainable use of forests and watersheds (Article 1), Forest Classification [State, Community and Private] (Article 8) and Forest (Article 14) and River Basin (Article 17) Management Plans and Forbidden Activities in these areas (Article 24). It also includes Climate Change requirements for Forest development (Article 28), for emissions reduction and conservation of carbon stocks.
Regulation UNTAET no.17/2000 – Prohibition of Logging operations and Export of Wood	Provided for in Law 14/2017, establishes the prohibition for felling, burning or destroying trees or forests (Article 2) and the activities exempt of these prohibitions (Article 3).
Government Resolution 33/2011 - National Adaptation Plan of Action (NAPA) for Climate Change	Climate Change is one of the compulsory components of this resolution and deals directly with its variations and adaptation requirements, especially regarding infrastructure durability. Annex 2 adopts trans-sectoral measures to reduce Climate Change vulnerability in essential sectors in Timor-Leste (Agro-forestry, Water supply, Biodiversity, Health, Infrastructure, Natural Disasters), all related to the Project, and defines and prioritizes Proposed Adaptation measures for said sectors (NAPA Table 13). Also relevant is its Project Profile 7 – Review and revise legislation, regulations and standards to enhance climate change resilient infrastructure.
Decree Law 08/2021 - Legal Framework for	Establishes soil classification and qualification criteria and the rural and urban soil qualification categories. It may be relevant to the soil classification and qualification or land associated with the project

Laws	Summary of Core Requirements
Classification and Qualification of the Soil	components and their consequent classification and inclusion into any Municipal plan as administrative easements and restrictions of public utility.
Government Resolution 16/2016 - National Policy on Urban Mobility	Defines the principles for regional and municipal planning, defining the scope for each of these two terms. The law further establishes the responsibilities for drafting a National Plan and for drafting Municipal Plans and sets the rules within these plans to guarantee the promotion of prosperity, progress, liability, and the just partition of the national product. While Urban Plans for Dili have yet to be defined/regulated in Dili (have been drafted but never approved in Council of Ministers), they are relevant for the Sanitation Sector, in regard to definition of the types of wastewater (domestic versus industrial, etc.).
Decree Law 4/2012 - Labour Code	The Labour Code establishes the legal regime for individual employment contracts and collective employment agreements. The code is based on the fundamental principles of equality, prohibition of harassment and the prohibition of forced labour. This law defines requirements of the Environmental Management Plan. The law also establishes duties and obligations of the private contractors, employers and employees while exercising a project's scope of work, or within the bounds of a work contract, with the aim of creating good working conditions via the implementation of Health and Safety requirements in the working environment.
Decree Law 33/2008 on Hygiene and Public Order	Establishes the local administrative measures in terms of public hygiene and order, setting the conditions and regulations to avoid interference with public land or infrastructure, namely the disposal of solid wastes in public spaces and prohibition of domestic animals circulating in public places. This law is relevant for the control of construction on drainage infrastructure and water and sanitation easements.
Decree Law 4/2004 on Water Supply for Public Consumption	The Water Supply for Public Consumption Law establishes the conditions for water distribution for public use in Timor-Leste. It places the responsibility on the State to provide Timorese communities with access to water for public consumption and provides for the creation of water management groups. The Water and Sanitation Service is responsible for managing the water supply system in urban areas and sets the standards and guidelines for water supply pipelines. The Water Supply for Public Consumption Law also provides for the setting of fees and charges for water supply services.
Decree Law 31/2020 – Water Quality for Human Consumption	This law establishes the concentration limits for controlled parameters in water sources for human consumption
Government Resolution 8/2012 - Sanitation Policy	Clarifies responsibilities for the provision of sanitation services, stipulating, for example, that each family and institution is responsible for the construction, use, and maintenance of its own hygienic and sanitary facilities. This policy defines responsibilities for strengthening, planning, developing, and managing urban sanitation services to collect sludge from septic tanks and operate centralized / decentralized sewer systems.
Decree Law 38/2020 - Creation of the National Authority for Water and Sanitation	The law creates and approves the National Authority for Water and Sanitation (ANAS) related Statute. It establishes composition, duties and responsibilities of ANAS that are aimed at proposing, monitoring and ensuring the implementation of national policy in the field of water resources, in order to guarantee its sustainable and integrated management, supervision and inspection of the sectors of public water supply, sanitation of urban wastewater and urban solid waste.
Decree Law 2/2017 - Urban Solid Waste Management System	This law defines the Municipal Authority as the responsible entity for municipal solid waste management (collection, treatment and final destination) and defines the "do's" and "don'ts" regarding solid waste management and directs the project in the mitigation and operational procedures regarding generated waste during the construction and operation phases of the Project.

Laws	Summary of Core Requirements
Government Resolution 24/2009 - National Policy for Culture	This Resolution defines the concept of culture, heritage, identifies types of each, describes how these should be identified, classified and communicated to the public; and establishes how such cultural resources should be registered to foster a dynamic sector for the development of the identity and citizenship of Timor-Leste.
Decree Law 33/2017 - Legal Framework for Cultural Heritage	This law defines the concept of cultural heritage and the measures for its support, protection, preservation and conservation and the typology of cultural heritage in Timor-Leste (Article 1) and its different cultural classification (Article 21). It also defines and regulates a 50 m Protection Zone around immovable Heritage (Article 23) and the rules and licensing requirements for general work within these Zones (Article 26). This law is particularly relevant to the project in regard to the intangible cultural components related to some sacred sites in the project area of influence. Furthermore, this law is relevant regarding project Work Camps, construction ROWs, and easements. When Heritage site Protection Zones cannot be avoided, EMP implementation is the overall measure to mitigate adverse impacts.

5.2 Interactions and Consultation with other Agencies

Table 5-3: Relevant Agencies and Organisations

Entity	Function for this Activity
Agência Nacional de Licenciamento Ambiental (ANLA)	Environmental Licensing Authority was created in 2022, ANLA is the national environmental regulator. ANLA's mission is to ensure the implementation of the legislation on environmental licensing, being responsible for the assessment of projects, classification and issuance of environmental licenses and monitoring of the activities of public and private entities in general, proponents and holders of environmental licenses, in accordance with national and international environmental legislation. ANLA is responsible for the issuance and monitoring of the environmental licenses for the WSD project.
Ministry of Public Works	Before the formation of BTL, E.P., the Ministry of Public Works (MoPW) was the entity responsible for water supply and sanitation in Timor-Leste. MoPW will continue to be responsible for the maintenance of drainage canals and will be responsible for the public roadways that will be used for wastewater network construction during the Compact.
BTL as Part of the MOPW	In 2020, GoTL created an independent, publicly owned water utility company, Bee Timor-Leste, Empresa Publica (BTL, E.P.). BTL, E.P. assumed responsibilities for the operations and maintenance of water supply and sanitation assets in Timor-Leste. BTL, E.P. will serve as the implementing entity in the Compact and will provide input to the Consultant during this contract. BTL, E.P. will own and operate the assets funded through the WSD project.
MCA-TL	MCA-TL will be the accountable GoTL entity that will execute and manage all contracts under the Compact. MCA-TL will coordinate communications between the GoTL and all consultants and contractors. MCC and the GoTL are currently in the process of appointing MCA-TL. MCA-TL will ultimately serve as the Employer for this contract, and as such, will provide approval for and accept all of the Consultant's deliverables, and issue all Payment Certificates for the Consultant under this Contract.

At a national level, in addition to ANLA and BTL, other organizations play a vital role in environmental protection and management, particularly the Secretary of State for Electricity, Water, and Sanitation (SWES), Ministry of Agriculture, Forestry and Fisheries (MAFF), Secretary of State for Local Development, Secretary of Land and Properties, Minister of Social Solidarity

and Inclusion, Ministry of Health, Ministry of Transport and Communications as well as the Municipality and the administrative setup of Dili.

5.3 International Standards and Guidelines

5.3.1 IFC Performance Standards

The IFC Sustainability Framework (IFC, 2012) comprises both IFC policy and established Performance Standards (PSs) for environmental and social (E&S) sustainability. The IFC PSs 1) define key responsibilities for managing projects' E&S risks, 2) provide risk and impact guidance 3) provide guidance to avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, and 4) provides guidance on best practices including stakeholder engagement and disclosure obligations. MCC-funded projects must address the IFC PSs.

The Performance Standards provide 1) a framework for the design, construction and operations of projects so that they are environmentally and socially acceptable and 2) guide measures to prevent, mitigate or compensate adverse E&S impacts of projects. The Performance Standards focus on outcomes rather than processes, and require the implementation of a robust Environmental and Social Management System (ESMS).

In addition to the fundamental eight PSs, IFC has published more detailed technical guidance under *Environmental, Health, and Safety Guidelines*. The EHS guidelines also include sector-specific technical guidance. The applicable document for this project is *Environmental, Health, and Safety Guidelines for Water and Sanitation* (IFC, 2007).

Table 5-4 presents a summary of each of the eight PSs including their applicability and specific actions to address the impacts and measures to minimize, mitigate and compensate impacts as far as possible.

Table 5-4: Applicability of IFC Performance Standards

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
Assessment and Management of E&S Risks and Impacts	Identify and evaluate E&S risks and impacts of the project and adopt measures to anticipate, avoid, and, when avoidance is not possible, minimize and/or compensate PAP and communities and environmental area of influence. To achieve this, an effective ESMS should be established that ensures public participation and grievance redress mechanisms.	Applicable	An ESIA will be carried out for Water, Sanitation and Drainage (WSD) Project and a general Environmental and Social Management Plan (ESMP) will be developed, which should function as basis for the contractor's site specific ESMP (CESMP). The contractor will implement an Environmental and Social Management System including monitoring, training, record keeping and reporting, etc.
Labour and Working Conditions of Workers	Management of projects should ensure worker safety, promote fair treatment, non-discriminatory and equal opportunity for workers; establish, maintain and improve the worker-management relationship; and comply with national	Applicable	Impacts and Mitigation measures will be assessed and an ESMP developed containing OHS and labour conditions, taking into account WB General and Water and Sanitation specific EHS Guidelines and the ILO fundamental conventions. The contractor will develop a site specific ESMP (CESMP), including a code of ethic and business

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
	employment and labour laws of the host country.		conduct; TIP, OHS requirements (PPE, safety induction, task specific training, emergency preparedness, documentation, reporting, grievances redress mechanism, etc.).
Resource Efficiency and Pollution Prevention	Avoid or minimize adverse impacts on human health and the environment through avoidance or minimization of pollution, including release of greenhouse gases, and promote sustainable use of resources such as energy and water. Ensure the use of efficient pollution abatement machinery.	Applicable	Possible impacts have and will be further assessed and mitigation measures developed, which will be described in the EMP and will be made an obligation to be included into the CESMP. The most important impacts and mitigation measures will be managed by several sub-plans as the waste management plan, Hazmat management plan, equipment maintenance management plan, emergency preparedness, oil spill contingency plan, traffic management plan, etc..
Community Health, Safety and Security	Evaluate the risks and impacts to the H&S of the affected communities during the project lifecycle and establish preventive and control measures consistent with best international practices and commensurate with the nature and magnitude of impacts.	Applicable	The main risks are associated with the traffic changes and congestions during construction, therefore a traffic management plan will be developed and enforced. Other aspects will be the dust creation during dry season to be mitigated by frequent sprinkling of construction sites and roads. Excavation and trenches will be marked and temporarily fenced. A TIP and GSI plan will be developed, HIV/Aids campaigns conducted to raise awareness as well as appropriate measures for preventing malaria and dengue. A Code of Conduct will be enforced. A stakeholder engagement plan will be developed to disseminate the information required for the local population including frequent meetings with the communities to raise advantages and disadvantages. Additionally, grievance mechanism will be put in place which should cover all aspects from compensation issues over, claims related to unsocial driving behaviour, etc.
Land Acquisition and Involuntary Resettlement	Where avoidance is not possible, displacement should be minimized by alternative project design considerations. No forced eviction should be undertaken. Land acquisition should be done in a manner that minimizes adverse social	Applicable	The core mitigation measure is to avoid any physical resettlement and there will not be any physical resettlement for the sewer network, only inconveniences and short to medium term economic displaced (business disruption). In case a house cannot be connected there are alternative solutions by either providing them with toilet

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
	and economic impacts through the provision of compensation packages and that ensures a humane resettlement procedure, disclosure of information, consultation and participation of affected persons. It should be the project proponent's duty to ensure the physical and economic well-being of displaced people are not worse off than their pre-displaced lives.		facilities at a different location in the property where it can be connected or other options need to be thought of (alternative assessment). The Right of Way of the sewer system will be optimized during the detailed design in a way that the impacts are as small as possible and as many houses as possible can be connected. A Resettlement Action Plan is under preparation as part of the required Safeguard documents for the project.
Biodiversity Conservation and Sustainable Management of Living Natural Resources	All project proponents should identify both direct and indirect project-related impacts that could potentially threaten biodiversity and ecosystem services. The following indicators should be used as a guide: habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient loading, and pollution.	Applicable	Main impact on biodiversity will be caused by the ocean outfall on aquatic biodiversity short-term caused by the in-water construction through increased solid particles in the surrounding and long-term by the discharge of treated effluents. To mitigate the long term impacts Hydrodynamic modelling is essential to simulate the performance of the proposed outfall with respect to the potential zone of influence and the level of impact associated with the effluent discharge plume. The impact caused by the treated effluent will be further assessed and the design of the ocean outfall further optimized to minimize the effect on the surrounding marine environment. Periodic monitoring of the effluent will be included to be able to react on any incidents. Other impacts will be related to construction activities and waste disposal which will be minimized by implementing the ESMP.
Indigenous People	Project proponents should ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture and natural resource-based livelihoods of Indigenous Peoples. Project proponents should promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner, respecting and preserving the culture, knowledge and practices. Adverse impacts on	TBD	Indigenous people as defined in the IFC guideline are social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population. The population living in the surroundings of the project area are not distinct from the mainstream groups. This will be further assessed during the RAP survey and general mitigation measures as the code of conduct will be implemented, impacts will be mitigated were possible and compensation payments will be made for all assets PAPs will lose.

IFC Performance Standard	Summary of Core Requirements	Applicability	Activities to address the different requirements
	communities should be anticipated and avoided. When avoidance is not possible, such impacts should be minimized and/or compensated for.		In Timor-Leste “indigenous” is defined by language. We expect some of the community will meet the definition. We ensure PS compliance through census, stakeholder engagement, public process, etc.
Preservation of Cultural Heritage	Project proponents must protect cultural heritage from the adverse impacts of project activities and support its preservation. Project proponents should also promote the equitable sharing of benefits from the use of cultural heritage.	TBD	There are several locations in the immediate vicinity of the future construction sites. Detailed protective measures and construction monitoring measures, e.g. monitoring of vibrations in the surrounding area, are being developed. We expect graves in the project area, which will be included in the detailed planning. Procedures for chance finds are also being developed.

5.4 MCC Environmental Guidelines

5.4.1 Statement of Principles

MCC recognizes that the pursuit of sustainable economic growth and a healthy environment are necessarily related. MCC has established a process for the review of environmental and social impacts to ensure that the projects undertaken as part of programs funded under Millennium Challenge Compacts with eligible countries are environmentally sound, are designed to operate in compliance with applicable regulatory requirements, and, as required by the legislation establishing MCC, are not likely to cause a significant environmental, health, or safety hazard.

MCC is committed to program design that reflects the results of public participation in host countries during all phases of the program, integrating governmental interests with those of private business and civil society. In this spirit, MCC will work to ensure that the preparation of Environmental and Social Impact Assessments will include consultation with affected parties and public disclosure of the associated documents.

Finally, MCC is committed to the principle of host-country ownership of a Compact, including host-country responsibility for measures to mitigate adverse environmental and social impacts. A Compact project is expected to comply with host-country laws, regulations and standards, as well as requirements by which the host country is bound under international agreements.

5.4.2 Sources of Policy; Applicability of Guidelines

The policies reflected in these guidelines are based, broadly speaking, on sound sustainable development project design principles and international best practices in this field, including, but not limited to the following:

- the “Principles of Environmental Impact Assessment Best Practices” of the International Association for Impact Assessment;
- the environmental policies and guidelines of other United States government development assistance and financing entities;
- the environmental and social policies and guidelines of the multilateral development banks, the Common Approaches developed by export credit agencies through the Organization for Economic Cooperation and Development (OECD); and

- the Equator Principles in use by international commercial banks.

In addition, these guidelines reflect the following:

- Section 605(e)(3) of the Millennium Challenge Act of 2003 prohibits MCC from providing assistance for any project that is “likely to cause a significant environmental, health, or safety hazard.” Consequently, the presence of such a project in a host country’s proposal will preclude MCC funding (or continued funding) of that project. (See the discussion of “environmental, health or safety hazard” in Appendix A.)
- Executive Order 12114, January 4, 1979, 44 Fed. Reg. 1957 (January 9, 1979) requires every federal agency taking actions encompassed by that Executive Order to establish procedures to implement it with respect to certain major federal actions having significant effects on the environment outside the geographical borders of the United States and its territories and possessions. It is expected that the Executive Order will have limited applicability to MCC programs, but where the terms of the Executive Order apply, the procedures described in Appendix B will be used.

In those instances where MCC’s actions or a project undertaken or funded under a Compact may significantly affect the quality of the environment of the United States, including its territories or possessions, MCC will require adherence to the environmental review procedures established by the Council on Environmental Quality under the National Environmental Policy Act (NEPA), 40 CFR Part 1500, in lieu of these guidelines.

In addition to the foregoing, and to the extent consistent with these guidelines and any applicable additional guidance issued by MCC from time to time, the projects MCC finances under a compact will be developed and implemented in a manner consistent with the environmental and social performance standards set forth in the Performance Standards on Environmental and Social Sustainability of the International Finance Corporation, as amended from time to time (IFC Performance Standards). Consistent with MCC’s principle of country ownership, the host country is responsible for managing environmental and social risks and impacts consistent with the requirements of the IFC Performance Standards.

MCC seeks to ensure, through its due diligence and implementation oversight efforts, that Compact activities it finances are implemented in accordance with the requirements of the IFC Performance Standards. MCC will only support Compact activities that are expected to meet the requirements of the IFC Performance Standards within a prescribed timeframe.

These guidelines are primarily intended to describe the principles of environmental and social impact assessment that Compact-eligible countries will be expected to apply in the context of a Compact. These guidelines are not intended to describe MCC’s internal implementation procedures, which MCC will develop to reflect experience with these guidelines.

MCC revises these guidelines from time to time to reflect lessons learned in their application as well as relevant changes in international standards and norms of practice. In addition, MCC may provide such additional guidance to a host country during the implementation of a program as may be advisable in light of host-country norms and international standards, such as the *Environmental, Health, and Safety Guidelines of the World Bank Group* (2007, or as amended from time to time) or World Health Organization guidelines and standards.

5.4.3 Environmental and Social Review

These guidelines apply to the review of each project described in a Compact or proposed Compact. The application of these guidelines to specific projects and the breadth, depth, and type of environmental and social impact review to be completed will depend on the nature, scale, and potential environmental and social impact of proposed projects.

MCC’s process of environmental and social review considers specific host-country conditions, the findings of host-country environmental studies, National Environmental Action Plans

(NEAPs), the host country's overall policy framework and national legislation, the capabilities of the entities implementing the project and managing its environmental and social impacts, and obligations of the host country under relevant international agreements.

5.4.4 Environmental and Social Screening

As early as possible in the Compact proposal review process, MCC screens each project as described in these guidelines. As part of its review of Compact proposals, MCC funding decisions will be informed by the results of screening and, where needed, an Environmental and Social Impact Assessment (ESIA) or other environmental and social impact analysis. To that end, MCC will not fund a project unless there is provision for appropriate screening and appropriate environmental and social impact analysis.

While the completion of the requisite environmental and social impact analysis is the responsibility, either directly or indirectly, of the host country, MCC will advise and consult on the requirements of an ESIA. MCC will review the findings and recommendations of the Environmental and Social Impact Assessment to ensure their consistency with these guidelines, and where appropriate, may require additional assessment work, including public consultation and information disclosure.

5.4.4.1 Categorical Prohibition

As stated above, MCC may not provide assistance for any project that is "likely to cause a significant environmental, health, or safety hazard." Accordingly, as part of its environmental and social screening, MCC will identify and exclude such a project from MCC funding. Such a project will be classified as a Categorical Prohibition.

5.4.5 Determination of Project Category

MCC screens all Compact proposals to identify projects that require further review due to their potential adverse environmental and social impacts, and projects that are in sensitive sectors or in or near sensitive locations. The result of this screening process will be an environmental classification following the recommendations contained in the Organisation for Economic Co-operation and Development Common Approaches and the practices of the World Bank, classifying in accordance with the potential environmental and social impact, and the extent of the environmental and social review required.

Based on the environmental and social impacts and the extent of the Project area, the Timor-Leste WSD Project was classified as MCC Category A and is consistent with the analogous ANLA classification. It requires that an ESIA be developed defining the environmental and social risks that need to be taken into account in the construction and operation of the WSD Project. The Draft ESIA was completed in 2022.

Table 5-5: MCC project categories

Category	Criteria	Requirements
A	A project is classified as Category A if it has the potential to have significant adverse environmental and social impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Category A, in principle, includes projects in sensitive sectors or located in or near sensitive	For Category A projects, MCC will require an Environmental and Social Impact Assessment in accordance with these guidelines. An Environmental and Social Impact Assessment evaluates the potential environmental and social risks and impacts of a specific project in its area of influence; examines alternatives to the project, including ways of improving project selection, siting, planning, design, and implementation in order to prevent, minimize, mitigate, or compensate for adverse environmental and social impacts and enhance positive impacts; and includes an Environmental and Social Management Plan, which describes the process of mitigating and managing adverse environmental and social impacts during the implementation of a project. The

Category	Criteria	Requirements
	<p>areas. An illustrative list of sensitive sectors and sensitive locations is set out in Appendix C.</p>	<p>recommended contents of an Environmental and Social Impact Assessment report are included in Appendix D. An Environmental and Social Impact Assessment should be initiated as early as possible in project development and be integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project. An Environmental and Social Impact Assessment should take into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples and cultural property); natural disaster risk and vulnerability assessment; and transboundary and global environmental aspects.</p> <p>For a Category A project, disbursement of some or all of the MCC funding for that project will be contingent upon completion of an Environmental and Social Impact Assessment. In deciding whether to provide some MCC funding for the project in advance of completion of the Environmental and Social Impact Assessment, MCC may consider funding costs of the assessment itself as well as costs of some other project elements (e.g., initial project administration) that can be prudently undertaken before the Environmental and Social Impact Assessment is completed. In the event that it is not possible to complete the Environmental and Social Impact Assessment, MCC will define procedures for addressing such a case on a Compact-specific basis. In any event, the project will be subject to the other requirements of these guidelines.</p>
B	<p>A project is classified as Category B if its potential environmental and social impacts are less adverse than those of Category A projects. Typically, these impacts are site-specific, few if any of them are irreversible, and mitigation measures are more readily available.</p>	<p>For a Category B project, MCC will require specific environmental and social impact analyses, including Environmental and Social Management Plans, as appropriate. Such analyses may be a condition for disbursement of some or all of the MCC funding for the project. The scope and format of the analyses will depend on the project and its potential environmental and social impacts. Like an Environmental and Social Impact Assessment for a Category A project, the analysis for a Category B project must examine the potential negative and positive environmental and social impacts of the project and recommend any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and enhance positive impacts. Generally, the scope of such work will be narrower than for Category A projects.</p>
C	<p>A project is classified as Category C if it is unlikely to have adverse environmental and social impacts.</p>	<p>While MCC generally will not require environmental and social impact analysis for a Category C project, MCC reserves the right to require specific environmental and social impact studies, reporting, or training where relevant or where positive environmental and social impacts may be enhanced.</p>
D	<p>A proposed project is classified as Category D, if it will involve an intermediate facility (such as a municipal public grant fund) that will use MCC funding to finance subprojects that may potentially result in adverse environmental and social impacts.</p>	<p>The host country must require that subprojects under a Category D project comply, at a minimum, with the environmental and social impact analysis standards, as well as relevant laws and regulations, of the host country. MCC reserves the right to set additional environmental and social performance standards and monitoring requirements for subprojects on a case-by-case basis, depending on the nature of the intermediate facility. For all subprojects, the intermediate facility will ensure that environmental and social impact analyses and associated documents are developed with public consultation and</p>

Category	Criteria	Requirements
		<p>made available in a public place accessible to potentially affected parties.</p> <p>The host country must require the intermediate facility to monitor the environmental and social performance of its subprojects and submit to MCC periodic (usually annual) reports on the implementation of its environmental and social procedures and the environmental and social performance of its portfolio.</p> <p>In addition to or in lieu of the determinations described above, MCC will determine during the environmental screening whether Appendix B of these guidelines, the National Environmental Policy Act, or other requirements or procedures must apply to the proposed project.</p>

5.4.6 Public Consultation and Disclosure

Consistent with MCC's principle of host-country ownership of the projects implemented under a Compact, implementing entities will be expected to incorporate timely, participatory, and meaningful public consultation in the development of Compact-related ESIA's, analyses, and associated Management Plans. They will also be expected to make these documents publicly available and easily accessible.

5.4.7 Monitoring

The host country will be responsible for appropriate monitoring of project mitigation plans (e.g., Environmental and Social Management Plan) during the term of the Compact. Recognizing that not all Compact-eligible countries may have this capacity, MCC can, where appropriate, provide funds within the Compact to help ensure proper oversight and implementation of mitigation measures. MCC will monitor compliance through the review of information provided by the implementing entity and through site visits.

In addition, MCC may require, where appropriate, an environmental audit in order to assess the impact of prior or existing activities not funded with MCC funds or of an MCC-funded project to determine the status of regulatory compliance and environmental performance, as well as potential environmental and health and safety risks, liabilities, and opportunities associated with the activities or project.

5.5 Multilateral Agreements

Table 5-6: Multilateral Agreements

Ratification or signing	Conventions and Objectives
Environment	
2020	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Cooperation among the signatory countries for protection of certain endangered species of wild animals and plants to prevent their over exploration.
2017	Paris Agreement is an agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future
2013	Convention of the Law of Seas (preservation and protection of the marine environment)
2012	Plant Protection Agreement for the Asia and Pacific Region
2009	Montreal Protocol on Ozone Layer Depleting Substances.

Ratification or signing	Conventions and Objectives
2009	Coral Triangle Initiative (CTI) defines five main components namely Seascapes, Ecological Approach for Fisheries Management, Marine Protected Areas, Threatened Species and Climate Chang
2008	Kyoto Protocol UNFCCC. Mitigation of climate change furthermore it promoted the carbon sequestration and credits (Credit Emission Reduction trading)
2007	The Rio Declaration. The Convention on Biological Diversity (UNCBD contains principles which address such important issues as; sustainable development to integrate environmental protection into the development process (ESIA); common but differentiated responsibilities to conserve, protect and restore the earth's ecosystems; public participation and information access at the national level, reduce and eliminate unsustainable patterns of production and consumption.
2007	International Plant Protection Convention (IPPC)
2006	UN Framework Convention on Climate Change (UNFCCC). Stabilization of greenhouse gas concentrations in the atmosphere.
2005	Convention on the International Maritime Organization
2003	Convention to Combat Desertification (UNCCD)
2020	Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Cooperation among the signatory countries for protection of certain endangered species of wild animals and plants to prevent their over exploration.
2017	Paris Agreement is an agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future
2013	Convention of the Law of Seas (preservation and protection of the marine environment)
2012	Plant Protection Agreement for the Asia and Pacific Region
Cultural Heritage	
2016	Convention for the Safeguarding of the Intangible Cultural Heritage (2003).
2016	Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005)
2016	Convention concerning the Protection of the World Cultural and Natural Heritage (1972)
Human Rights	
2003	Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment
2003	International Covenant on Civil and Political Rights
2003	Second Optional Protocol to the International Covenant on Civil and Political Rights aiming to the abolition of the death penalty
2003	Convention on the Elimination of all forms of Discrimination against Woman
2003	Convention on the Elimination of all forms of Racial Discrimination
2003	International Covenant on Economic, Social and Cultural Rights
2003	International Convention on the rights of the Child including Optional Protocols (on the involvement of Children in armed conflicts, 2004; on the sale of children child prostitution and child pornography, 2003)
2004	International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
2023	Convention on the Right of Persons with Disabilities
2002	Constitution of the World Health Organization
International Labour Standards	
2009	Forced Labour Convention
2009	Freedom of Association and Protection of the right to Organise Convention
2009	Right to Organise and Collective Bargaining Convention
2016	Equal Remuneration Convention

Ratification or signing	Conventions and Objectives
2016	Discrimination Convention
2009	Worst Forms of Child Labour Convention

6 STUDY AREA

While this Activity involves two Phases and two EISs, for continuity and compliance with IFC PS1, the EISs study areas are only partially segregated and will have some overlap to ensure that the combined and cumulative impacts are accurately characterized. Figure Figure 6-1 shows the Phase 1 and Phase 2 main study area. Phase 1 is the plant site and outfall area at the far north outlined in cyan and the Phase 2 study area is the remainder of the hatched area.

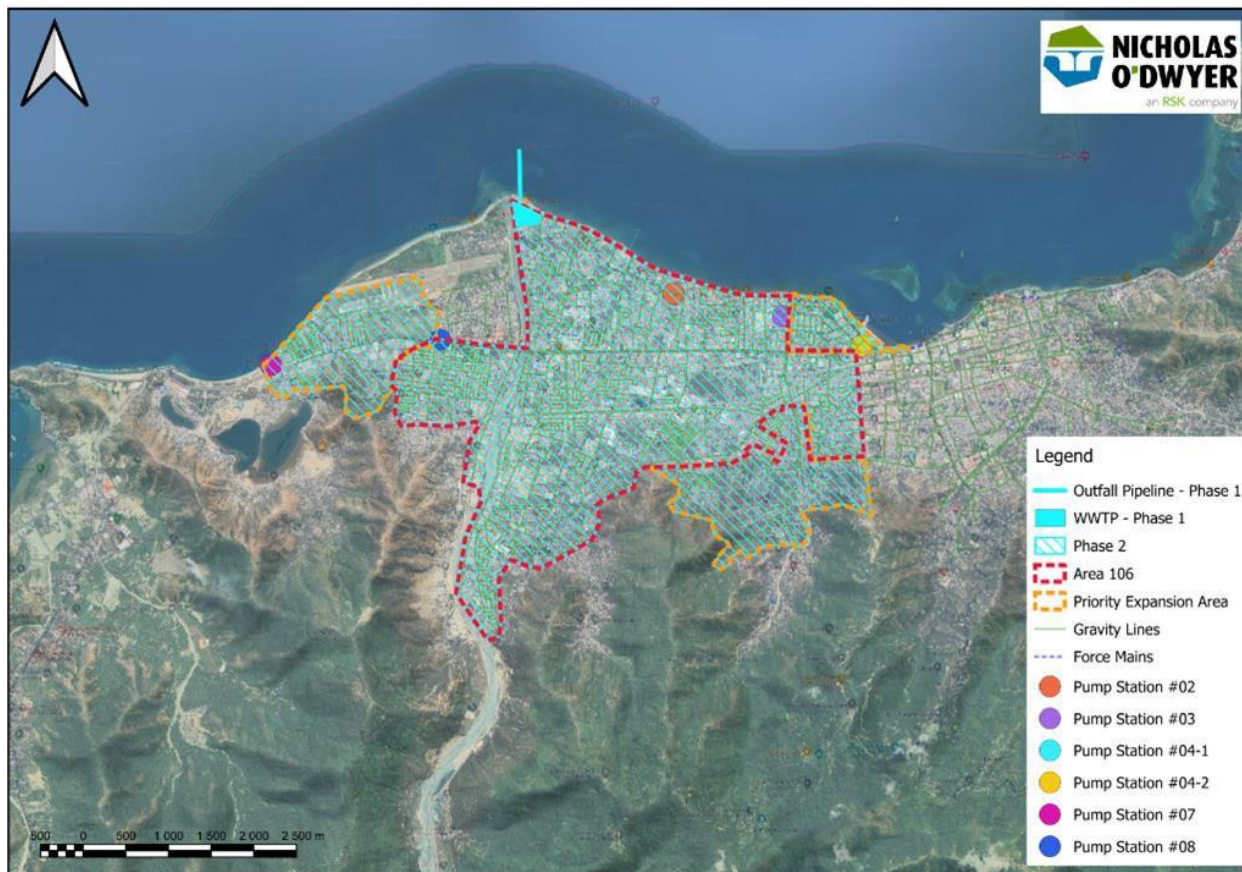


Figure 6-1: Phase 1 and Phase 2 main study area (hatched area)

6.1 Phase 2 study area

The study area for the social baseline is focused on the Dili municipality and the four administrative areas within it, namely Dom Aleixo, Vera Cruz, Nain Feto and Cristo Rei. The Dom Aleixo administrative post, with the Sucos of Fatuhada, Bairo Pite, Manleuana and Comoro, encompasses most of "Area 106", which is the core target area for the sanitation project and drainage improvements. "Area 106" also includes a small sector of Vera Cruz, capturing portions of the Sucos Motael, Vila Verde, Kampung Alor and Colmera. The study area also includes, areas that will potentially benefit from the disinfection aspects of the project including other administrative posts within the Dili municipality and the district areas of Aileu, Liquiça, Ermera, and Manatuto.

The Dom Aleixo administrative post is located in the west of the study area and is bisected by the Comoro River. This administrative post contains four sucos, which account for approximately 50% of the total study area. Vera Cruz and Nain Feto are adjoining administrative posts located in central Dili. A number of international organizations and diplomatic buildings are located within these regions. Cristo Rei administrative post is located in the east of the study area and generally comprises rural and urban areas.

Figure 6-2 shows the Study Area for Phase 2, a map of the affected sucos, and a map of the areas requiring the Simplified Gravity Sewer.

While the details and scope of the study area varies by topic, the main Phase 2 Study Area extent coordinates are approximated below.

Westernmost point:

- Latitude: 08°33'21.03"S
- Longitude: 125°30'30.73"E

Northernmost point

- Latitude: 08°31'59.73"S
- Longitude: 125°32'7.90"E

Easternmost point

- Latitude: 08°33'12.42"S
- Longitude: 125°34'39.29"E

Southernmost point

- Latitude: 08°35'5.71"S
- Longitude: 125°31'58.07"E



Figure 6-2: Phase 2 Study area.

7 SCOPE OF THE WORK.

7.1 Project Description

As discussed in Section 2, Phase 2 of the project includes the construction and delivery of the waste water collection system.

As part of the Phase 2 proposals, the untreated wastewater (sewage) will be collected from the properties in Area 106, and potentially the three priority expansion areas, and conveyed to the proposed Phase 1 WWTP via a series of gravity pipes, pumping stations and force mains. Through a series of treatment processes, the WWTP will treat the sewage to an acceptable level before discharging the treated effluent to the Banda Sea.

Figure 7-1 provides a simplified overview of the Phase 1 and Phase 2 elements while the remainder of this section provides additional information on the Phase 2 Project Elements as well as the Project Activities and a high-level Project Schedule.

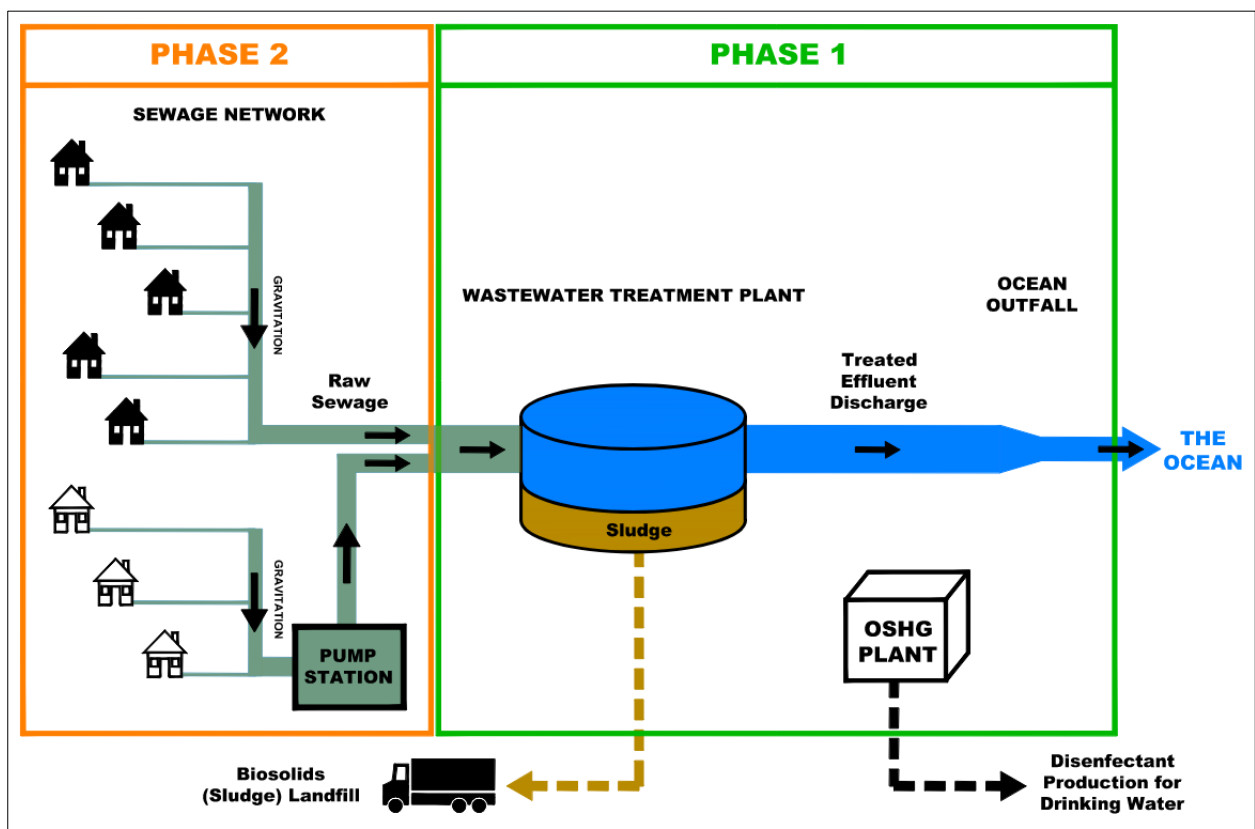


Figure 7-1: Simplified sketch of sanitation system including Phase 1: WWTP, OSHG and ocean outfall, and Phase 2: network, pumping stations,

7.1.1 Phase 2 Project Elements

Collection Network

The wastewater collection network, often referred to as a sewerage system, is a network of pipes, pumps, force mains and other infrastructure designed to collect and transport wastewater from residential, commercial, industrial, and institutional sources to a treatment facility.

Key components of a wastewater collection network associated with this project include:

1. Conventional Gravity Network

2. Simplified Gravity Network
3. Pumping Stations and Force Mains
4. Building Connections
5. Communal Toilet Blocks

Area 106 (within dashed red boundary in Figure 7-2) was selected for Compact funding based on the disease burden modelling and analyses performed during the feasibility studies. Terra Santa Golgota and 12 De Outubro and Halibur and Loria were identified as **priority expansion area**, these areas would only be served if surplus funds remain in the Compact budget following award of implementation contracts.

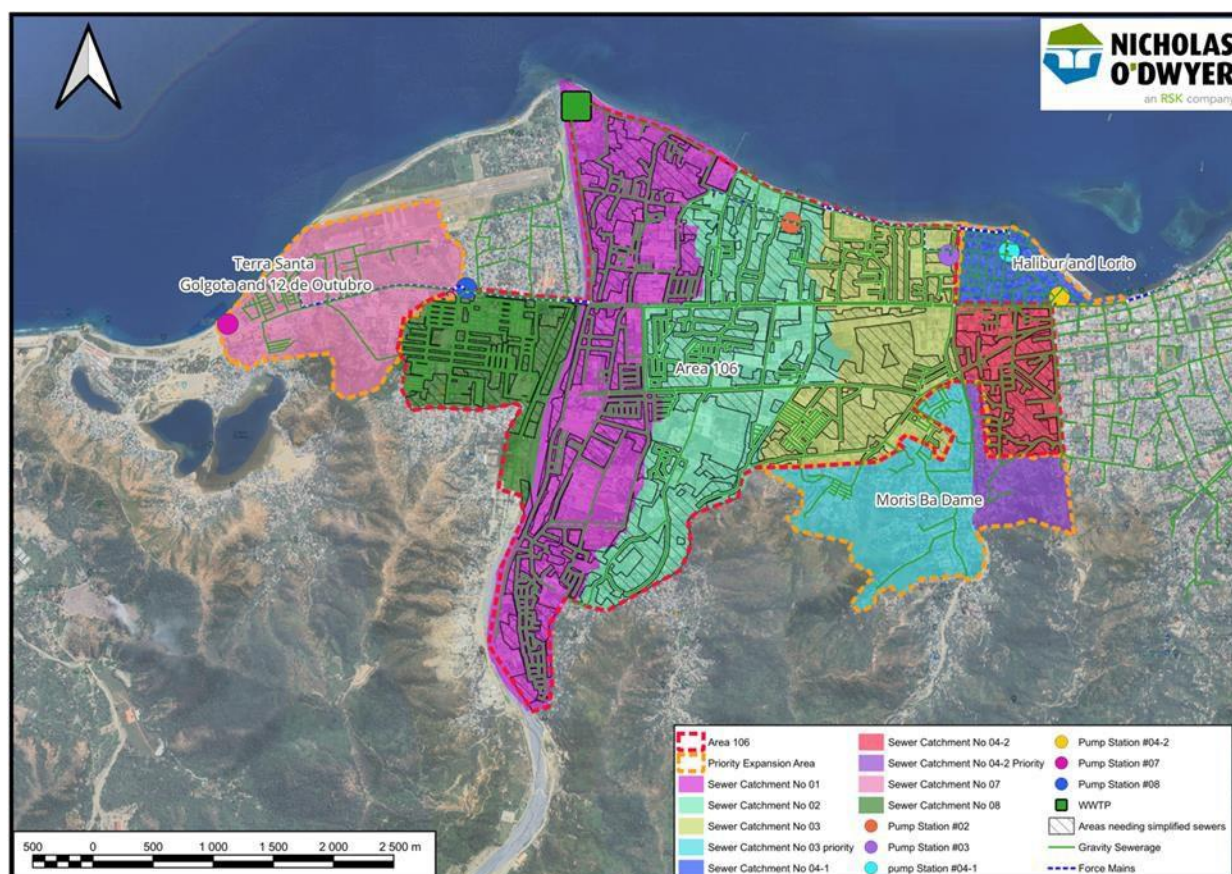


Figure 7-2: Geographic location of project area (Area 106 plus Priority Areas)

Conventional Gravity Networks

This sub-activity includes the design and construction of a conventional gravity collection network which will consist of buried gravity pipelines, generally constructed within public roads.

Several potential solutions for the collection of domestic wastewater were considered, including on-site systems, low-pressure sewers, and manual pumping/faecal management systems.

Conventional gravity sewers were determined to be the most appropriate sanitation solution for the Accessible Areas. Conventional gravity sewers generally comprise buried pipes 160mm and larger in diameter which usually run parallel to the fronts of houses or businesses, sloping toward pump stations and/or the WWTP. Manhole structures will be constructed straddling the conventional sewer lines at regular intervals and at changes in direction. This will permit personnel to access the conventional sewer mains for inspection and maintenance of the system.

Simplified sewer

Simplified Sewers, developed in the 1980s in Brazil, are recommended as the most appropriate solution for the limited access areas. These sewers utilize smaller diameter pipes installed at shallower depth, or above grade that serve smaller areas with more frequent points of access. Such an approach reduces construction and permanent impacts to nearby structures while providing the same user experience when properly managed.

This sub-activity includes design and construction of simplified gravity sewers in Area 106 only, typically in densely developed unstructured areas with limited access. Simplified sewers will generally comprise mostly buried pipes (sometimes above grade pipes against pathway/boundary walls or concrete encased where required) with a diameter of between 110mm and 160mm, as well as the related simplified sewer manholes and junctions. Simplified sewers will then connect to a conventional sewer at a conventional sewer manhole.

Pump Stations and Force Mains

Pump stations are designed to overcome elevation differences and transport wastewater from lower to higher elevations. These stations typically include wet wells, control systems, odour control systems and screening system to prevent debris clogging the pumps. The wet well serves as a collection basin where incoming wastewater accumulates before being pumped out, and it helps prevent pump cycling by providing a consistent flow. Control systems manage pump operation, monitor fluid levels, and can trigger alarms or adjustments to maintain optimal performance.

The force main, is a pressurized pipeline that carries the pumped wastewater away from the pumping station to its discharge point, such as a treatment plant or receiving gravity network.

Preliminary locations of the pumping stations (see Figure 7-3) were selected during the feasibility stage of the project. All pumping stations will be equipped with several redundancy mechanism to allow for their continued operation, even in case of mechanical and power failure.

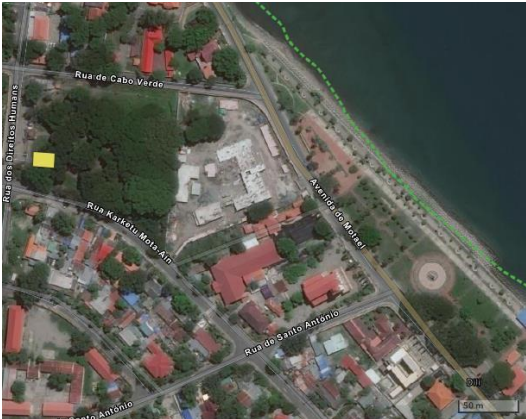


Figure 7-5: Pump station # 04-1 (Priority Expansion Area)



Figure 7-6: Pump station # 03



Figure 7-7: Pump station # 02



Figure 7-8: Pump station # 08

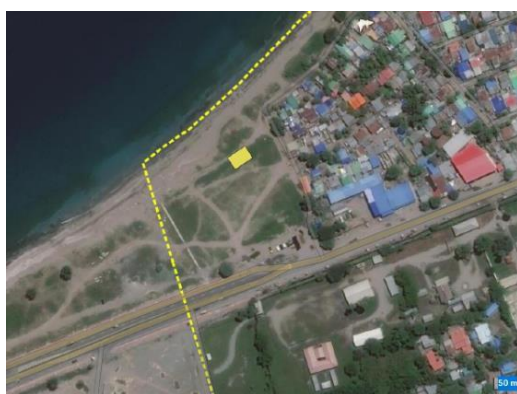


Figure 7-9: Pump station # 07 (Priority expansion Area)

Building connections

Building connections will connect the existing wastewater generating infrastructure to the proposed new collection system. The construction and completion of the building connections is included in the scope of the project.

There are three fundamental conditions that will drive how building connections are designed and constructed:

1. Buildings with an existing toilet in the building and have a septic tank or leaching pit;
2. Buildings with a toilet separate from the building and have a septic tank or leaching pit; and,
3. Buildings with a toilet separate from the building, but have no septic tank or leaching pit.

Figure 7-10 and Figure 7-11 show simplified sketches of the building situations and indicate how the building connections could be undertaken.

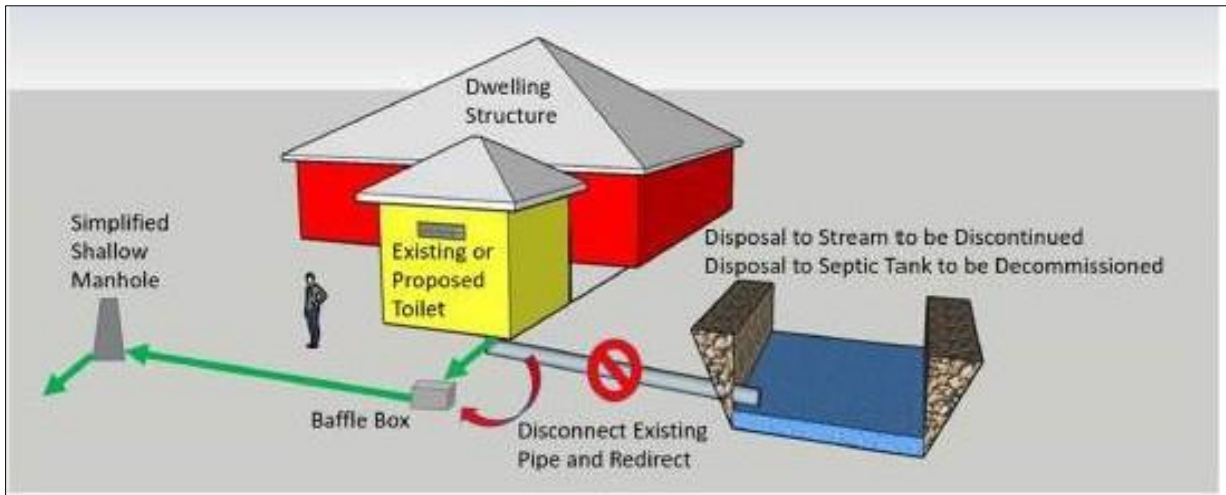


Figure 7-10: Connection to building with existing or proposed outbuilding toilet.

In this situation, the toilet (yellow) is separated from the building and disposal is to a public drainage channel (shown) or a subsurface septic tank (not shown). The proposed improvement is to redirect the discharge to a simplified sewer. The redirected discharge is shown by the piping (green) and simplified shallow manhole.

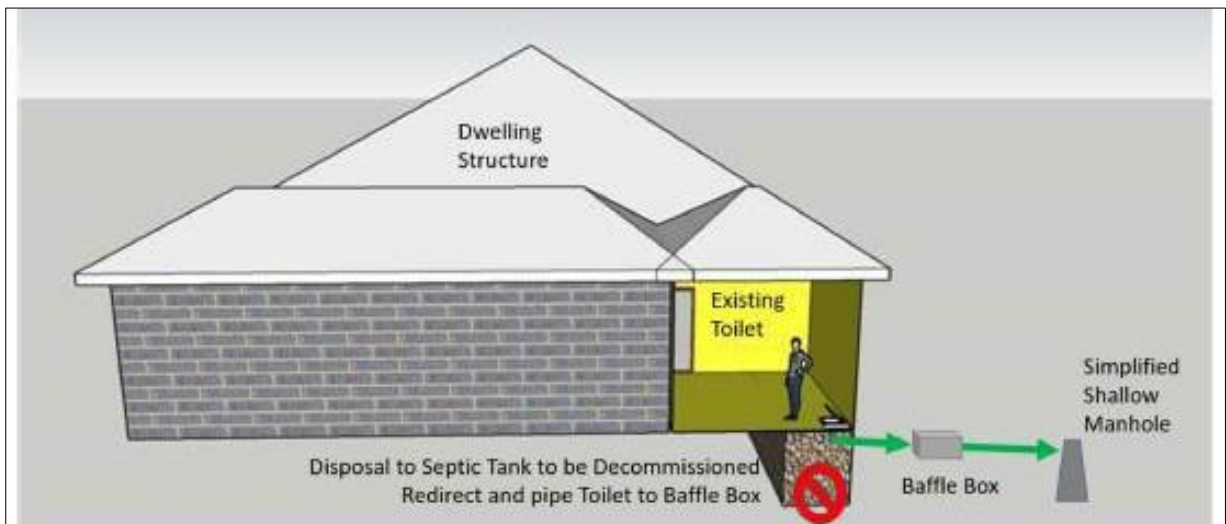


Figure 7-11: Connection to building with direct disposal

Toilet blocks

The preferred solution for long-term sustainability is to have an individual toilet per household. The attempt will be to place a toilet as near to the property as possible – but where this is not feasible, toilet blocks may be installed. The toilets may either be standalone prefabricated toilets or blocks or standalone prefabricated toilets, however site access for installation in informal areas may prevent this.

Associated Drainage Activity

This activity includes improving specific portions of the drainage system in areas where the WSD Project-funded conventional gravity sewer system will be constructed. Installing the sanitary sewer and the drainage infrastructure simultaneously provides the opportunity to avoid conflicts between the two systems.

7.1.2 Project activities

The primary activities associated with Phase 2 of the Project include:

Detailed Design: This design will provide all the necessary information for the Contractors to carry out the construction work. To inform these designs, a series of intrusive and non-intrusive surveys will be carried out, as described under section 7.2.1.2. This stage of design will also include the preparation of the FIDIC Red contract documents that will guide the activities of the Contractors.

Construction: The General construction activities will include but are not limited to:

- Site preparation, Clearing and Earthworks
- Establish site compound including site offices and parking areas
- Set up including material lay down areas (aggregates, pipes, fittings, mechanical and electrical equipment, chemical storage in bunded tanks)
- Construction yard set up will include concrete batching, refuelling facilities, steel fixing for reinforced concrete structures, pipe welding facilities, mechanical and electrical assembly points, wash-down areas etc. Some smaller temporary work areas may be set up around the Project Area for activities such as small batch concrete mixing, welding, equipment assembly that are most efficiently done at the work area.
- Excavation/trenching and construction of pipelines
- Excavation for pumping station structures
- Management and disposal of surplus material
- Construction of pumping stations
- Mechanical and electrical fit out of the pumphouses
- Construction of controls and ancillary facilities at pumpstations
- Construction of temporary access roads and parking facilities
- Placement of backfill material
- Landscaping, fencing, lighting, and aesthetic enhancements as appropriate
- Trenchless pipe Installation

Operation of the completed system will likely include:

- Regular visual inspections of manholes, inlet structures, and gravity pipelines.
- Identification of potential issues such as blockages, cracks, or corrosion.
- Cleaning and Jetting:
 - Scheduled cleaning of gravity pipelines to remove accumulated debris.
 - High-pressure water jetting to clear obstructions and prevent clogs.
- Manhole Maintenance:
 - Inspection and maintenance of manhole components, including covers, frames, and seals.
 - Addressing issues such as infiltration and exfiltration.
- Responding to any alarms
- Regular inspection and testing of pumps for proper operation.
- Lubrication of bearings and replacement of worn components etc
- Removal of debris from screens (plastic bottles etc.)
- Scheduled cleaning of wet wells to remove accumulated solids and debris.
- Regular testing of control systems, sensors, and alarms.
- Calibration of sensors to ensure accurate measurements.
- Testing and maintenance of backup generators.
- Inspection and maintenance of odour control equipment.
- Replacement or replenishment of media as needed.

7.1.3 Schedule

At this stage it is anticipated that the construction stage associated with the Phase 2 activities will be approximately 3-4 years in duration.

7.2 Description of the Environment (Baseline data)

The Compact WSD project was subject to an intensive three-year, pre-Compact development period that included engineering, economic, environmental, and social studies and analyses. During those studies, a wide array of previous studies and data were also collected and used in the analyses. All studies done during the MCC Compact Development period (2019 – 2022) were scoped and conducted in close consultation with GoTL. Table 7-2, Table 7-4:, and Table 7-5Table 7-5 summarize the primary source studies and data for those resource areas. Table 7-1 lists some other relevant studies that are otherwise classified.

Table 7-1: Summary of previous studies for the WSD Project.

Study	Date(s)	Field Study	Desktop Study	Analysis	Data and Scope
Legislative and Policy Analysis	2022	n/a	•	•	Discussion of applicability of various Timor-Leste laws, International performance standards and policy, and applicable treaties and conventions
Economic Analysis	2019, 2021	n/a	•	•	Economic analysis of various alternatives and benefits beginning with initial Compact Scoping and proceeding through sequential layers of detail to define the Compact scope and budget
Stakeholder engagement	2020 - 2022	•		•	Stakeholder Engagement has been an ongoing process since 2020 to obtain information to inform Compact Development and identify concerns and issues from GoTL ministries, NGOs, community groups and Suco Chiefs.
Alternatives analysis	2020, 2021, 2022		•	•	Alternatives analysis has been conducted throughout the Compact development process. Section 7.3 provides details of the alternatives analysis to date, as well as the alternatives addressed in this stage of the work.

In addition to the four years of previous studies and data, there are studies that will be conducted during Phase 1 and 2 of this project. Some of these studies are new and some will supplement the previous studies. Table 7-3 and Table 7-6 list these new and enhanced studies. More detail on these studies is provided in the appropriate Physical environment (Section 7.2.1), Biological environment (Section 7.2.2), and Human environment (Section 7.4.3) sections.

Some of the studies overlap, are multidisciplinary and provide data and information for the physical, biological and human environment, namely the LiDAR and 360-imaging and the Census. The imaging informs the design as well as the residence and asset inventory for the Census and all roadside vegetation (trees, shrubs, etc.) is automatically documented in the LiDAR and 360 imagery. The Census also informs the building connection analysis. Figure 7-12 shows how these activities interconnect, while Sections 7.2.1.2.1, 7.2.1.2.2, and 7.2.3.2.1 provide details of the Lidar, 360-imaging, and Census, respectively.

7.2.1 Physical environment

The physical environment includes; air resources emissions, water resources (surface waters, ground waters, coastal waters and marine waters), noise, geology, soils, topography, and landforms.

For all these recipients, a comprehensive description of the prevailing situation will be given on the basis of secondary and primary data. It should be noted that most of the secondary data used is very recent (within the last five years), as the studies were carried out as preparatory assessments for the Dili Drainage Project and the WSD Project.

7.2.1.1 Physical environment: Currently available data and baseline studies

Table 7-2: Physical environment, currently available baseline data summary

Aspect	Available data	Date
Air resources	Particulate matter (PM10), Particulate matter (PM2.5), Nitrogen dioxide (NO2), Sulphur dioxide (SO2)	2008 – 2019, 2020
Geology and soils	Geotechnical and groundwater investigations, boreholes, lab analyses	2016
Surface water quality – fresh systems	pH, total dissolved solids, total suspended solids (TSS), turbidity, ammonia, nitrate, nitrite + nitrate as N, total nitrogen as N, total phosphorus as P, iron, manganese, total hardness, oil & grease, dissolved oxygen, biochemical oxygen demand (BOD), sulphate, total coliform bacteria, Escherichia coli bacteria	Four locations as part of the Dili Drainage Infrastructure Upgrading Project EIA (National Directorate for Basic Sanitation, 2020) Two locations in the Comoro River as part of the Presidente Nicolau Lobato International Airport Expansion Project (Ministry of Transport and Communications and Asian Development Bank, 2021)
Surface water quality – marine systems	Temperature, salinity, conductivity, dissolved oxygen, oil and grease, pH, ammonia, nitrate/nitrite, total Kjeldahl nitrogen (TKN), total nitrogen, orthophosphates, total phosphorus, TSS,	Microbiological water quality of the nearshore was assessed in a single marine water sampling event in June 2019 as part of the DDUIP EIA (National Directorate for Basic Sanitation, 2020) During October 2021, a field team collected marine water quality samples from nine locations along north-south transects, centred on the proposed outfall alignment at 500 m intervals at three depths within the water column – 2 m, 25 m and 60 m below the surface.
Groundwater quality	Bacteria, metals	Draft Final Pre-Feasibility Study of a Groundwater Resource Development Project for the Water Supply of Dili Metropolitan Area by TEAM, ATT & CQ2 (2020)
Marine hydrodynamics and mixing zones	Currents, tides, waves, seasonal data Bathymetric	Installation of tide gauge at Port of Dili took place in September 2021. A dataset of global oceanographic information from Mercator Ocean International Daily Global Physical Bulletin, which includes daily updated 10-day forecasts on currents, was used by Tetra Tech (2020a) Analysis of data from the Centre for Australian Weather and Climate Research for seasonal wave patterns found (Tetra Tech, 2020b)

Aspect	Available data	Date
		A bathymetric survey of the proposed ocean outfall construction corridor took place during September 2021 using a Hydrographic Echosounder ECHOTRAC and Transducer. The results of the bathymetric survey were used to inform modelling for the ocean outfall (Tetra Tech 2022b)
Topography, surface hydrology, and landforms	Digital terrain models, satellite imaging	Most recent
Noise	Data from nine monitoring stations, five of which are in, or very near the project area	2019

7.2.1.2 Physical environment: New studies

Table 7-3: Physical environment: Summary of new and enhanced studies for this Activity

Study	New Supplemental	or Field Study	Desktop Study	Analysis	Notes
LIDAR, Photography and Infill Topographical Surveys	New	•	•	•	See Section 7.2.1.2.1
360 Imagery	New	•	•	•	See Section 7.2.1.2.2
Geotechnical	New	•	•	•	See Section 0
Acid sulphate soils	New	•	•	•	See Section 7.2.1.2.4
Climate change	New, supplemental		•	•	See Section 7.2.1.2.5
Waste management	New		•	•	See Section 7.2.1.2.6

7.2.1.2.1 Field Survey: LIDAR, Photography and Infill Topographical Surveys

Initial data gathering activities have started and will continue throughout 2024. The following technologies are being planned:

- *Aerial LiDAR and Photogrammetry:*
 - High Resolution Digital Terrain Models (DTM) / Digital Elevation Model (DEM) – for clarity this is considered to be the “Bare Earth Model” throughout. These aerial surveys were conducted employing a drone or unmanned aerial vehicle (UAV);
 - High Resolution Digital Surface Models (DSM);
 - High Resolution aerial photography.
- *Topographic survey/Terrestrial Surveys:*
 - Terrestrial surveys will be carried out to infill areas that will need more detail such as the Wastewater Treatment plant site and other areas that are where the aerial survey information proves insufficient.
- Figure 7-12 shows how the field imaging surveys integrate with the census activities (See Sections 7.2.1.2.2 (360 imaging) and 7.2.3.2.1 (census)).

mobilisation of excavation machinery to carry out trial digs in order to prove the ground conditions.

All investigation points will be assigned with a unique identifier. The target depths of investigation will be selected according to the depth of planned excavation, type of structure and the associated loading, the types of foundations to be constructed, and the anticipated subsurface conditions. The conditions encountered in the boreholes and trial pits will be logged in accordance with an accepted soil classification system (USCS, AUS Code or similar).

Laboratory testing will also be undertaken. These tests will be performed in accordance with recognised standards/industry norms to allow for soil classification, development of the geological and hydrogeological model and derivation of engineering properties.

7.2.1.2.4 Acid Sulphate (AS) Soils Investigation

Acid soils were identified in the coastal areas of Dili and such soils are identified as an environmental risk during excavation for structures and pipelines.

AS Soil forms naturally in both coastal and inland settings under highly reducing conditions in saturated, organic-rich sediments where there is a source of sulphate and iron. From a preliminary assessment, the geology of Dili comprises Holocene age flood plain alluvium that is expected to contain organic carbon material and iron within silicate and carbonate minerals. The most significant source of sulphate is seawater.

AS Soils investigation includes:

- Detailed desktop study to inform the basis for development of the sampling and analyses processes and distribution of sampling locations;
- A preliminary sampling and analytical program considering industry standard documentation, inclusive of the Australian National Acid Sulphate Soil Guidance documentation on AS Soils identification, sampling and laboratory methods, and the Queensland Laboratory Method Guidelines. These documents will be relied upon to inform the sample density, sample preservation methodology, and analytical requirements;
- Field verification of assumptions made in the development of the sampling and analyses process to this point;
- Collection of samples for out-of-country testing at a Australian National Association of Testing Authorities (NATA) certified lab;
- Assessment of the data by the AS Soils specialist team, preparation of the AS Soils Management Plan documentation, and generation of spatial maps for the sites.

Data assessment will be undertaken and an AS Soils Management report will be developed. The report will outline the presence or absence of AS Soils at each sample site and extrapolate the findings spatially across the study area according to the nature and distribution of materials observed. The plan will include the following:

- Details of how acid sulphate soils will be identified, segregated, stored and managed to remove potential of contaminating other soils, and acid drainage into surface water and groundwater.
- An appropriate inspection and monitoring program commensurate with risks and areas that are identified as requiring further management during the detailed design phase.
- Appropriate management strategies based on the findings of the investigation will be outlined in the AS Soils Management Plan, which will be aligned with published AS Soils Management Principles.

7.2.1.2.5 Climate change

The Draft ESIA completed by TetraTech for MCC in 2022 included a high-level summary of climate change issues. Because climate change is a complex issue and has direct bearing on project design as well as global impacts and localized vulnerability, the EIS will contain a more detailed analysis of climate change. The analysis will include:

- A summary of the IPCC Assessment Report (AR) 6 (IPCC, 2023);
- A summary of regional and Timor-Leste specific impacts and vulnerabilities;
- A discussion of project emissions in a global context, including trade-offs (e.g., in situ emissions from waste (baseline) vs WWTP emissions (with project));
- A summary of precipitation issues, to the extent that data allow, that could affect design issues such as stormwater management and flooding;
- Sea level rise issues that could affect project design, with focus on the WWTP site; and
- A general discussion of extreme event frequency that may affect project design.

7.2.1.2.6 Waste management

Waste management was raised during Stakeholder consultation as an issue of concern for the project. Waste from Phase 2 of the project falls into several categories:

- Maintenance waste.
This includes periodic manhole clean out, office waste (such as non-hazardous trash), and normal plant waste, such as containers and wash water.
- Debris/screenings
Bottles, sticks, stones intercepted at pumping stations.

Each of these waste streams will be discussed in terms of:

- Volume
- Disposal practices
- Disposal facilities (Dili municipal landfill)

Each of the waste streams will be further discussed in the EMP including management best practices and reporting requirements.

7.2.2 Biological environment

The biological environment includes vegetation, terrestrial fauna and flora, wetlands and mangroves, aquatic fauna and flora, corals, endangered species (IUCN and regional and national listed) protected areas and national parks.

For all these recipients, a comprehensive description of the prevailing situation will be given on the basis of secondary data. It should be noted that especially the LiDAR and 360-imagery will provide primary data on vegetation and flora in the directly affected areas (project footprint).

7.2.2.1 Biological environment: Currently available data and baseline studies

Timor-Leste and neighbouring islands in eastern Indonesia are geographically positioned in one of only 34 'biodiversity hotspots' in the world. Between 2010 and today extensive efforts were taken to assess and protect the biodiversity within Timor-Leste. A National Biodiversity Strategy and Action Plan was developed and the sixth National Report to the UN Convention on Biological Diversity was published. The Timor-Leste plan of work for Protected Areas includes 46 protected areas of which two are national Parks and three marine natural reserves.

Besides the above-mentioned the following reports contain extensive data including extensive field studies specific to the WSD Project. Some of the main references for baseline data include:

- TetraTech, 2022a. Draft Environmental and Social Impact Assessment. Consulting Services for Preparation of the Feasibility Project, Draft

Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for Water Disinfection, Sanitation and Drainage Program, Timor-Leste Compact. Prepared for Millennium Challenge Corporation.

- Dili Drainage Infrastructure Upgrading Project (DDIUP) EIS, NDBS 2020
- Timor-Leste Plan of Work for Protected Areas – PoWPA;
- Timor Port: Tibar Bay – Environmental Impact Statement;
- State of the coral triangle: Timor-Leste - ADB, 2014

The WSD project is located in the same area as the Dili Drainage Infrastructure Upgrading Project (National Directorate for Basic Sanitation, 2020), for which an assessment of terrestrial vegetation along the road corridors and drainage channels was carried out as part of the environmental impact assessment (in May 2019 and February 2020). In addition, the field investigations carried out by Tetra Tech’s in-country subconsultant, Oasis Sustainable Projects, will be used.

Table 7-4: Biological environment, currently available baseline data

Aspect	Available data	Sources/Dates
Terrestrial biodiversity		
Vegetation	General species of vegetation types in Timor-Leste as well as species lists flora, fauna and endangered species,	TetraTech, 2022a; DDIUP- EIS, NDBS 2020
Flora	Flora in the project affected area,	DDIUP- EIS, NDBS 2020; TetraTech, 2022a;
Fauna	Fauna in the project affected area	
Aquatic biodiversity		
Microbiological water quality	Nearshore microbiological water quality	DDIUP- EIS, NDBS 2020
Mangroves	Wetlands and Mangroves including species.	DDIUP- EIS, NDBS 2020; TetraTech, 2022a;
Marine Fauna	Marine Megafauna Surveys in Timor-Leste A Marine Rapid Assessment (MRAP) of Timor-Leste	Dethmers K, Chatto R, Meekan M, Amaral A, de Cunha C, de Carvalho N, Edyvane K (2009). Conservation International, 2019
Corals	State of the coral triangle: Timor-Leste Drivers of coral reef composition, cryptic marine biodiversity, and coral health along the north coast of Timor-Leste	ADB, 2014 Cathrine Jung Shim Kim, A thesis submitted for the degree of Doctor of Philosophy at The University of Queensland in 2021
Benthic habitat	United States National Oceanic and Atmospheric Administration (NOAA) Pacific Islands Fisheries Science Centre (PIFSC) fisheries and marine resource research in Timor-Leste, including Dili, from 2012 to 2016 (Pacific Islands Fisheries Science Centre, 2017). Observations from field surveys undertaken during September through to December 2021 found that the seabed aggrades in some places near the mouth of the Comoro River as a result of the fine sediment accumulation. Observed aggradation in this area was between 3 to 5 m between this period (Costa, pers com 2022).	NOAA, 2017 October 2021 field campaign TetraTech
Endangered species	List of species aquatic and terrestrial fauna and flora	National Biodiversity Strategy and Action Plan, 2011-2020 IUCN, 2020 country lists TetraTech, 2022a;

Aspect	Available data	Sources/Dates
Protected areas	Maps and locations, distance to the project area	PoWPA 2011 TetraTech, 2022a;

7.2.2.2 Biological environment: New studies

As described in Section 7.2.2.1 extensive baseline surveys were conducted for the MCC Draft ESIA between 2020 and 2022 which also relied on many of the studies cited in Table 7-4:. Specifically, the Dili Drainage Infrastructure Upgrading Project is located in the same area as the WSD Project. During the reconnaissance mission it was recognized that in relation to flora no changes have occurred in the Dili metropolitan area. It is composed of broad-leaf trees such as Devil's tree (*Alstonia scholaris*), Persian silk tree (*Albizia julibrissin*) and curtain fig tree (*Ficus macrocarpa*) and various fruit trees (banana, coconut, mango, papaya, etc.). As expected in a metropolitan area the vegetation is highly degraded with scattered trees. Most of them occurring on private land and in the public parts as well as along the rivers.

A general description of terrestrial and aquatic fauna and flora for Timor-Leste will be provided as part of the EIS the possibility of any effects of the project in relation to terrestrial and marine protected areas will be assessed taking any waste streams, quarries and disposal areas into account. The effect of the Pump Station #07 in the outer area of the Tasi Tolu marine protected area will be assessed in detail and mitigation measures will be recommended. Wild terrestrial animals within the metropolitan area will be composed of smaller animals and those who are very opportunistic and try to find food within the waste deposit areas.

Considering the already available information and the study area, no new terrestrial or aquatic baseline studies are required. The assessment will be based on the existing information. No field work will be needed. We will, however, pursue and refine specific issues through a thorough literature review and consultation with and through:

- Conservation International
- Birdlife international
- Stakeholder engagement (Universities and other entities)

As the design develops, an assessment of any design impacts on protected or trees of cultural importance will be undertaken and either propose appropriate design modifications, directives for construction and EMP items, or mitigation measures.

7.2.3 Human environment

Human Environment: this is presumably the most important part of the environment to be analysed. The main points are population, socio-economy, land tenure and ownership, land use, employment and economic activities, infrastructure with the focus on sensitive infrastructure (communication, energy, water supply, public buildings, health and education services, etc.), town parks, recreational areas and tourism, public health, cultural sites and objects (like archaeological sites but also cemeteries, graves, shrines, places of worship, churches etc.).

For all these recipients, a comprehensive description of the prevailing situation will be given on the basis of secondary data and primary data e.g. LiDAR and 360-imagery, census, stakeholder engagement, RAP survey.

7.2.3.1 Human environment: Currently available data and baseline studies

Table 7-5: Human environment, currently available baseline data

Aspect	Studies/Date
Demographics	Draft ESIA, TetraTech, 2022. Gender and Social Assessment, TetraTech, 2022 Timor-Leste Population and Housing Census INETL, 2022

Education	Draft ESIA, TetraTech, 2022.Timor-Leste Population and Housing Census INETL, 2022
Employment	Draft ESIA, TetraTech, 2022.
Workforce	Draft ESIA, TetraTech, 2022.
Gender	Draft ESIA, TetraTech, 2022.Gender and Social Assessment, TetraTech, 2022Timor-Leste Population and Housing Census INETL, 2022
Trafficking in persons (TIP) risk	Draft ESIA, TetraTech, 2022.
Grave sites	Draft ESIA, TetraTech, 2022.
Community safety	Draft ESIA, TetraTech, 2022.
Waste management	Draft ESIA, TetraTech, 2022.
Cultural resources	Draft ESIA, TetraTech, 2022.
Waterborne diseases	Draft ESIA, TetraTech, 2022.
Traffic management	Draft ESIA, TetraTech, 2022.

7.2.3.2 Human environment: New studies

Table 7-6: Human environment, new studies

Study	New Supplemental or Field Study	Desktop Study	Analysis	Notes
Stakeholder engagement	Supplemental	•	•	See Stakeholder Engagement Plan (December 2023) for more detail
Large Scale Census	New	•	•	See Section 7.2.3.2.1
Resettlement and economic displacement survey	New	•	•	See Section 7.2.3.2.2
Gender and Social Assessment	New and Supplemental		•	See Section 7.2.3.2.1, Section 7.2.3.2.2 and Section 7.2.3.2.3
TIP risk management	New and Supplemental	l	•	See Section 7.2.3.2.4
Grave sites	New		•	EIS will outline Unanticipated Discoveries procedures
Waste management	New		•	See Section 7.2.1.2.6

7.2.3.2.1 Field survey – Census

The census will be undertaken using a mobile application that will be completed by enumerators on a tablet or mobile phone. Specific QA measures will be pre-loaded onto the app to ensure accurate data is being obtained from the field. Where possible, questions will be crafted such that they can be answered by selecting pre-entered responses from a list to improve QA.

Preparatory work for the large-scale census will consist of the following:

- Suco/ Aldeia level consultations;
- Preparation of the questionnaire and database structure;
- Training of census enumerators; and
- Pilot surveys and data processing of pilot data.

Following the completion of the preparatory work and the aerial surveys, the census will proceed with the following stages:

- Mobilization of enumerators;
- Census of the Outfall Area (area covered under Phase 1);
- Census focused on areas to be served by simplified sewers;
- Census focused on areas to be served by conventional sewers; and
- Overall census data processing.

We estimate that just under 26,000 properties will be census surveyed. This data has been obtained via a detailed review of the Open Street Map and 2022 Census information on properties and property types within Dili. Table 7-7 below shows the distribution of census estimated to be carried out in Area 106 and the three priority expansion areas (Terra Santa, Golgota and 12 de Outubro, Halibur and Lorio, and Moris Ba Dame).

Table 7-7: Preliminary estimate of buildings to be included in the Census.

Area	Estimated Properties		
	Total per area	Structured areas	Unstructured areas
Area 106	22,925	11,463 (50%)	11,462 (50%)
Terra Santa, Golgota and 12 de Outubro	1,364	1091 (80%)	273 (20%)
Halibur and Lorio	613	613 (100%)	0
Moris Ba Dame	1,074	644 (60%)	430 (40%)
Total Surveys	25,976		

Note: (i) These estimates have been obtained using the available GIS information to identify the existing buildings and disregard gated communities and other institutions that are not included in the compact for household connections. (ii) Only unstructured areas within Area 106 are to be included in the survey.

Before starting the census work itself, we will conduct community outreach sessions through Suco/ Aldeia level consultations to ensure the population is aware of the project and the importance of the surveys. We will then perform a round of pilot surveys in areas to be served by conventional and simplified surveys. The pilot surveys will be carried out by the Consultant's team in Timor-Leste, accompanied by local partners. The pilot is aimed at testing the survey in terms of the questions and the time that it takes to be carried out by the enumerators.

Given that some questions may be sensitive in some contexts, it is possible that private interviews may be necessary – most prominently with women. The intention will be that survey teams will be made up of a minimum 25% women.

The enumerators will be trained by international and local social specialists and monitored throughout the data gathering exercise. Training will include identifying potentially sensitive situations and how to handle them for the comfort and safety of both the interviewees and the teams.

This census will focus on gathering data in four primary aspects – note this questionnaire below is aimed toward domestic residences a separate set of questions will be developed for commercial buildings:

1. Section 1: Demographic data
 - a) Property type and ownership status.
 - b) Domestic residences: Names, contact details, sex and number of people living in a household.
 - c) Commercial/Institutional buildings: Name, contact details, sex, number of staff and estimate of customers/users per day.
2. Section 2: Water and sanitation
 - a) Primary source of domestic water.
 - b) Wastewater facilities (toilet and other plumbing).
 - c) Is there a toilet in the household and is it shared.
 - d) Is there a septic tank in the household and is it shared.
3. Section 3: Design details
 - a) Current discharge point (geo-referenced).
 - b) Location of septic tank

- c) Property boundary
 - d) Number and location of graves in the property and immediate surroundings
4. Section 4: Photos / QA
- a) Photo of respondent's proof of identification.
 - b) Photo of the structure(s) from the outside.
 - c) Photo of septic tank.

All survey data will be uploaded to a secure server and the data can be extracted to be processed separately. The Consultant has engaged with the Fulcrum development team and new features such as lines and polygons can now be added to the surveys. This will allow for the enumerators to clearly mark georeferenced locations

7.2.3.2.2 Resettlement and economic displacement

"Resettlement" in the context of this project is expected to include: temporary use of private land, and removal and replacement of minor features such as fences. **In compliance with MCC policy, the project as currently designed, will involve no forced displacement and resettlement of residents.** Economic displacement is another consideration in resettlement analysis. For this project, this could include such things as temporary impairment of access to businesses during trenching and pipe installation. It may include temporary and permanent easements across property that will restrict use.

The plots for each Pump Station (approximate are 216 m²) are to be acquired by BTL on behalf of GoTL.

A Resettlement Policy Framework (RPF) for the project was prepared in 2022 (TetraTech, 2022a). Table 7-8 provides a summary of the resettlement scoping. A Resettlement Action Plan (RAP) is being prepared under the Consultant contract.

Table 7-8: Project activities with potential resettlement and economic displacement impacts.

Project component	Impact	Comments
The OSHG plant is contained within the WWTP site which is being acquired by the GoTL	Land: 5.5 Ha (~3.9 Ha is privately owned; 1.6 Ha is government owned); Structures: business on the site; apartment complex; hotel / dive shop / restaurant; large iron fence around site; others; Others: loss of business income; loss of rental income; loss of tenancy; trees; others.	GoTL will provide land and be responsible for any structure takings and other impacts as applicable. Resettlement issues on the OSHG /WWTP site are being addressed by the GoTL.
The Ocean Outfall will be placed underground across the beach area to avoid conflicts with access across the public domain lands	The Consultant will ensure that the outfall will be buried from the WWTP to a point approximately 10-15m below the mean water level. After this the pipeline would be placed on the seabed but well below the level that could cause a visual nuisance or impact the navigation of ship	Because (per Law 13/2017) the beaches and strip of seafront measured 50m inland from the highest high tide, as well as the roadways, are considered public domain, no land acquisition impacts are expected. However, it will have to be verified if any structures could be impacted during construction

The RAP will provide guidance for Red Book/Yellow Book procurements, so that they are aware of the required procedures for implementation and documentation of the RAP process and how Red Book/Yellow Book procedures differ and how those differences affect RAP implementation.

An important aspect of the RAP that requires up-front management is that 1) negotiating compensation agreements and 2) executing the compensation process that cannot begin until

EIF of the Compact (estimated to be 2026) and when detailed designs are complete. The smooth timing and execution of compensation is critical. To that end, some compensation templates will be included, and it will be ensured that the central database contains essential data or fields for that data when it becomes available.

The proposed compensation packages will be assessed in comparison to those formulated for the Water Supply Projects. Whenever feasible, comparable compensation levels should be implemented to prevent any perception of unfairness among the involved parties. Due to the potential multitude of people affected differently in magnitude and significance, the resettlement assessment will be carried out in several stages and is closely tied to the Census study (Section 7.2.3.2.1):

- Identification and training of survey enumerators;
- Screening/preliminary assessment of all potentially affected homesteads / businesses inside or immediately adjacent to the proposed conventional as well as simplified sewer collection systems. The preliminary assessment (Census) will only collect salient data per house / structure / property e.g., Name of landowner/user/tenant, Number of people living in the house, preliminary identification of structure use and improvements to land that may be impacted, with particular focus on the availability of a toilet and the kind of the toilet. The main purpose of the preliminary assessment is to get an overview of potential impacts and a notional understanding of whether homesteads / businesses will be economically displaced or whether they will only be inconvenienced temporarily.
- The assessment of potentially affected persons and assets will pay careful attention to gender and social inclusion dynamics in the household to ensure that women or other possibly marginalized individuals (including the elderly, chronically ill, children, etc.) are captured appropriately in ways so as not to marginalize or exclude them from potential compensation and project benefits, but rather actively ensure their inclusion to compensation and benefits. This information is also critical to the GSI and TIP activities and the ESIA socioeconomic analysis.
- Key Informant Interviews (e.g., local authorities, health sector, education sector, business owners, vulnerable people, land ownership and land tenure and other) and Focus Group Discussions (Allows a smaller group of between 8 and 15 people to provide their views and opinions of targeted baseline information e.g. TIP and GSI) will be carried out to get further insides to sensitive receptors (schools, kindergartens, health services, cultural monuments, etc.), concerns, risks, impacts and benefits and possible training opportunities. Analysis of preliminary assessment data according to those homesteads / businesses who will be inconvenienced temporarily (e.g., trenching across driveways, destruction of fencing / walls along property boundaries) versus homesteads / businesses who will be temporarily impacted.
- Distinguishing between a direct significant impact which could have a long-term effect on the livelihood of a HH and a temporary inconvenience which will have a short-term effect (easy to reinstate and/or compensate in cash) but will not impact the livelihood in the long-term.
- A detailed socio-economic survey (RAP-Census) and asset inventory and valuation will only be conducted for those homesteads / businesses who may potentially face a significant permanent or long-term temporary effect, (e.g., long-term disruption of business enterprises, guest houses, severe loss of fixed and moveable assets e.g., tree plantations). The detailed survey, asset inventory and valuation process will include collecting information on household demography, socio-economic information, gender and social inclusion aspects (e.g., identification of vulnerable groups), land rights (including valuation of affected assets and livelihoods), livelihood activities and income sources and proposals on training and support requirements from the affected households or businesses.

- Development of monitoring indicators based on the preliminary and detailed assessments
- Development of a project affected person (PAP) file (hard copy and electronic) containing all relevant information including photographs, survey and asset inventory documents, signed-off Compensation or Re-instatement agreements, proof of payment in case of compensation etc.
- Structural Reinstatement works (replacement of a fence, wall, etc.) will be made as far as possible the responsibility of the Contractor with process facilitation and oversight by the RAP Implementation Specialist (RAP documentation e.g., kind of restoration required, start of disturbance, end of disturbance pictures before and after, signing off after restoration).

7.2.3.2.3 Gender and Social Analysis

There are four broad stages undertaken in the Gender Equality and Social Inclusion (GESI) assessment for this project, all of which variously rely on 1) past and new Stakeholder Engagement, 2) planned Census, 3) past GESI data analysis for the WSD project, and 4) TIP assessment.

- The first stage analyses secondary data sources such as census data to describe GESI statistics, policies, plans, and local and academic research. The purpose of the first stage is to provide the social, cultural, and economic context to the underlying causes of inequality and exclusion in Timor-Leste generally and Dili specifically.
- The second stage identifies the potential GESI constraints that may be relevant to the project in Dili.
- The third stage involves stakeholder engagement and analysis of the outcomes of the stakeholder engagement that was undertaken to identify the water, sanitation and drainage issues, needs, priorities and recommendations from the stakeholders' perspectives.
- The fourth and final stage determines the strategic recommendations for gender equality and social inclusion and presents these as an Integration Plan with goals and practices to be integrated into the stages of the project to enhance gender equality and social inclusion of otherwise marginalized groups.

7.2.3.2.4 TIP Analysis

Although domestic violence in Timor-Leste is the most common form of violence against women, Timorese women also experience non-partner rape and sexual assault, sexual harassment and trafficking.

The United Nations recognizes Timor-Leste as a source, transit and destination country of trafficking in persons. There are three types of TIP prevalent in Timor-Leste: outward trafficking (70%), inward trafficking from other countries (20%), and internal trafficking (10%), mainly for the purposes of forced labour, domestic servitude and sexual exploitation. In 2018, for example, the International Organization of Migration found 64 victims of trafficking in 7 confirmed TIP cases.

Poor economic conditions and limited educational opportunities create trafficking vulnerabilities for Timorese, in particular women, girls and members of the LGBTQI+ community from rural areas who are often forcibly involved in domestic servitude and sex-trafficking. TIP is also prevalent among men who are forced to work in labour-intensive and physically demanding jobs such as forced labour in agriculture, construction, and mining.

In 2023, Timor-Leste has been classified as Tier 2 by the U.S. Office to monitor and combat trafficking in persons. This classification means that the Government of Timor-Leste does not fully meet the minimum standards for the elimination of trafficking, but is making significant efforts to do so. During the last years, these efforts included the promulgation of the Komisaun Luta Kontra Trafiku Umanu (Anti-Trafficking Commission, KLATU) that developed the Anti-

Trafficking National Action Plan (NAP) 2023-2028; the adoption and funding of a training on Standard Operating Procedures (SOPs) to identify trafficking victims and refer them to care; and initiating investigations into suspected labour and sex-traffickers.

In this context, any infrastructure project brings with it risks of trafficking, especially inward and internal trafficking, for men, women and children, that need to be proactively mitigated against.

The trafficking in person (TIP) assessment will identify and assess potential risks related to trafficking in persons during the construction, implementation and maintenance of the Timor-Leste WSD Project on populations engaged in, affected by, or benefitting from it. It will also propose recommendations to prevent and mitigate trafficking risks and enhance protection measures. Based on this information, the project will be categorized as "high" or "low" TIP risk.

The TIP risk assessment will be guided by the MCC Policies, the United Nations (UN) Guiding Principles on Business and Human Rights, international human rights standards, and other International Labour Organization (ILO) Conventions. This assessment will consider in particular the MCC's Gender Policy as a key factor to MCC's approach to countering trafficking in persons. Gender integration in this assessment will be the incorporation of social and gender analyses throughout the whole process for the TIP risk analysis. Every task carried out will integrate the gender perspective considering that beyond the fact that human trafficking impacts men, women, boys, and girls, women and girls are particularly vulnerable. This means, social and gender inequalities will be specifically addressed.

For this assessment, we will apply the MCC's Trafficking in Persons definitions:

- A. Sex trafficking in which a commercial sex act is induced by force, fraud, or coercion, or in which the person induced to perform such act has not attained 18 years of age; and/or
- B. The recruitment, harbouring, transportation, provision, or obtaining of a person for labour or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

This definition includes additional and specific forms of trafficking in person such as bonded labour, child labour, forced labour, child sex trafficking and sex trafficking, between others.

In this sense, it will be analysed the risks during the lifecycle of the project that could exist regarding the potential presence of exploitation and making profit at the expense of adults or children by compelling them to perform labour or engage in commercial sex. It is important to highlight that in order to fall within this definition, a person does not need to be physically transported from one location to another, for example, crossing borders or being internally displaced from the rural areas to Dili.

The TIP risk assessment will focus on the following areas specific to the Timor-Leste Project:

Construction, implementation and maintenance phases: Assess risks related to labour recruitment, working conditions, and exploitation during the lifecycle of the project.

Community Engagement: Consider risks on populations engaged in, affected by, or benefitting from the project, with a special focus on women and girls.

The assessment of the TIP risks will be informed by two main questions: In what ways does the Timor-Leste WSD Project create an environment for TIP to occur? and what actions should be taken to prevent and mitigate TIP risks during the construction and operation of the WSD Project and to respond to TIP when it occurs?

To answer these questions we apply the following methodology:

Desk review: the following information and documentation will be systematized and analysed:

- General background and information of the Project;
- MCC policies, guidelines and reports related to TIP and gender and social inclusion;
- Timor-Leste reports, laws and policies related to TIP and gender and social inclusion;
- UN agencies reports on TIP, gender and social inclusion in Timor-Leste;
- INGO and local NGO reports on TIP, gender and social inclusion in Timor-Leste.

Stakeholder mapping: an identification of the relevant key players related to TIP will be part of the assessment and prior to the fieldwork stage:

- International agencies;
- International civil society organizations;
- Local civil society organizations working with victims of human trafficking and smuggling, violence against women, child labour, sex workers, etc.;
- Worker recruitment agencies; and
- National and local government agencies.

In depth interviews: We estimate at least 25 interviews will be conducted with key informants identified during the stakeholder mapping and also with members of the population potentially impacted by WSD project.

- This includes representatives of the stakeholders mapped in the previous stage - local NGOs, INGOs, national and local government, international agencies, etc. -. And, mainly local workers potentially related to the project, internal migrants and, if possible, international migrant workers based in Timor-Leste. At this point in time, with the information available, this proposal for the interviews is based on the assumption that the contractor will be appointing unskilled and semiskilled staff locally which from our perspective might decrease the TIP risks. However, if this changes, it would be necessary to follow a more strict approach.
- Special attention will be given to interview representatives of vulnerable groups: women, children, members of the LGBTQI+ community, sex workers, victims of gender violence in the different areas impacted by the project. It will be taken into consideration that for assessing TIP risks, in some cases, people might prefer being interviewed rather than participating in a focus group where the person could be feeling more publicly exposed to share his/her experiences and to have the risk of being revictimized. In this sense, the preference of the person will be respected and this might impact the amount of interviews and number of participation in the focus groups.

Focus groups: a minimum number of 4 focus groups is estimated, two with workers (one with local workers and the other with internal and international migrant workers); and the other two with women from different regions of Dili to identify potential differentiation of risk depending on the geographical areas.

- During the in depth interviews and focus groups, special emphasis will be placed on the representation of women. This is because, following the guidelines of MCC's gender and TIP policies, it is necessary to specifically analyse social and gender inequalities, both to ensure opportunities for the participation and benefit of women and vulnerable groups and to avoid causing negative social and gender impacts.
- All interviews and focus groups discussion will be prefaced with MCC's definition of TIP, and an informed consent and confidentiality statement.

Analysis and risk ranking: the primary and secondary data gathered during the desk review, stakeholders mapping, interviews and focus groups will be coded, triangulated and analysed. These findings will be used to populate the risk assessment matrix and to determine if the WSD has a "high" or "low" risk for TIP, and identify actions/measures to mitigate those risks, which became recommendations.

Recommendations: based on the analysis and risk classification for TIP, recommendations will be made to prevent and mitigate TIP risks and to enhance protection measures.

7.2.3.2.5 Grave sites

The project area has potential for grave site discovery, though no known gravesites were identified through due diligence and the Draft ESIA (TetraTech, 2022a). Gravesites will be further addressed at the current phase through:

- Stakeholder engagement
- Census interviews

Even with this consultation, there is a moderate risk of discovering unmarked graves during construction.

As part of the EMP, an Unanticipated Discoveries Plan will describe:

- A discussion of the risks, expectations, and legal and cultural framework surrounding unmarked grave discovery
- Training requirements for equipment operators and site personnel
- Training requirements for Construction and Project Managers
- Stop-work authority and procedures
- Legal requirements
- Notification requirements
- Removal and reburial procedures and responsibilities

7.3 Analysis of Alternatives

The MCC Compact Development process is rigorous and integrated across benefits, impacts, cost, and schedule. After a constraints analysis, MCC and GoTL defined the objective of the Water, Sanitation and Drainage project as **“reduce faecal pathogens in piped and stored drinking water and groundwater”** (MCC, 2022).

The alternatives analysis for the Project began in 2019 and has proceeded through various levels of detail and complexity, beginning with concept development. The MCC process requires that environmental and social impacts and benefits be incorporated throughout the alternatives analysis and engineering feasibility process. At this time, the project definition is sufficiently mature that remaining alternatives analysis include: 1) engineering alternatives for the WWTP process design and 2) the outfall diffuser configuration. All other expected alternative analysis falls in the categories of avoidance, minimization and mitigation, which will be documented in the EIS and the EMP.

7.3.1 Summary of Alternatives examined to date

The major alternatives MCC and GoTL evaluated to date for this Phase of the WSD Project include collection systems alternatives and drainage. Table 7-9 summarizes the primary alternatives analysed to date. Bold type indicates the alternative that was carried forward to the current project definition. Eliminated alternatives either had fatal flaws or had an overall multi-criteria rating that was less attractive than the preferred alternative.

Table 7-9: Alternatives assessed to date

WASTEWATER COLLECTION SYSTEM ALTERNATIVES		
Combined Conventional and Simplified Gravity-fed	Conventional Only	Decentralized Wastewater Management
DRAINAGE ALTERNATIVES		
Box culverts in Service Area 106	All infrastructure from drainage master plan within project footprint	Box culverts and dry weather interceptors in Service Area 106

7.3.2 Current Alternative Process

At this time, we expect no major alternatives analysis for Phase 2. It is possible, that minor changes to the design will be needed and these could possibly include: adjustment of pump stations sites and sewer alignments.

Table 7-10: Phase 2 Possible design driven alternatives

Alternative	Affected parts of the Project Phase	Notes
Pump station locations	Pump stations	During the design process, some locations may require adjustment and will be evaluated as alternatives
Main routing	Conventional and simplified sewers	Once the detailed design and imaging proceed, it is likely that adjustments will be made to the alignment and/or depth of the mains. This will be driven by engineering considerations, avoidance of impacts top structures or sensitive features, or both.

7.3.3 Do-nothing/No action alternative

The do nothing/no project/no action alternative serves as a comparative baseline to characterize the cumulative impact, benefits and trade-offs of the proposed project. While the EIS will discuss in more detail, Table 7-11, Table 7-12, and Table 7-13 provide an initial summary of the avoided impacts, abandoned benefits and trade-offs associated with the do-nothing alternative.

Table 7-11: Avoided impacts

Avoided Impacts
Temporary construction impacts (noise, dust, engine emissions, traffic)
Benthic habitat around outfall preserved
Trafficking-in-persons risk avoided
Temporary land takes and easements avoided
Permanent land takes avoided
Treated effluent /mixing zone plume avoided
Use of waterfront property avoided
Fugitive emissions avoided

Table 7-12: Abandoned benefits

Abandoned benefits
Waterborne illness will not be reduced
Sanitary conditions will not be improved
Groundwater and surface water quality will not be improved
Disinfection supply for public water will not be provided
Local employment opportunities will not be realized

Table 7-13: Trade-offs

Trade-off
Green house gas emissions from plant for Green house gas emission from untreated sewage
Workforce for construction for other employment
Workforce for operation for other employment
Solid waste from plant for trucked sewage from latrines
Treated effluent from plant for trucked sewage and untreated liquid waste from latrines
Odour from WWTP for odour from latrines and untreated sewage in channels

Cash and in-kind compensation for demolished features, temporary land use, and livelihood impacts for business-as-usual

7.4 Impact scoping

Table 7-147-3, Table 7-15, Table 7-16 summarize the results of the impact analysis from the Draft ESIA performed for MCC (TetraTech, 2022a) and includes additional impacts not identified at the Draft ESIA that we have since identified for analysis. The EISs will further elaborate on these findings.

7.4.1 Physical environment

Table 7-14: Primary known and expected impacts: Physical resources

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Air and climate				
Reduced air quality due to fugitive dust emissions from construction activities causing nuisance to residents, workers and people that frequent areas adjacent to drainage and sanitation works, the WWTP site and haul roads.	C	Moderate	Minimizing soil excavation and earth moving activities during dry and windy conditions. Using water sprays during soil excavation, earth movement and the haulage of materials. Covering soil stockpiles to reduce fugitive dust emissions. Developing and implementing an air quality management plan.	Low, reversible
Reduced air quality due to exhaust emissions from motor vehicles and machinery, impacting residents, workers and people that frequent areas adjacent to areas of construction, haul roads and the WWTP site.	C, O	Moderate	Using fuel efficient plant, vehicles, and equipment. Regularly servicing and maintaining plant, vehicles, and equipment.	Very low, partially reversible
Reduced air quality due to fugitive emissions from the WWTP site.	O	Moderate	Operate and maintain biogas flare at optimal conditions to provide complete combustion of biogas	Very low, partially reversible
Increased greenhouse gas emissions from motor vehicles, machinery, generators and use of grid electricity (which is produced from diesel) and direct from the WWTP.	C, O	Very low	Using fuel efficient plant, vehicles, and equipment. Regularly servicing and maintaining plant, vehicles, and equipment.	Very low, partially reversible
Increased odour from operation of the WWTP, Dili Municipal landfill and biosolids transport, impacting residents, workers and people that frequent areas adjacent to sources of odour.	O	Moderate	Designing WWTP layout to optimize buffer between site boundary and odour emissions. Using odour control system at the WWTP to reduce odour emissions. Covering trucks hauling biosolids/sludge/septage.	Low, reversible
Reduced odour within the Project area due to operation of the sanitation	O	High positive	Connecting all households and commercial properties in the project	High (positive)

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
system, which will provide sewer connections to residents and businesses and remove existing pit latrine and septic systems.			area to maximize collection of odour-causing elements. Designing WWTP layout to optimize buffer between site boundary and odour emissions. Using odour control system at the WWTP to reduce odour emissions. Covering trucks hauling biosolids/sludge/septage.	
Water resources				
Contamination of surface water and groundwater through accidental spills and discharges of fuels, chemicals and hazardous materials, or unplanned / accidental sewage releases.	C, O	Moderate	Establishing a hazardous substance management plan. Ensuring spill response kits and procedures in place. Conducting maintenance/leak tests. Conducting regular maintenance and service checks of the WWTP.	Low, partially reversible
Improved surface water and groundwater quality associated with the operation of the sanitation system within the project area, diverting sewage waste away from the drainage system and reducing infiltration into groundwater.	O	Major (positive)	Conducting maintenance checks on the sewer system. Providing of sanitation connections to the whole Project area. Decommissioning existing pit latrine systems.	High (positive)
Improved aquatic ecology associated with the operation of the sanitation system within the project area, diverting sewage waste away from the river system and reducing infiltration into groundwater.	O	Moderate (positive)	Conducting maintenance checks on the sewer system Providing of sanitation connections to the whole Project area Decommissioning existing pit latrine systems	High (positive)
Use of groundwater for disinfectant production reducing the capacity of the groundwater aquifer to supply existing and potential users.	O	Moderate	Ensuring that groundwater is sourced in a sustainable manner from an aquifer with sufficient yield. Minimizing water consumption through water saving measures.	Low, partially reversible
Soils and topography				
Sedimentation of waterways and drainage due to runoff from construction sites.	C	Moderate	Assessing areas at risk of soil erosion and sedimentation, and establishing erosion and sedimentation controls, including: silt traps and curtains, covering soil stockpiles, stormwater diversion drains, sealing high-traffic areas	Very low, reversible
Contamination of soils, surface water and groundwater due to the disturbance and exposure of acid sulphate soils from soil	C, O	Moderate	Conducting preconstruction and / or construction soil testing to identify any acid sulphate soils that will be disturbed.	Very low, partially reversible

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
excavation during construction activities or maintenance activities.			Establishing and implementing an acid sulphate soils management plan.	
Contamination of soil from mixing excavated contaminated spoil during construction of the WWTP and sewer network.	C	Moderate	Undertaking soil testing. Not using contaminated soil in construction activities. Identifying methods for safe management and disposal of contaminated soil.	Low, reversible
The extraction of borrow materials for construction purposes, modifying the landforms and drainage patterns.	C	Moderate	Using appropriately regulated borrow pits/quarries and conducting due diligence to determine appropriate erosion and sediment controls, appropriate dust management and appropriate labour conditions.	Low, irreversible
Contamination of soils through accidental spills and discharges of fuels, chemicals and hazardous materials at construction sites, maintenance yards and the WWTP.	C, O	Moderate	Establishing a hazardous substance management plan including appropriate containment. Establishing spill response kits and spill and emergency preparedness and response procedures. Conducting maintenance/leak tests. Establishing a waste management plan. Disposing of waste that reduces potential for soil contamination. Not using contaminated soil in construction activities.	Low, reversible
The operation of the sanitation system and drainage improvements within the project area, reducing a source of existing soil contamination.	O	High (positive)	None identified.	High (positive)

7.4.2 Biological environment

Table 7-15: Primary known and expected impacts: Biological resources

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Threatened and endangered species				
Since the project is located in the Dili metropolitan it is expected that there are only few to no wild animals.	C	Low	Trees need to be checked in relation to the occurrence of birds (bird nests and bat roosts). In water construction which creates increased turbidity and TSD like dredging should be carried out between January and September.	Very low

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			Further requirements like bubble screens to protect corals will have to be assessed, if required	
Terrestrial environment				
Loss of individual trees and disturbance to fauna behaviour (through noise, vibration or light or other impacts) during the construction of the WWTP and sewage network	C	low	Replanting trees at a defined ratio e.g. 5 for 1 as an improvement to previous situation.	Very low
Marine environment				
Modification of marine habitats and disturbance to fauna behaviour (through noise, vibration or light or other impacts) during the construction of the WWTP outfall pipeline.	C	Moderate	Avoiding megafauna migration periods during the construction of the ocean outfall pipeline. Implementing a vessel management plan. Employing an appropriately qualified/experienced specialist during ocean outfall pipeline construction activities to monitor/sight marine megafauna. Establishing protocols for the construction of the ocean outfall pipeline to protect megafauna from construction areas / activities (e.g., maintaining safe distances, suspending particular activities until megafauna moves on). Adopting construction methods that minimize noise and sediment disturbance.	Low, reversible
Loss of or harm to marine life (including cetaceans and marine mammals) through collision with construction equipment or vessels as a result of the WWTP outfall construction.	C	Moderate	Employing an appropriately qualified/experienced specialist during ocean outfall pipeline construction activities to monitor/sight marine megafauna. Establishing protocols for the construction of the ocean outfall pipeline to protect megafauna from construction areas / activities (e.g., maintaining safe distances, suspending	Low, Irreversible

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			particular activities until megafauna moves on).	
Changes to marine ocean water quality that may affect marine life (including cetaceans and marine mammals) as a result of the WWTP outfall operation.	O	Very low	Implement regular inspections, testing and monitoring program to measure compliance.	Very low, reversible
Disturbance of fine sediment during construction of the ocean outfall pipeline altering water quality due to increased turbidity and re-suspension of sediments and nutrients.	C	Low	Adopting construction techniques that minimize disturbance of sediments.	Low, reversible
Modification of benthic habitat during construction of the WWTP outfall pipeline.	C	Moderate	Design and placement of the pipeline outfall in location that avoids sensitive marine habitat such as coral reefs and seagrass areas.	Low, reversible
Operation of the WWTP resulting in alteration of benthic habitat as a result of outfall discharge.	O	Moderate	Design and placement of the pipeline outfall in location that avoids sensitive marine habitat such as coral reefs and seagrass areas.	Low, reversible
Operation of the WWTP outfall changing conditions in the effluent dispersion zone (noise, air, water quality changes) resulting in negative impacts to marine fauna.	O	Moderate	Regularly inspecting the ocean outfall pipeline to allow early detection of potential integrity issues (e.g., leaks, ruptures, deterioration). Establishing effluent discharge quality parameters and testing effluent regularly to measure compliance.	Low, partially reversible
Presence of the WWTP outfall pipeline changing benthic habitat.	O	Moderate	Design and placement of the pipeline outfall in location that avoids sensitive marine habitat such as coral reefs and seagrass areas	Very low, Partially reversible
Erosion of soils during construction activities across the project area, resulting in increased sedimentation/turbidity in the marine environment negatively impacting marine water quality and biodiversity and activities affected by marine water quality including fishing,	C	Low	Assessing areas at risk of soil erosion and sedimentation, and establishing erosion and sedimentation controls, including: silt traps and curtains, covering soil stockpiles, stormwater diversion drains, sealing high-traffic areas	Very Low

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
shellfish harvesting, tourism and recreation.				
Contaminated runoff from acid sulphate soils, or disturbance of contaminated soils during construction discharging to the marine environment and negatively impacting marine water quality and biodiversity and activities affected by marine water quality including fishing, seafood collection, tourism and recreation.	C	Moderate	Conducting preconstruction and / or construction soil testing to identify any acid sulphate soils that will be disturbed. Establishing and implementing an acid sulphate soils management plan.	Low
Contaminated surface water/runoff from fuel, chemicals and/or other hazardous substance spills and leaks entering the marine environment during the transport, handling, storage and disposal of these substances during construction and operation activities across the project area, negatively impacting marine water quality and biodiversity and activities affected by marine water quality including fishing, seafood collection, tourism and recreation.	C, O	Moderate	Establishing a hazardous substance management plan that identifies controls for the transport, storage, handling and disposal of fuels, chemicals and other hazardous substances. Ensuring spill response kits and procedures (including emergency preparedness and response procedures). Conducting maintenance/leak tests on fuel and chemical containers. Conducting regular maintenance and service checks of the WWTP. Regularly inspecting and maintaining the WWTP to ensure operational performance standards are met.	Low
Discharge of treated effluent from the outfall pipeline off the coast of Dili, decreasing marine water quality and impacting fishing, seafood collection, tourism and recreation in the offshore waters outside the Contact Protection Zone.	O	Low	Establishing effluent discharge quality parameters and testing effluent regularly to measure compliance. Regularly inspecting and maintaining the WWTP to maintain operational performance standards.	Low, Reversible

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Reducing the discharge of wastewater containing plastics and microplastics that degrade marine water quality and impact marine life.	O	Moderate (positive)	Designing the WWTP to minimize the release of plastics to the marine environment, including staged screening mechanisms to remove different sized particles (screens are to 6 mm). Regularly inspecting and maintaining the WWTP to ensure operational performance standards are met.	Moderate (positive)
Reducing untreated wastewater/sewage entering drainage lines and discharging to the marine environment from the operation of the sanitation system within the project area, improving marine water quality and biodiversity and improving conditions for activities affected by marine water quality including fishing, seafood collection, tourism and recreation in the nearshore area (within the Contact Protection Zone).	O	Major (positive)	Conducting maintenance checks on the sewer system where appropriate to allow for early identification of potential problems such as blockages, leaks, ruptures, etc. Regularly inspecting and maintaining the WWTP to ensure operational performance standards are met.	Major (positive)

7.4.3 Human environment

Table 7-16: Primary known and expected impacts: Human environment

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Increased traffic due to project construction vehicles causing increased congestion and inconvenience to road users and decreasing road conditions.	C, O	Moderate	Adoption of appropriate routes. Traffic management plan. Road condition survey.	Low
Disruption to traffic impacting road users (including pedestrians), residents and businesses adjacent to roads that will be impacted as part of the construction of the sanitation and drainage system.	C	High	Adoption of appropriate routes. Traffic management plan. Construction management plan.	Moderate
Decreased safety for road users due to heavy vehicle traffic increases associated with project vehicles.	C, O	High	Adoption of appropriate routes. Traffic management plan. Road condition survey. Construction management plan.	Moderate

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Increased traffic due to project vehicles causing increased congestion and inconvenience to road users and increased wear and tear on roads.	O	Moderate	Adoption of appropriate routes. Traffic management plan. Construction management plan.	Low
Cultural heritage				
Disturbance or damage to cultural heritage items or values due to the construction of the project. The risk that this may occur is increased due to inadequate engagement with community stakeholders and GoTL.	C	High	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement). Cultural heritage chance find procedure. Environment and social management and monitoring plan (ESMP) to manage dust, noise, light and vibration impacts.	Low
Disturbance or damage to cultural heritage items or values due to the extraction of borrow materials for construction or the disposal of excess spoil from construction.	C	Moderate	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement). Cultural heritage chance find procedure. Environment and social management and monitoring plan (ESMP) to manage dust, noise, light and vibration impacts.	Very low
The project's construction may temporarily restrict access to cultural heritage sites or areas of cultural heritage	C	Moderate	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement).	Very low
The establishment of project infrastructure within the urban environment of Dili may result in the impairment of cultural heritage items or values due to the proximity of project infrastructure.	O	Moderate	Avoidance via design and site selection. Cultural heritage management plan (including surveys and engagement). Cultural heritage chance find procedure. ESMP to manage dust, noise, light and vibration impacts.	Very low
Construction activities create dust, noise, visual impacts, light and vibration and temporarily impair amenity for nearby residents and businesses.	C	Major	Traffic management plan. ESMP to manage dust, noise, light and vibration impacts. Minimize soil excavation and earth moving activities during dry, high wind conditions. Water sprays to minimize dust. Cover soil stockpiles. Establish a grievance redress mechanism.	Moderate

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
The presence of the WWTP, ocean outfall and pump stations impair nearby residents and businesses due to visual, noise, light and odour impacts.	O	Moderate	As above.	Low
The increased volume of heavy vehicles impairs amenity of nearby residents and businesses along transport routes due to noise, dust, odour (during operations) and vibration impacts.	C, O	Moderate	As above.	Low, Irreversible
Improved amenity of the shoreline and nearshore environment due to removal of sewerage from drainages discharging to these areas.	O	High (positive)	Regularly service and maintain plant, vehicles and equipment in accordance with manufacturer's specifications. Conducting maintenance checks on the sewer system where appropriate to allow for early identification of potential problems such as blockages, leaks, ruptures etc. Providing sanitation connections to the whole Project area. Decommissioning existing pit latrine systems.	Major (positive)
Community health and safety				
Poor/ unacceptable workforce behaviour in the community, reducing perception of safety for residents.	C	Moderate	As above.	Low, Irreversible
Increased communicable diseases due to interactions between construction workforce and local community.	C	High	Employee code of conduct. Contractor management plans to prevent trafficking-in-persons (TIP). Communicable disease (including HIV) awareness training.	Low, Irreversible
Construction workforce includes trafficked persons.	C	High	Employee code of conduct. Contractor management plans to prevent trafficking-in-persons (TIP). Communicable disease (including HIV) awareness training.	Low, Irreversible
Safety risks from footpath/sidewalk closures/deviations associated with construction within or in proximity to a carriageway and interactions with construction machinery and excavations.	C	High	Traffic management plan. Community safety plan. ESMP to manage dust, noise, light and vibration impacts. Establish a grievance redress mechanism.	Moderate, Irreversible
Effluent discharge causes health issues in nearshore environment or consumers of marine resources (e.g., fish).	O	Moderate	Regular inspection of ocean outfall pipeline, Establishing effluent discharge quality parameters and testing.	Very Low, Reversible

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Waste generated during Project is improperly disposed causing health risks.	C, O	Moderate	Waste management plan	Very low, Reversible
Improved health outcomes including improved childhood development and wellbeing, and reduced disease burden for residents and workers in sanitation and drainage project area of influence and those connected to water supplies that receive disinfectant (e.g., people on the Dili, Aileu, Ermera, Liquiça and Manatuto water supply network).	O	Major (positive)	Social and behaviour change programs.	Major (positive)
Improved health outcomes for people using shallow groundwater associated with improved groundwater quality affected by the project.	O	High (positive)	Social and behaviour change programs.	High (positive)
Improved school attendance as a result of decreased cases of diarrheal disease in children.	O	Major (positive)	Social and behaviour change programs.	Major (positive)
Resettlement and livelihood				
Potential disruption to social cohesion and livelihoods due to resettlement of households into different locations to their established social, community and employment networks.	P, C, O	Major	Project is designed to minimize or eliminate resettlement. Stakeholder engagement plan. Resettlement policy framework (RPF), resettlement action plan (RAP). Livelihood Restoration Plan (LRP) if applicable. Broad participatory consultation with all members of the community, facilitating meetings in an inclusive manner and ensuring opportunities for those traditionally excluded to speak. Include the marginalized to foster a uniting impact and increase community cohesion. Ensure government representative always attends community consultations. Conduct pre-construction project disclosure and engagement program with communities, with the assistance of Suco administration, to build community knowledge and	Low, Irreversible

Impact	Constructi on (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
			confidence in project approach. GoTL to provide assurances on housing security. Close coordination with government officials to identify equivalent location for relocation (i.e. - similar services, amenities, etc.) as close to current location as possible.	
Livelihood impacts due to displacement of people from marine areas that support or partially support livelihoods e.g., fishing zones.	C, O	Moderate	As above.	Low, Reversible
Short-term livelihood impacts due to displacement of people from areas that support or partially support livelihoods e.g., fishing zones, drainage lines, roadsides.	P, C	Major	As above	Moderate, Reversible
Inadequate resettlement management or compensation processes resulting in adverse impacts to wellbeing of affected people.	P, C, O	High	As above.	Low, Reversible
Potential impact to residences of a lack of an available/ acceptable resettlement site for in-kind replacement of structures, if requested by impacted persons, resulting in failure of resettlement process.	P, C, O	Major	As above.	Low, Irreversible
Economic and workforce				
Existing businesses have increased competition for workers.	C	Moderate	Transparent and non-discriminatory employment practices Training and development of potential local workforce On-the-job training Engagement with the local communities	Low, Reversible
Construction of the outfall leads to disruption of shipping, fishing and marine tourism industries.	C	Moderate	Conduct pre-construction project disclosure engagement with communities.	Low, Reversible
Decreased work for existing workers and businesses servicing septic systems and supplying drinking water to Dili and other districts that will receive disinfectant.	O	Major	Optimize opportunities for local employment. Local procurement policies and procedures. Engagement with the local communities regarding employment opportunities. Inclusive community engagement vulnerable groups.	Low, Reversible

Impact	Construction (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Increased employment opportunities.	P, C, O	High to major (positive)	Training and development of local workforce. Engagement with the local communities regarding employment opportunities. Optimizing opportunities for local employment.	High to major (positive)
Increased business opportunities associated with materials and services.	C, O	Low to moderate (positive)	Establishing local procurement policies and procedures.	Moderate to high (positive)
Effluent discharge causes perception risks for the fishing and marine tourism industries.	O	Moderate	Conduct pre-construction project disclosure and engagement program to build community knowledge and confidence in project approach.	Low, Reversible
Improved business equity due to improved sanitation facilities across whole of Area 106 and access to disinfected water supply across whole of Dili (and additional regional areas).	O	High (positive)	None identified.	High (positive)
Increased reinvestment in businesses due to the savings enabled by the sanitation and water disinfection activities	O	High (positive)	None identified.	High (positive)
Improved reputation in tourism sector and in business sector more generally due to the provision of sanitation and disinfected water.	O	High (positive)	None identified.	High (positive)
Improved labour reliability and reduced labour costs due to the improved health of workforce with the reduction in diarrheal disease.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Education and training benefits of the project building workforce capacity and assisting other businesses.	O	Low (positive)	Social and behaviour change program.	Moderate (positive)
Reduced costs to the Timor-Leste medical system due to reduction in diarrheal disease.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Reduced costs to households (lost wages, medication, travel) due to reduction in diarrheal disease.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Reduced labour/costs to households due to easier/more economical access to disinfected water and a sanitation system.	O	High (positive)	Social and behaviour change program.	High (positive)
Improved gross domestic product (GDP) due to reduced stunting, mortality and morbidity due to reduction in diarrheal disease.	O	High (positive)	None identified.	High (positive)
Gender impacts				

Impact	Constructi on (C) or Operation (O)	Impact significance without Mitigation	Potential mitigation or enhancements	Impact with Mitigation
Increased disadvantage experienced by women in Dili if financial burden of payments for improved water and sanitation services falls on women.	O	Major	Gender action plan. Inclusive engagement with women. Setting service and capital prices appropriately. Financial assistance measures as appropriate.	Low, Reversible
Vulnerability of women (in particular female-headed households) is increased through lack of recognition in resettlement and livelihood restoration processes.	C, O	Major	Gender action plan. Inclusive engagement and participatory design processes with women. Resettlement policy framework/resettlement action plan and livelihood restoration plan.	Low, Reversible
Design and location of the sanitation network (in particular the simplified sewer network) and household-level connection points does not adequately meet the needs of women and children.	O	Moderate	Gender action plan. Inclusive engagement and participatory design processes with women.	Low, Reversible
Harassment, sexual exploitation and violence toward women and girls by construction workers.	C	High	Gender action plan. Employee induction, code of conduct, including zero tolerance policy, education, training and disciplinary measures. Establish grievance redress mechanism. Contractor screening.	Low, Irreversible
Reduced caring burden for women associated with decreased incidence of diarrheal disease in dependents.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Reduced labour and financial burden for women and families associated with accessing or purchasing drinking water due to the disinfection of Dili water supply.	O	Major (positive)	Social and behaviour change program.	Major (positive)
Impacts to women in informal employment that are impacted by construction of project e.g., street vendors.	C	Moderate	Inclusive engagement and participatory design processes with women. Resettlement policy framework/resettlement and livelihood restoration plan. Code of conduct for construction workers. Traffic management plans.	Low, Reversible

7.5 Impact assessment methodology and assessment and evaluation of alternatives

The methodology used to rate impacts on a resource or receptor is based on the combination of multiple characteristics of the impact, namely:

- *Likelihood*. The probability that an event will happen. These range from rare, driven mostly by accidents or small mishaps to long-term or permanent.
- *Duration*. Can be temporary (usually as a construction impact), intermittent, long term, or permanent.
- *Magnitude*. Magnitude of the impact can either be measured against specific metrics (such as for air emissions) or performance standards, relative to existing conditions (such as habitat impact relative to an entire forest stand), or a combination, and can be characterized as small, medium, or large.
- *Reversibility*. Many impacts passively reverse (such as vegetation regrowth), are actively mitigated, or are long-term and reversible with active intervention (such as removal of a facility). Occasionally, impacts are permanent or functionally permanent, such as major earthwork.

Some resource impacts consider regulatory or best practice standards, such as for water quality or air emissions. Other resources, absent quantified thresholds, consider the sensitivity of the receptor, such as for noise or habitat disturbance. Typical sensitive receptors include sensitive habitats, schools, houses of worship, and residences.

In addition to characterizing each impact by type, duration, magnitude, likelihood, and reversibility and as appropriate, effects on sensitive receptors, the analysis results in a significance rating of the impact. Table 7-17 shows a graphical summary of how impacts are rated.

During the project planning and development process, many avoidance, minimization, and mitigation elements were incorporated or embedded into the plans and layouts and are considered as part of the design rather than post-design elements mitigation.

Table 7-17: Impact magnitude

Magnitude of Impact		Sensitivity of Receptor				
		Very low	Low	Moderate	High	Very High
Positive	Very high	Moderate	High	Major	Major	Major
	Major	Low	Moderate	High	Major	Major
	Moderate	Low	Low	Moderate	High	High
	Minor	Very low	Low	Low	Moderate	Moderate
	Negligible	Very low	Very low	Very low	Low	Moderate
Negative	Negligible	Very low	Very low	Very low	Low	Moderate
	Minor	Very low	Low	Low	Moderate	Moderate
	Moderate	Low	Low	Moderate	High	High
	Major	Low	Moderate	High	Major	Major
	Very high	Moderate	High	Major	Major	Major

7.6 Mitigation Measures

Mitigation is part of a continuum of best practices and is reflected in MCC’s environmental policy application. This continuum includes:

- *Avoidance*: for a significant negative impact, we first determine if an adjustment to the project can avoid the impact (e.g. by changing the route of the sewer pipeline).
- *Minimization*: if avoidance is not possible, measures will be sought which aim at minimizing the impact, with the aim of reducing it to low, very low, or insignificant or, where such values exist, within legally prescribed limits. For example, construction noise, while temporary, can further be reduced by limiting idling and work hours.
- *Mitigation/Compensation*: If a significant impact is unavoidable, we then consider mitigation. For example, it may be necessary to plant trees to compensate for trees removed during clearing. As another example, if a business is prevented or impaired from operating a cash compensation will be calculated and offered through the resettlement process.
- Positive effects may also be further enhanced through measures such as job opportunities during construction, requiring hiring policies of the construction contractor that favour local population, and identifying training opportunities for workforce enhancement.

All proposed measures will also be checked on their effectiveness, which means that they will be scrutinized according to the following questions:

- Is the measure realistic, i.e. can it be implemented under the prevailing conditions?
- Is it adequate in that it actually addresses the identified impact?
- Is it suitable, i.e. will it reduce (or compensate) the impact to the degree required? What will the remaining impact be?
- Is it cost effective?
- Does it create conflicts with other interests?

The EIS will identify impacts that incorporated avoidance, minimization, and mitigation and how the impact level was adjusted by those measures. For example, if an impact is determined to be moderate and can be reduced to very low through a minimization measure, that will be documented in the Impact Analysis.

7.7 Environmental Management Plan

As part of the EIS Report, a Standalone Environmental Management Plan (EMP) will be developed considering all phases of the proposed project, as relevant (pre-construction, construction, operation, closure and decommissioning). The EMP will follow the requirements of the Ministerial Diploma 46/2017, regarding Annex VI and will focus on the required institutional arrangements, the mitigation measures, monitoring measures and reporting arrangement including:

- Description of the institutional setup for EMP implementation: identification of responsibilities and the necessary structures, mainly in terms of manpower and capabilities.
- Summary of the identified significant environmental and social impacts and the corresponding mitigation measures: aggregating, where possible and required, of the measures identified, and describing them in a form (including responsibilities, means required for implementation, procedures to be followed, expected outcome, etc.) in a way to make them practical for implementation.
- Description of any regulatory parameters e.g. emission limits, approvals, permits, etc.; and
- Costs: a budget for implementation will have to be prepared, taking into account the costs (as far as these are not already covered in the technical project) required for their implementation.
- Monitoring: this serves the purpose of following up on implementation of the E&S measures, with the aim to be able to take corrective measures either in case of non-compliance, i.e. if a measure is not being implemented according to plan, or if it does not produce the expected results. Here again, responsibilities and costs will have to be identified.

- Reporting requirements: internal and external, inspections, incident, accident and emergency reports, etc.

This EMP will be a first draft, for being discussed by the various stakeholders involved. It will then serve as the basis for preparation of the final EMP.

7.7.1 Trafficking in Person Management Plan

The counter-trafficking plan (C-TIP plan) will include the requirements for the prevention, monitoring, and managing of cases of trafficking-in-persons (TIP), within and outside the workforce, in keeping with MCC's Counter-Trafficking in Persons Policy.

This C-TIP plan will be interrelated to a social and gender integration plan (SGIP) which will provide a roadmap for the social inclusion and gender integration throughout the lifecycle of the project. The C-TIP plan and the SGIP will identify and seek to address the social and gender risks associated with the project including, but not limited to, risks associated with TIP for sex and labour, gender-based violence, and sexual exploitation and harassment.

7.8 Public Consultation and Stakeholder engagement plan

The main stakeholder groups identified comprise Timor-Leste Government agencies, municipal administration, households and businesses, civil society organizations, multilateral aid agencies, and foreign government agencies.

Stakeholder engagement has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns through key informant interviews and focus group discussions.

The engagement for the Project commenced in February 2019 and extended to April 2022 (with an extended period of limited engagement due to COVID-19). Engagement activities included kick-off meetings, key informant interviews, meetings with Project representatives, i.e., MCC, CDT and Tetra Tech, and various stakeholders from government agencies, bilateral and multilateral aid agencies and civil society and focus group discussions with different community stakeholders.

Additional Stakeholder engagement planning for the Project includes:

- Key stakeholders identification;
- Stakeholder issue mapping;
- Engagement methods and consultation materials;
- Engagement activities.
- Process for recording and incorporating Stakeholder issues into the EISs, EMPs, and design.

7.8.1 Stakeholder identification to date

Broad stakeholder groups have been identified, based on likely common interests in Timor-Leste's sanitation and water issues. Table 7-18 lists these groups along with a brief description of each.

Table 7-18: Stakeholder groups

Stakeholder Group	Description
Timor-Leste Government agencies	This group includes country-wide government ministries and agencies responsible for water supply, sanitation and drainage infrastructure services and project approvals. It includes Bee Timor-Leste (BTL), Secretary of Land and Registry, the National Authority for Water and Sanitation (also known as ANAS), National Authority for Environmental Licensing (ANLA), Ministry of Public Works, and the Secretariat of State for Vocational Training and

Stakeholder Group	Description
	Employment (SEFOPE), under the Coordinating Minister Economic Affairs.
Municipal administration, households and businesses	This group includes Suco chiefs, households and businesses that may benefit from the Project or be adversely affected during construction of the infrastructure. Also includes Dili Municipality Authority, Ermera Municipality Authority, Municipal Planning Agency for Dili Municipality, and Dili Municipality Water and Sanitation Services.
Civil society	This group include NGOs (both international and national) involved in the water, sanitation, and hygiene (commonly referred to as 'WASH') sector in Timor-Leste and other NGOs that may have an interest in the Project (e.g., NGOs that support development for women and vulnerable persons).
Bilateral and multilateral aid agencies	This group includes international aid organizations implementing large projects in the WASH sector, such as UNICEF, the Asian Development Bank and the World Bank.
Foreign government agencies	This group includes foreign government agencies such as Australian Government's Department of Foreign Affairs and Trade (DFAT), Japanese International Cooperation Agency and USAID that sponsor or implement programs in Timor-Leste. Also includes European Investment Bank (EIB), that has an ongoing water and sanitation infrastructure investment project throughout Timor-Leste, and the World Bank.

Stakeholder engagement for the Project has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns (February 2020 to March 2022). As part of this stakeholder engagement the MCC ESIA consultant:

- Provided stakeholders with preliminary information regarding the potential project.
- Collected data to support the project deliverables (e.g., Feasibility Study (FS), Preliminary Assessment of Environmental and Social (including gender) Impacts, draft ESIA, RPF, Social and Gender Assessment) through key informant interviews and focus group discussions.
- Identified and examined existing and potential issues from the perspective of key stakeholders.

The engagement for the Project commenced in February 2020, with kick-off meetings and key informant interviews in Dili. The consultation activities included meetings with the MCC, the Compact Development Team (GoTL entity set-up for Compact Development), and TetraTech with various stakeholders from government agencies, bilateral and multilateral aid agencies, and civil society. A list of the engagement undertaken is provided in Table 7-19. The engagement program was put on hold in March 2020 due to COVID19 and recommenced in March 2022.

Table 7-19: Stakeholder engagement to date

Date	Stakeholder
17-Feb-20	Ministry of Public Works
18-Feb-20	Ministry of Public Works and Housing, National Directorate of Basic Sanitation
18-Feb-20	National Directorate of Water & Sanitation, Japanese International Cooperation Agency
18-Feb-20	Ministry of Public Works and Housing
19-Feb-20	National Authority for Environmental Licensing (ANLA)
20-Feb-20	National Directorate of Land and Property

Date	Stakeholder
20-Feb-20	Conservation International
21-Feb-20	National Directorate for Basic Sanitation
21-Feb-20	Inter-ministerial Commission on Expropriation and presentation by Aguas de Portugal
21-Feb-20	National Directorate of Roads, Bridges and Flood Control
24-Feb-20	Aguas de Portugal, Ministry of Public Works and Housing
25-Feb-20	National Directorate of Roads, Bridges and Flood Control
25-Feb-20	Sistema Nacional de Cadastro
25-Feb-20	Timor-Leste's Business Registration and Verification Service
25-Feb-20	Dili's Chefe of Suco and village
27-Feb-20	Aguas de Portugal
27-Feb-20	National Directorate for Basic Sanitation
28-Feb-20	Port of Dili
28-Feb-20	Rede ba Rai Team
28-Feb-20	Pertamina
28-Feb-20	National Development Agency
02-Mar-20	Ministry of Agriculture and Fisheries
03-Mar-20	Sistema Nacional de Cadastro
04-Mar-20	National Directorate of Land and Property
09-Mar-20	Timor-Leste's Business Registration and Verification Service
11-Mar-20	Dili Municipality
11-Mar-20	Suco chiefs
1-Mar-22	Asian Development Bank
3-Mar-22	UNICEF
3-Mar-22	Suco Chief Bebonuk focus group
4-Mar-22	Suco Chief Vila Verde focus group
4-Mar-22	Suco Chief Comoro focus group
4-Mar-22	Female informal housing area representatives from Suco Vila Verde focus group
4-Mar-22	Female formal housing area representatives from Suco Comoro focus group
4-Mar-22	Water Aid
7 to 18-Mar-22	Female formal business representatives
9-Mar-22	Department of Foreign Affairs and Trade (Australia)
11-Mar-22	Youth representatives focus group
15-Mar-22	Female informal business representatives
24-Mar-22	CODIVA LGBTQIA+ community NGO
30-Mar-22	National Directorate of Housing under the Ministry of Public Works
7-Nov-23	Kick-Off Meeting MCC, MCC DD Consultant, MCA-TL, BTL, Minister of Finance
8-Nov-23	MCC, MCC DD Consultant, MCA-TL, BTL
10-Nov-23	National Authority for Environmental Licensing (ANLA)
13-Nov-23	EnviPro as Local consultant to support with local understanding, culture challenges, etc.
14-Nov-23	MCA-TL, BTL, EnviPro, NOD
15-Nov-23	National Directorate of Land and Property, Director of Cadastral Office
15-Nov-23	Gender Based NGOs (ACbit & Fokupers)
15-Nov-23	Gender Based NGOs (AJAR)
15-Nov-23	National Authority for Environmental Licensing (ANLA), EnviPro, NOD
15-Nov-23	Institute for Statistics
15-Nov-23	Suco Chief Comoro
16-Nov-23	Conservation International
29-Jan-24	APORTIL
30-Jan-24	EDTL
23-Feb-24	Suco Chiefs of Comoro, Vila Verde, Madohi, Motael, Bairo-Pite, Fatu-Hada, Maleuna
27-Feb-24	ANLA
27-Feb-24	Forestry Directorate
04-Mar-24	ANLA
04-Mar-24	National Directorate of Land and Property
05-Mar-24	BTL

As part of the community stakeholder engagement conducted in 2022, 69 people were engaged in the Suco focus group discussions and business key informant interviews. Of the total, 46% identified as female and 54% male. Additional interviews with Timor-Leste government agencies, Civil society organizations, and bilateral and multilateral aid agencies were also undertaken.

Of the 69 informants that provided input to this report, their ages ranged from 22 to 73 years of age, and they spoke a range of languages at home including Tetum, Portuguese, Indonesian, Japanese, Mandarin and mother tongues such as Makasae. The informants' household size ranged from 2 to 12 people, with only 7 women (10% of the informants) identifying as the head of their household.

A detailed Stakeholder Engagement Plan has been developed and is provided in Annex 3.

8 STATEMENT OF FLEXIBILITY

At this time, we are reasonably certain that the Study Area will not change, since the concept and design have matured adequately at this stage. It is possible that issues may arise over the course of the investigations, noting particularly the Census, that may drive minor changes in the design. We will apprise ANLA of any significant issues that arise that could affect this ToR for the EISs or the EMPs for this project. We are aware that a major change to the ToR may initiate new processing in accordance with Decree Law 5/2011.

9 REFERENCES

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ANNEX 1. Millennium Challenge Compact

ANNEX 2. Project Classification Document

Annex 3: Stakeholder Engagement Plan

ANNEX 1. Millennium Challenge Compact

MILLENNIUM CHALLENGE COMPACT

BETWEEN

THE UNITED STATES OF AMERICA

ACTING THROUGH

THE MILLENNIUM CHALLENGE CORPORATION

AND

THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE

MILLENNIUM CHALLENGE COMPACT

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MILLENNIUM CHALLENGE COMPACT

PREAMBLE

This MILLENNIUM CHALLENGE COMPACT (this “*Compact*”) is between the United States of America, acting through the Millennium Challenge Corporation, a United States government corporation (“*MCC*”), and the Democratic Republic of Timor-Leste (the “*Government*”). Capitalized terms used in this Compact shall have the meanings provided in Annex VI.

Recognizing that the United States of America (the “*United States*”) and the Government (collectively, the “*Parties*” and each individually, a “*Party*”) are committed to the shared goals of promoting economic growth and the elimination of extreme poverty in Timor-Leste and that MCC assistance under this Compact supports Timor-Leste’s demonstrated commitment to strengthening good governance, economic freedom, and investments in people;

Recalling that the Government consulted with the private sector and civil society of Timor-Leste to determine the priorities for the use of MCC assistance, and developed and submitted to MCC a proposal for such assistance to achieve lasting economic growth and poverty reduction;

Recognizing that the United States wishes to help the Government implement the program described herein to achieve the goal and objectives described herein (as such program description and objectives may be amended from time to time in accordance with the terms of this Compact, the “*Program*”); and

Recognizing that MCC shall serve as an implementing agency for the United States under this Compact.

The Parties hereby agree as follows:

ARTICLE 1.

GOAL AND OBJECTIVES

Section 1.1 Compact Goal. The goal of this Compact is to reduce poverty through economic growth in Timor-Leste (the “*Compact Goal*”). MCC shall provide assistance in a manner that strengthens good governance, economic freedom, and investments in the people of Timor-Leste.

Section 1.2 Project Objectives. The Program consists of the projects described in Annex I (each a “*Project*” and collectively, the “*Projects*”). The objective of each of the Projects (each a “*Project Objective*” and collectively, the “*Project Objectives*”) is to:

- (a) Reduce fecal pathogens in piped and stored drinking water and groundwater (the “*WSD Project Objective*”); and
- (b) Improve student learning outcomes (the “*TALENT Project Objective*”).

ARTICLE 2.

FUNDING AND RESOURCES

Section 2.1 Program Funding. Upon entry into force of this Compact in accordance with Section 7.3, MCC shall grant to the Government, under the terms of this Compact, an amount not to exceed Three Hundred Sixty-Eight Million, Nine Hundred Forty-Eight Thousand, Three Hundred Seventy-One United States Dollars (US\$368,948,371) (“**Program Funding**”) for use by the Government to implement the Program. The multi-year allocation of Program Funding is generally described in Annex II.

Section 2.2 Compact Facilitation Funding.

(a) Upon the signing of this Compact, MCC shall grant to the Government, under the terms of this Compact and in addition to the Program Funding described in Section 2.1, an amount not to exceed Fifty-One Million, Fifty-One Thousand, Six Hundred Twenty-Nine United States Dollars (US\$51,051,629) (“**Compact Facilitation Funding**” or “**CFF**”) under Section 609(g) of the Millennium Challenge Act of 2003, as amended (the “**MCA Act**”), for use by the Government to facilitate implementation of this Compact, including for the following purposes:

- (i) financial management and procurement activities;
- (ii) administrative activities (including start-up costs such as staff salaries) and administrative support expenses such as rent, computers and other information technology or capital equipment;
- (iii) monitoring and evaluation activities;
- (iv) feasibility, design and other project preparatory studies;
- (v) the development of a cost recovery plan under the WSD Project;
- (vi) advisory services; and
- (vii) other activities to facilitate Compact implementation as approved by MCC.

The allocation of CFF is generally described in Annex II.

(e) In accordance with Section 7.5, this Section 2.2 and other provisions of this Compact applicable to CFF shall be effective, for purposes of CFF only, as of the date this Compact is signed by the Parties.

(f) Each Disbursement of CFF is subject to satisfaction of the conditions precedent to such disbursement as set forth in Annex IV.

(g) If MCC determines that the full amount of CFF available under Section 2.2(a) exceeds the amount that reasonably can be utilized for the purposes set forth in Section 2.2(a), MCC, by written notice to the Government, may withdraw the excess amount, thereby reducing

the amount of the CFF available under Section 2.2(a) (such excess, the “**Excess CFF Amount**”). In such event, the amount of CFF granted to the Government under Section 2.2(a) shall be reduced by the Excess CFF Amount, and MCC shall have no further obligations with respect to such Excess CFF Amount.

(h) MCC, at its option by written notice to the Government, may elect to grant to the Government an amount equal to all or a portion of such Excess CFF Amount as an increase in the Program Funding, and such additional Program Funding shall be subject to the terms and conditions of this Compact applicable to Program Funding.

Section 2.3 MCC Funding. Program Funding and CFF are collectively referred to in this Compact as “**MCC Funding**,” and includes any refunds or reimbursements of Program Funding or CFF paid by the Government in accordance with this Compact.

Section 2.4 Disbursement. In accordance with this Compact and the Program Implementation Agreement, MCC shall disburse MCC Funding for expenditures incurred in furtherance of the Program (each instance, a “**Disbursement**”). Subject to the satisfaction of all applicable conditions precedent, the proceeds of Disbursements shall be made available to the Government, at MCC’s sole election, by (a) deposit to one or more bank accounts established by the Government and acceptable to MCC (each, a “**Permitted Account**”) or (b) direct payment to the relevant provider of goods, works or services for the implementation of the Program. MCC Funding may be expended only for Program expenditures.

Section 2.5 Interest. The Government shall pay or transfer to MCC, in accordance with the Program Implementation Agreement, any interest or other earnings that accrue on MCC Funding prior to such funding being used for a Program purpose.

Section 2.6 Government Resources; Budget.

(a) The Government is committed to providing a contribution of up to Sixty-Four Million United States Dollars (US\$64,000,000) over the Compact Term for the WSD Project as further provided in Annex IV to the PIA (the “**WSD Contribution**”).

(b) The Government shall provide all funds and other resources, and shall take all other actions, that are necessary to carry out the Government’s responsibilities under this Compact.

(c) The Government shall use its best efforts to ensure that all MCC Funding it receives or is projected to receive in each of its fiscal years is fully accounted for and identified in its annual budgets for the duration of the Program.

(d) The Government shall not reduce the normal and expected resources that it would otherwise receive or budget from sources other than MCC for the activities contemplated under this Compact and the Program.

(i) Unless the Government discloses otherwise to MCC in writing, MCC Funding shall be in addition to the resources that the Government would otherwise receive or budget for the activities contemplated under this Compact and the Program.

Section 2.7 Limitations on the Use of MCC Funding. The Government shall ensure that MCC Funding is not used for any purpose that would violate United States law or policy, as specified in this Compact or as further notified to the Government in writing, including but not limited to the following purposes:

(a) for assistance to, or training of, the military, police, militia, national guard or other quasi-military organization or unit;

(b) for any activity that is likely to cause a substantial loss of United States jobs or a substantial displacement of United States production;

(c) to undertake, fund or otherwise support any activity that is likely to cause a significant environmental, health, or safety hazard, as further described in MCC's *Environmental Guidelines* and any guidance documents issued in connection with such guidelines (collectively, the "*MCC Environmental Guidelines*"); or

(d) to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilizations as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, or to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning.

Section 2.8 Taxes.

(a) Unless the Parties specifically agree otherwise in writing, the Government shall ensure that all MCC Funding is free from the payment or imposition of any existing or future taxes, duties, levies, contributions or other similar charges (but not fees or charges for services that are generally applicable in Timor-Leste, reasonable in amount and imposed on a non-discriminatory basis) ("*Taxes*") of or in Timor-Leste (including any such Taxes imposed by a national, regional, local or other governmental or taxing authority of or in Timor-Leste). Specifically, and without limiting the generality of the foregoing, MCC Funding shall be free from the payment of (i) any tariffs, customs duties, import taxes, export taxes, and other similar charges on any goods, works or services introduced into Timor-Leste in connection with the Program; (ii) sales tax, value added tax, excise tax, property transfer tax, and other similar charges on any transactions involving goods, works or services in connection with the Program, (iii) taxes and other similar charges on ownership, possession or use of any property in connection with the Program, and (iv) taxes and other similar charges on income, profits, or gross receipts attributable to work performed in connection with the Program, and related social security taxes and other similar charges on all natural or legal persons performing work in connection with the Program, except in the case of this clause (iv): (1) natural persons who are citizens or permanent residents of Timor-Leste and (2) legal persons formed under the laws of Timor-Leste (but excluding MCA-Timor-Leste) and any other entity formed for the purpose of implementing the Government's obligations hereunder).

(b) The mechanisms that the Government shall use to implement the tax exemption required by Section 2.8(a) for certain principal Taxes are set forth in Annex V of the Program Implementation Agreement. Such mechanisms shall be in accordance with the terms of the Agreement for Economic and Technical Cooperation between the United States of America and the Democratic Republic of Timor-Leste, that entered into force on April 25, 2005 and is considered effective from January 1, 2003, and may include exemptions from the payment of Taxes that have been granted in accordance with applicable law, refund or reimbursement of Taxes by the Government to MCC, MCA-Timor-Leste or to the taxpayer, or payment by the Government to MCA-Timor-Leste or MCC, for the benefit of the Program, of an agreed amount representing any collectible Taxes on the items described in Section 2.8(a). For the avoidance of doubt, the identification (or lack of identification) of Taxes in the Program Implementation Agreement shall in no way limit the scope of the tax-free treatment required by this Section 2.8. In addition, the Government shall from time to time execute and deliver, or cause to be executed and delivered, such other instructions, instruments or documents, and to take or cause to be taken such other actions as may be necessary or appropriate in the determination of MCC, in order to implement the provisions of this Section 2.8.

(c) If a Tax has been paid contrary to the requirements of Section 2.8(a) or Annex V of the Program Implementation Agreement, the Government shall refund promptly to MCC (or to another party as designated by MCC) the amount of such Tax in United States dollars within 30 days (or such other period as may be agreed in writing by the Parties) after the Government is notified in writing (whether by MCC or MCA-Timor-Leste) that such Tax has been paid. Failure to refund such amount within the specified time shall result in interest accruing on the unpaid amount in accordance with Section 5.4.

(d) The Government shall not apply any MCC Funding, any proceeds thereof or any Program Assets to satisfy its obligations under Section 2.8(c).

ARTICLE 3.

IMPLEMENTATION

Section 3.1 Program Implementation Agreement. The Parties shall enter into an agreement providing further detail on the implementation arrangements, fiscal accountability and disbursement, and use of MCC Funding and the WSD Contribution, among other matters (the “*Program Implementation Agreement*” or “*PIA*”); and the Government shall implement the Program in accordance with this Compact, the PIA, any other Supplemental Agreement and any Implementation Letter.

Section 3.2 Government Responsibilities.

(a) The Government has principal responsibility for overseeing and managing the implementation of the Program.

(b) In consultation with MCC, the Government may designate an entity to be established as an autonomous entity through issuance of a decree-law, as the accountable entity to implement the Program and to exercise and perform the Government’s right and obligation to oversee, manage and implement the Program, including without limitation, managing the implementation of the Projects and their Activities, allocating resources and managing procurements. Such entity shall be referred to herein as “*MCA-Timor-Leste*,” and shall have the

authority to bind the Government with regard to all Program activities. The Government hereby also designates MCA-Timor-Leste to exercise and perform the Government's right and obligation to oversee, manage and implement the activities described in the Compact Development Funding Agreement, dated May 3, 2019, by and between the Government and MCC (as amended or otherwise modified, the "*CDF Agreement*"). Prior to the recruitment of the Executive Director of MCA-Timor-Leste, the Government hereby designates the existing Compact Development Team of Timor-Leste to implement the Program and to exercise and perform the Government's right and obligation to oversee, manage and implement the Program, including without limitation, managing the implementation of the Projects and their Activities, allocating resources and managing procurements. The designation contemplated by this Section 3.2(b) shall not relieve the Government of any obligations or responsibilities hereunder or under any related agreement, for which the Government remains fully responsible and any provision of this Compact, the PIA or any Supplemental Agreement obligating MCA-Timor-Leste to take any action or refrain from taking any action, as the case may be, means the Government shall cause MCA-Timor-Leste to take such action or refrain from taking such action, as the case may be. MCC hereby acknowledges and consents to the designation in this Section 3.2(b).

(c) The Government shall ensure that any Program Assets or services funded in whole or in part (directly or indirectly) by MCC Funding are used solely in furtherance of this Compact and the Program unless MCC agrees otherwise in writing.

(d) The Government shall take all necessary or appropriate steps to achieve each of the Project Objectives during the Compact Term (including, without limiting Section 2.6(a), funding all costs that exceed MCC Funding and are required to carry out the terms hereof and achieve such objectives, unless MCC agrees otherwise in writing).

(e) The Government shall ensure that the Program is implemented, and that the Government carries out its obligations hereunder, with due care, efficiency, and diligence in conformity with sound technical, financial, procurement, and management practices, and in conformity with this Compact, the Program Implementation Agreement, any other Supplemental Agreement, any Implementation Letter, and the Program Guidelines.

(f) The Government hereby grants to MCC a perpetual, irrevocable, royalty-free, worldwide, fully paid, assignable right and license to practice or have practiced on its behalf (including the right to produce, reproduce, publish, repurpose, use, store, modify, or make available) any portion or portions of Intellectual Property as MCC sees fit in any medium, now known or hereafter developed, for any purpose whatsoever.

Section 3.3 Policy Performance. In addition to undertaking the specific policy, legal, and regulatory reform commitments identified in Annex I, the Government shall seek to maintain and to improve its level of performance under the policy criteria identified in Section 607 of the MCA Act, and the selection criteria and methodology used by MCC.

Section 3.4 Accuracy of Information. The Government assures MCC that, as of the date this Compact is signed by the Government, the information provided to MCC by or on behalf of the Government in the course of reaching agreement on this Compact is true, correct, and complete in all material respects.

Section 3.5 Implementation Letters. From time to time, MCC may provide guidance to the Government in writing on any matters relating to this Compact, MCC Funding or implementation of the Program. The Government shall use such guidance in implementing the Program. The Parties may also issue joint writings to confirm and record their mutual understanding on aspects related to the implementation of this Compact, the PIA or other related agreements, including to record any revisions, exceptions or modifications that are permitted hereunder. All such writings referenced in this section are referred to herein as “**Implementation Letters**.”

Section 3.6 Procurement and Grants.

(a) The Government shall ensure that the procurement of all goods, works, and services by the Government or any Provider to implement the Program shall be in accordance with MCC’s *Program Procurement Guidelines* (the “**MCC Program Procurement Guidelines**”). The MCC Program Procurement Guidelines include the following provisions, among others:

(i) open, fair, and competitive procedures must be used in a transparent manner to solicit, award and administer contracts and to procure goods, works and services;

(ii) solicitations for goods, works, and services must be based upon a clear and accurate description of the goods, works and services to be acquired;

(iii) contracts must be awarded only to qualified contractors that have the capability and willingness to perform the contracts in accordance with their terms on a cost effective and timely basis; and

(iv) no more than a commercially reasonable price, as determined, for example, by a comparison of price quotations and market prices, shall be paid to procure goods, works and services.

(b) Unless MCC otherwise consents in writing, the Government shall ensure that any grant issued in furtherance of the Program (each, a “**Grant**”) is awarded, implemented, and managed in accordance with MCC’s *Program Grant Guidelines* (the “**MCC Program Grant Guidelines**”). The MCC Program Grant Guidelines must be interpreted and applied consistent with the principle that open, competitive and fair procedures are used in a transparent manner in the award and administration of Grants, for the accomplishment of objectives under the Compact.

Section 3.7 Records; Accounting; Covered Providers; Access.

(a) Government Books and Records. The Government shall maintain, and shall use its best efforts to ensure that all Covered Providers maintain, accounting books, records, documents, and other evidence relating to the Program adequate to show, to MCC’s satisfaction, the use of all MCC Funding and the implementation and results of the Program (“**Compact Records**”). In addition, the Government shall furnish or cause to be furnished to MCC, upon its request, originals or copies of such Compact Records.

(b) Accounting. The Government shall maintain, and shall use its best efforts to ensure that all Covered Providers maintain, Compact Records in accordance with generally

accepted accounting principles prevailing in the United States, or at the Government's option and with MCC's prior written approval, other accounting principles, such as those (i) prescribed by the International Accounting Standards Board, or (ii) then prevailing in Timor-Leste. Compact Records must be maintained for at least five years after the end of the Compact Term or for such longer period, if any, required to resolve any litigation, claims or audit findings or any applicable legal requirements.

(c) Access. Upon MCC's request, the Government, at all reasonable times, shall permit, or cause to be permitted, authorized representatives of MCC, the Inspector General of MCC ("*Inspector General*"), the United States Government Accountability Office, any auditor responsible for an audit contemplated herein or otherwise conducted in furtherance of this Compact, and any agents or representatives engaged by MCC or the Government to conduct any assessment, review, or evaluation of the Program, the opportunity to audit, review, evaluate, or inspect facilities, assets, and activities funded in whole or in part by MCC Funding.

Section 3.8 Audits; Reviews.

(a) Government Audits. Except as the Parties may agree otherwise in writing, the Government shall, on at least an annual basis, conduct, or cause to be conducted, financial audits and review engagements of all disbursements of MCC Funding covering the period from signing of this Compact until the following March 31 or September 30, and then covering each semi-annual period thereafter ending March 31 or September 30, through the end of the Compact Term, as well as the 90-day period following expiration of the Compact Term. In addition, the Government shall ensure that such audits are conducted by an independent auditor approved by MCC and selected in accordance with MCC's *The Accountable Entities Guidelines for Contracted Financial Audits* (the "*Audit Guidelines*"). Audits shall be performed in accordance with such Audit Guidelines, and/or other processes and procedures as directed from time to time by MCC. Each audit must be completed, and the draft audit report delivered to MCC, no later than 90 days after the applicable audit period, or such other period as the Parties may otherwise agree in writing. Each final audit report will be delivered to MCC and to MCA-Timor-Leste's *Orgão Fiscal*, when such report has been finalized. Any changes to the period to be audited shall be included in an audit plan developed and implemented by MCA-Timor-Leste in accordance with Audit Guidelines and Program Implementation Agreement and as approved by MCC (the "*Audit Plan*"). The requirements of this Section 3.8(a) do not preclude the Government from conducting audits of MCA-Timor-Leste or of the Program, as may be required by Timor-Leste law.

(b) Audits of Other Entities. The Government shall ensure that MCC-financed agreements between the Government or any Provider, on the one hand, and an entity defined as a Covered Provider by the Audit Guidelines on the other hand, state that the Covered Provider is subject to audit in accordance with the Audit Guidelines.

(c) Corrective Actions. The Government shall use its best efforts to ensure that MCA-Timor-Leste and any other Covered Provider (i) takes, where necessary, appropriate, and timely, corrective actions in response to audits, (ii) considers whether the results of MCA-Timor-Leste's or any other Covered Provider's audits necessitate adjustment of the Government's records, and (iii) permits independent auditors to have access to its records and financial statements as necessary.

(d) Audits. MCC or the Government shall each have the right to arrange for audits of the Government's use of MCC Funding and the WSD Contribution. The Parties agree that the *Câmara de Contas do Tribunal Superior Administrativo, Fiscal e de Contas* (Timor-Leste's Audit Court) will not have jurisdiction over MCA-Timor-Leste's acts, as set forth in more detail in Annex I.

(e) Cost of Audits, Reviews or Evaluations. MCC Funding may be used to fund the costs of any audits, reviews, or evaluations required under this Compact.

ARTICLE 4.

COMMUNICATIONS

Section 4.1 Communications. Any document or communication required or submitted by either Party to the other under this Compact must be in writing and, except as otherwise agreed with MCC, in English. All such documents or communication must be submitted to the address of each Party set forth below or to such other address as may be designated by any Party in a written notice to the other Party.

To MCC:

Millennium Challenge Corporation
Attention: Vice President, Compact Operations
(with a copy to the Vice President and General Counsel)
1099 Fourteenth Street NW, Suite 700
Washington, DC 20005
United States of America
Facsimile: +1 (202) 521-3700
Telephone: +1 (202) 521-3600
Email: VPOperations@mcc.gov (Vice President, Compact Operations)
VPGeneralCounsel@mcc.gov (Vice President and General Counsel)

To the Government:

Minister of the Presidency of the Council of Ministers
Attention: Minister of the Presidency of the Council of Ministers
Palácio do Governo
Edifício 1
Praça da Proclamação da Independência
Dili, Timor-Leste
Telephone: +670 77465004
+670 77859229
Email: fidelis.magalhaes@oitavo.gov.tl

To MCA-Timor-Leste:

Upon establishment of MCA-Timor-Leste, MCA-Timor-Leste shall notify the Parties of its contact details.

Section 4.2 Representatives. For all purposes relevant to implementation of this Compact, the Government shall be represented by the individual holding the position of, or acting as, the Minister of the Presidency of the Council of Ministers, and the United States shall be represented by the individual holding the position of, or acting as, Vice President, Compact Operations of MCC (each of the foregoing, a “*Principal Representative*”). Each Party, by written notice to the other Party, may designate one or more additional representatives of such Party, as appropriate (each, an “*Additional Representative*”) for all purposes relevant to implementation of this Compact except for amending this Compact pursuant to Section 6.2(a). The Government hereby designates the Executive Director of MCA-Timor-Leste as an Additional Representative for the Government. The United States hereby designates the Deputy Vice President for Europe, Asia, Pacific, and Latin America of MCC and the Resident Country Director of MCC for Timor-Leste as Additional Representatives for the United States. A Party may change its Principal Representative to a new representative that holds a position of equal or higher authority upon written notice to the other Party.

Section 4.3 Signatures. Signatures to this Compact and to any amendment to this Compact shall be original signatures appearing on the same page or in an exchange of letters or diplomatic notes.

ARTICLE 5.

TERMINATION; SUSPENSION; EXPIRATION

Section 5.1 Termination; Suspension.

(a) Either Party may terminate this Compact without cause in its entirety by giving the other Party 30 days’ prior written notice. MCC may also terminate MCC Funding without cause in part by giving the Government 30 days’ prior written notice.

(b) MCC may, immediately, upon written notice to the Government, suspend or terminate this Compact or MCC Funding, in whole or in part, and any obligation related thereto, if MCC determines that any circumstance identified by MCC as a basis for suspension or termination (as notified to the Government in writing) has occurred, which circumstances include, but are not limited to the following:

(i) the Government fails to comply with its obligations under this Compact or any other agreement or arrangement entered into by the Government in connection with this Compact or the Program;

(ii) any statement, affirmation or assurance of the Government made or deemed made in this Compact, the PIA, any Supplemental Agreement, or in any certificate or other document delivered in connection with this Compact proves to have been incorrect or misleading as of the date when made or deemed made;

(iii) an event or series of events has occurred that makes it probable that any Project Objective is not going to be achieved during the Compact Term or that the Government is not going to be able to perform its obligations under this Compact;

(iv) a use of MCC Funding or continued implementation of this Compact or the Program violates applicable law or United States Government policy, whether now or hereafter in effect;

(v) the Government or any other person or entity receiving MCC Funding or using Program Assets is engaged in activities that are contrary to the national security interests of the United States;

(vi) an act has been committed or an omission or an event has occurred that would render Timor-Leste ineligible to receive United States economic assistance under Part I of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2151 *et seq.*), by reason of the application of any provision of such act or any other provision of law;

(vii) the Government has engaged in a pattern of actions inconsistent with the criteria used to determine the eligibility of Timor-Leste for assistance under the MCA Act;

(viii) Timor-Leste is classified as a Tier 3 country in the United States Department of State's annual Trafficking in Persons Report; and

(ix) a person or entity receiving MCC Funding or using Program Assets is found to have been convicted of a narcotics offense or to have been engaged in drug trafficking.

Section 5.2 Consequences of Termination, Suspension or Expiration.

(a) Upon the suspension or termination, in whole or in part, of this Compact or any MCC Funding, or upon the expiration of this Compact, the Program Implementation Agreement shall govern the post-suspension, post-termination or post-expiration treatment of MCC Funding, any related Disbursements and Program Assets. Any portion of this Compact, MCC Funding, the Program Implementation Agreement or any other Supplemental Agreement that is not suspended or terminated shall remain in full force and effect.

(b) MCC may reinstate any suspended or terminated MCC Funding under this Compact if MCC determines that the Government or other relevant person or entity has committed to correct each condition for which MCC Funding was suspended or terminated.

Section 5.3 Refunds; Violation.

(a) If any MCC Funding, any interest or earnings thereon, or any Program Asset is used for any purpose in violation of the terms of this Compact, then MCC may require the Government to repay to MCC in United States Dollars the value of the misused MCC Funding, interest, earnings, or asset, plus interest thereon in accordance with Section 5.4 within 30 days after the Government's receipt of MCC's request for repayment. The Government shall not use MCC Funding, proceeds thereof or any Program Asset to make such payment.

(b) Notwithstanding any other provision in this Compact or any other agreement to the contrary, the United States' right under Section 5.3(a) to obtain a refund shall continue

during the Compact Term and for a period of (i) five years thereafter or (ii) one year after MCC receives actual knowledge of such violation, whichever is later.

Section 5.4 Late Payment Interest. If the Government fails to pay any amount under this Compact or the Program Implementation Agreement when due (including amounts under Section 2.8(c) and 5.3(a)), the Government shall pay interest on such past due amount. Interest shall accrue on such amount at a rate equal to the then-current US Treasury Current Value of Funds Rate, calculated on a daily basis and a 360-day year from the due date of such payment until such amount is paid in full. Any such payment shall first be credited against interest due, and once the interest due amount is extinguished, then payments shall be credited against outstanding principal.

Section 5.5 Survival. The Government's responsibilities under this Section and Sections 2.7 (Limitations on the Use of MCC Funding), 2.8 (Taxes), 3.2(f), 3.7 (Records; Accounting; Covered Providers; Access), 3.8 (Audits; Reviews), 5.2 (Consequences of Termination, Suspension or Expiration), 5.3 (Refunds; Violation), 5.4 (Late Payment Interest), and 6.4 (Governing Law) shall survive the expiration, suspension or termination of this Compact, provided that the terms of Section 2.8 shall survive for only 120 days following this Compact's expiration.

ARTICLE 6.

COMPACT ANNEXES; AMENDMENTS; GOVERNING LAW

Section 6.1 Annexes. Each annex to this Compact constitutes an integral part hereof, and references to "*Annex*" mean an annex to this Compact unless otherwise expressly stated.

Section 6.2 Amendments and Modifications.

(a) The Parties may amend this Compact only by a written agreement. Such agreement shall specify how it enters into force.

(b) Notwithstanding subsection (a), the Parties agree that the Government and MCC may by written agreement, which shall enter into force upon signature, modify any Annex to, in particular, but without limitation (i) suspend, terminate or modify any Project or Activity, (ii) change the allocations of funds as set forth in Annex II, (iii) modify the implementation framework described in Annex I, (iv) add, change or delete any indicator, baseline or target or other information set forth in Annex III in accordance with the MCC M&E Policy, or (v) add, modify or delete any condition precedent described in Annexes IV and V; *provided that*, in each case, any such modification (1) is consistent in all material respects with the Project Objectives, (2) does not cause the amount of Program Funding to exceed the aggregate amount specified in Section 2.1 (as may be modified by operation of Section 2.2(e)), (3) does not cause the amount of CFF to exceed the aggregate amount specified in Section 2.2(a), and (4) does not extend the Compact Term.

(c) The Parties understand that any modification of any Annex pursuant to this Section 6.2 may be entered into by the Government without the need for further action by the Government (including any parliamentary action), or satisfaction of any additional domestic requirements of Timor-Leste.

Section 6.3 Inconsistencies. In the event of any conflict or inconsistency between:

(a) any Annex and any of Articles 1 through 7, such Articles 1 through 7, as applicable, shall prevail; or

(b) this Compact and any other agreement between the Parties regarding the Program, this Compact shall prevail.

Section 6.4 Governing Law. This Compact is an international agreement and as such shall be governed by international law.

Section 6.5 Additional Instruments. Any reference to activities, obligations or rights undertaken or existing under or in furtherance of this Compact or similar language shall include activities, obligations, and rights undertaken by, or existing under or in furtherance of any agreement, document or instrument related to this Compact and the Program.

Section 6.6 References to MCC Website. Any reference in this Compact, the PIA or any other agreement entered into in connection with this Compact, to a document or information available on, or notified by posting on the MCC Website shall be deemed a reference to such document or information as updated or substituted on the MCC Website from time to time.

Section 6.7 References to Laws, Regulations, Policies and Guidelines; References to Compact Expiration and Termination; Government Successors.

(a) Each reference in this Compact, the PIA or any other agreement entered into in connection with this Compact to a law, regulation, policy, guideline or similar document shall be construed as a reference to such law, regulation, policy, guideline or similar document as it may, from time to time, be amended, revised, replaced, or extended, and shall include any law, regulation, policy, guideline or similar document issued under or otherwise applicable or related to such law, regulation, policy, guideline or similar document.

(b) Each reference in this Compact, the PIA or any other agreement entered into in connection with this Compact, to the Compact's "expiration" refers to the date on which the Compact Term ends if the Compact is not terminated earlier, which in accordance with Section 7.4 is five years after its entry into force. Each reference in any of the aforementioned documents to the Compact's "termination" refers to this Compact ceasing to be in force prior to its expiration in accordance with Section 5.1.

(c) Unless expressly provided otherwise, each reference in this Compact, the PIA, or any other agreement entered into in connection with this Compact, to a Government ministry shall be construed to include any successor ministry with the relevant subject matter or sector authority.

Section 6.8 MCC Status. MCC is a United States government corporation acting on behalf of the United States in the implementation of this Compact. The United States Government, including MCC, assumes no liability for any claims or loss arising out of activities or omissions under this Compact. The Government waives any and all claims against the United States Government, including MCC, and any current or former officer or employee of the United States Government, including MCC, for all loss, damage, injury, or death arising out of activities or omissions under this Compact, and agrees that it shall not bring any claim or legal proceeding of

any kind against any of the above entities or persons for any such loss, damage, injury, or death. The Government agrees that the United States Government, including MCC, and any current or former officer or employee of the United States Government, including MCC, shall be immune from the jurisdiction of all courts and tribunals of Timor-Leste for any claim or loss arising out of activities or omissions under this Compact.

ARTICLE 7.

ENTRY INTO FORCE

Section 7.1 Domestic Procedures. The Government shall proceed in a timely manner to complete all of its domestic requirements for this Compact to enter into force. The Parties understand that this Compact and the PIA, upon entry into force, shall prevail over the laws of Timor-Leste with the exception of the constitution of Timor-Leste.

Section 7.2 Conditions Precedent to Entry into Force. Each of the following conditions must be met to MCC's satisfaction, before this Compact enters into force:

- (a) the Program Implementation Agreement is signed by the parties thereto;
- (b) The Government delivers to MCC:
 - (i) a letter signed and dated by the Principal Representative of the Government, or such other duly authorized representative of the Government acceptable to MCC, confirming that the Government has completed its domestic requirements necessary for this Compact to enter into force and that the other conditions precedent to entry into force in this Section 7.2 have been met;
 - (ii) a signed legal opinion from the Presidency of the Council of Ministers of Timor-Leste (or such other legal representative of the Government acceptable to MCC), in form and substance satisfactory to MCC; and
 - (iii) complete, certified copies of all decrees, legislation, regulations or other governmental documents relating to the Government's domestic requirements necessary for this Compact and the PIA to enter into force, which MCC may post on its website or otherwise make publicly available.
- (c) MCC determines that, after signature of this Compact, the Government has not engaged in a pattern of actions inconsistent with the eligibility criteria for MCC Funding; and
- (d) The conditions set forth in Annex V have been satisfied.

Section 7.3 Date of Entry into Force. This Compact shall enter into force on the date of the letter from MCC to the Government in an exchange of letters confirming that MCC and the Government have completed their respective domestic requirements for entry into force of this Compact and that the conditions precedent to entry into force in Section 7.2 have been met to MCC's satisfaction.

Section 7.4 Compact Term. This Compact shall remain in force for five years after its entry into force, unless terminated earlier under Section 5.1 (the "*Compact Term*").

Section 7.5 Provisional Application. Upon signature of this Compact, and until this Compact has entered into force in accordance with Section 7.3, the Parties shall provisionally apply the terms of this Compact; *provided that*, no MCC Funding, other than CFF, shall be made available or disbursed before this Compact enters into force.

SIGNATURE PAGE FOLLOWS ON THE NEXT PAGE

IN WITNESS WHEREOF, the undersigned duly authorized by their respective governments have signed this Compact. Done at Dili, Timor-Leste, this 19th day of July, 2022. The English language text is the only authentic text of this Compact.

FOR THE UNITED STATES OF AMERICA

FOR THE DEMOCRATIC REPUBLIC OF
TIMOR-LESTE

/s/

/s/

Name: Cameron Alford
Title: Acting Vice President, Department
of Compact Operations, the
Millennium Challenge Corporation

Name: Fidelis Manuel Leite Magalhães
Title: Minister of the Presidency of the
Council of Ministers

**SIGNATURE PAGE TO MILLENNIUM CHALLENGE COMPACT
BETWEEN THE UNITED STATES OF AMERICA
ACTING THROUGH THE MILLENNIUM CHALLENGE CORPORATION
AND THE DEMOCRATIC REPUBLIC OF TIMOR-LESTE**

ANNEX I

PROGRAM DESCRIPTION

This Annex I describes the Program that MCC Funding will support in Timor-Leste during the Compact Term.

A. PROGRAM OVERVIEW

1. Background and Consultative Process.

a. Background.

Since gaining independence in 2002, Timor-Leste has been engaged in building a strong, resilient economy that benefits all Timorese. Supported by significant donor investment since its founding, the Government coordinates aid financing in an effort to make the strategic investments necessary to address critical development priorities and generate sustained job-creating growth, as reflected in the Government's Foreign Aid Policy.

In 2010, MCC's Board of Directors approved a \$10.49 million Threshold Program for Timor-Leste, which aimed to reduce corruption by building a network of anti-corruption institutions and actors and improve access to immunization services through the creation of a more effective community health system. The program was administered by USAID and completed in 2014. In December 2017, MCC's Board of Directors selected Timor-Leste as eligible to develop a compact and reselected Timor-Leste in each year from 2018 to 2021. In discussions with MCC, the Government has shown strong commitment to an inclusive and transparent compact development process to identify investments that will reduce poverty through economic growth.

The constraints analysis identified four primary constraints, two of which were selected for further development: weak policies and institutions to enable market transactions, and low human capital attributed to poor nutritional outcomes and lack of high skilled workers. The Government ultimately decided to submit two project proposals in education and water, sanitation, and drainage to address the human capital constraint, recognizing the importance of a skilled, healthy workforce in improving the business environment and generating significant and sustainable economic returns for the country.

b. Consultative Process.

The Government and MCC engaged in an inclusive and strategic consultative process to inform the constraints analysis and project designs. Both project teams consulted with government ministries and stakeholders, international development partners, and civil society throughout the compact development process.

2. Description of Program and Beneficiaries.

(a) Program Description.

The Program aims to address the human capital constraint to economic growth by improving the health and skills of the Timorese people through two projects: the WSD Project and the TALENT Project.

(b) Intended Beneficiaries.

The Program is projected to benefit hundreds of thousands of people in Timor-Leste over a twenty-year period, as set forth below and as further detailed in Annex III. Through the WSD Project, an estimated 429,000 residents of the capital city of Dili and 64,000 residents of four neighboring districts will receive disinfected water. Approximately 301,000 Dili residents are also expected to benefit from the wastewater collection and treatment infrastructure introduced by the WSD Project. Through improved secondary school teaching and school leadership, the TALENT Project is expected to benefit all upper secondary graduates in the country who were taught by TALENT Project-trained teachers and subsequently entered the labor force, as well as their co-householders, which totals approximately 957,000 beneficiaries. As there is some anticipated overlap in beneficiaries across both projects, the beneficiaries cannot simply be added together to estimate total beneficiaries.

B. DESCRIPTION OF PROJECTS

Set forth below is a description of each of the Projects that the Government shall implement, or cause to be implemented, using MCC Funding and the WSD Contribution to advance the applicable Project Objective. In addition, specific activities that shall be undertaken within each Project (each, an “*Activity*”), including sub-activities, are also described.

1. WSD Project

a. Summary of Project and Activities.

The objective of the Water, Sanitation, and Drainage Project (the “*WSD Project*”) is stated in Section 1.2. The WSD Project will achieve the WSD Project Objective by (i) building a plant to produce a disinfectant chemical to treat city water supply across Dili and four districts, (ii) constructing the country’s first central wastewater system, (iii) making improvements to the related drainage network in Dili, (iv) supporting key policy and institutional reforms to support long-term sustainability of the infrastructure, and (v) supporting social behavioral change efforts to improve household water management and hygiene practices. Collectively, these investments are aimed at mitigating exposure to sanitary waste and pathogens in water, households, and the environment.

The WSD Project includes the following five Activities:

(i) Water Disinfection Activity

This Activity will supply disinfected water to Dili and four districts of Timor-Leste (Aileu, Ermera, Liquica, and Manatuto) through the design and construction of an On-site Sodium Hypochlorite Generation (“*OSHG*”) plant and the purchase of disinfectant distribution equipment. MCC

Funding will support the design and construction of the OSHG plant which will provide the required amount of 0.8% sodium hypochlorite solution for disinfection of wastewater and drinking water. The drinking water disinfection component will serve the Dili Municipal Water System and the four targeted districts. The facility will house up to four OSHG skids each with a production capacity of 680kg/day. MCC Funding also will support the design and construction of a high-grade sodium chloride storage building at the Wastewater Treatment Plant with the capacity to store salt, the primary raw material required for the OSHG system, with capacity for a two-month supply of salt. This high-grade sodium chloride storage building will also house brine tanks, water tank, pressure filters, water pump, and brine pumps.

In addition, MCC Funding will support the purchase of a number of tanker trucks and associated infrastructure and equipment for delivery of disinfectant to water supply application points in Dili and the surrounding districts.

(ii) Sanitation Activity

The aim of the Sanitation Activity is to remove fecal pathogens from the environment and reduce exposure pathways through the development of a new centralized wastewater treatment system in Dili, which has nearly four times the population density and higher incidence of diarrheal disease when compared to the other districts of Timor-Leste. This activity includes the design and construction of a new wastewater treatment plant (“*Wastewater Treatment Plant*”), ocean outfall, wastewater collection systems, and wastewater connections to households and businesses.

A. *Wastewater Treatment Plant*

MCC Funding will support the design and construction of a new Wastewater Treatment Plant. The Wastewater Treatment Plant will treat and disinfect wastewater from the piped sanitation coverage area and include a septage receiving facility to treat septage received from areas outside the piped sanitation coverage area. The plant will be sized for future connections in Dili, allowing the Government and other donors to continue cost effective expansion of the sewage collection system. The Sub-Activity also includes support for operations and maintenance of the plant by a private operator. The private operator is expected to also provide training of local utility staff in operations and maintenance management.

B. *Ocean Outfall*

Through this Sub-Activity, MCC Funding will support a marine pipeline constructed to convey treated, disinfected wastewater from the Wastewater Treatment Plant to the ocean to ensure adequate mixing of treated effluent with ocean waters. The outfall is designed to convey treated wastewater flows from the Wastewater Treatment Plant operating at full capacity, hence the investment will cover areas outside the WSD Project areas to account for future growth.

C. *Wastewater Collection System – Conventional Gravity Sewers*

Under this Sub-Activity, MCC Funding will support the construction of conventional wastewater collection networks comprised of approximately 130 km of sewer pipelines, four pumping stations receiving flows from the project area, and a transmission main pipeline conveying the wastewater to the Wastewater Treatment Plant.

D. Wastewater Collection System – Simplified Gravity Sewers

In order to expand service to all households in the project area, MCC Funding for this Sub-Activity will support the construction of a simplified sewer collection system comprised of approximately 160 km of sewer pipelines in unstructured¹ areas in the project area.

E. House Connections, Toilets, Decommissioning Septic Tanks

This Sub-Activity, expected to be funded by the Government through the WSD Contribution, will support the implementation of household and business wastewater connections, the decommissioning of pit latrines, and the provision of toileting facilities, where required, in both structured and unstructured areas.

(iii) Associated Drainage Activity

This Activity includes improving specific portions of the drainage system in areas where the WSD Project-funded conventional gravity sewer system will be constructed. Installing the sanitary sewer and the drainage infrastructure simultaneously provides the opportunity to avoid conflicts between the two systems. MCC Funding will provide for the construction of new drainage structures in the Activity areas.

(iv) Institutional Reform Activity

To ensure long-term sustainability of the WSD Project’s infrastructure investments, this Activity will support the capacity building and institutional development of the water utility with a focus on strengthening asset management expertise and operations and maintenance (“*O&M*”) capacity. The Activity will further promote sustainability through targeted assistance to the new independent water regulator (“*ANAS*”), to develop and implement regulations around sanitation and disinfection. Together with other institutional reform efforts that are supported by the Government and other development partners, this Activity contributes to improved customer services and the sustainability of all assets under the management of the newly established water utility, the Bee Timor Leste Public Company (“*BTL*”), including the Project-funded construction.

A. Utility Operator Training Program

All sanitation and disinfection assets will require trained operators to properly operate and maintain the systems. MCC Funding will provide for a foundational technical training program to prepare BTL staff for subsequent on-the-job training by the private operator and to ultimately assume responsibility in operating and maintaining all assets.

¹ For the purposes of this Compact, an “unstructured area” is an area that is difficult to serve with a conventional gravity sewer. These areas are often further characterized by gravel or dirt road access and dense, informal housing developments and uncertain land ownership. These areas are in contrast to “structured areas” that are able to be served with a conventional gravity sewer.

B. Utility Private Operator Procurement Support

Through this Sub-Activity, MCC Funding will provide technical assistance to develop terms of reference for private operator assistance that will be procured through the Wastewater Treatment Plant construction contract. Over an approximately five-year period, the private operator will operate the Wastewater Treatment Plant and the OSHG plant. Simultaneously, the private operator will train BTL staff so that BTL can assume operations of both the Wastewater Treatment Plant and the OSHG plant after the end of the private operator's contract.

C. Regulatory Reform Assistance

MCC Funding under this Sub-Activity will provide technical assistance to ANAS to develop sanitation regulations and promulgate relevant decree-law(s). This includes sanitation standards in wastewater effluent quality from the Wastewater Treatment Plant, wastewater discharges from industrial customers, decommissioning of septic tanks, mandatory connections when a central collection system is made available, and septic tank regulations for areas without piped sanitation.

D. Sanitation and Disinfection Operations and Maintenance Support

Under this Sub-Activity, MCC Funding will fund the initial cost of the equipment and vehicles needed to operate and maintain the wastewater system and the drainage network and provide for laboratory equipment for water quality monitoring. Technical assistance will also be provided to evaluate the feasibility of producing food grade salt for the OSHG plant locally.

(v) Household Water and Hygiene Activity

This Activity includes interventions to increase household and community awareness of the benefits of and support for the infrastructure as well as the adoption and maintenance of key behaviors aimed at reducing fecal pathogens and ultimately reducing the diarrheal disease burden, using a gender-focused approach. Social behavioral change techniques employed in these interventions will seek to improve the knowledge, awareness, social support, and self-efficacy of project participants in performing these behaviors and be appropriately phased to complement infrastructure milestones and interventions.

A. Household Water Management

MCC Funding under this Sub-Activity will support the diffusion of techniques usable at the household-level to promote safe household water management practices prior to and post-construction, including point-of-use treatment, storage, transport, and dispensing of water to prevent recontamination of water. These techniques will be communicated through community training and household-level mentorship programming, communications campaigns, and targeted capacity building for relevant entities, all in collaboration with the Government and other donors. It will support increasing awareness of the use of water from various sources, including the impact of the Water Disinfection Activity on the quality of water supplied to households.

B. Household Sanitation

In collaboration with the Government and other donors, MCC Funding under this Sub-Activity supports community training and household-level mentorship programming, communications campaigns, and targeted capacity building for relevant entities on consistent and correct use of flush toilets in both structured and unstructured areas, appropriate hygiene practices, and regular toilet maintenance.

b. Beneficiaries.

Through the Water Disinfection Activity, the WSD Project will provide sufficient disinfectant that will permit BTL to supply disinfected water to approximately 108,000 residents of Dili who are currently connected to the water supply network, and in conjunction with the World Bank and Asian Development Bank-funded Dili Water Supply Project, ultimately serve 429,000 total residents in Dili's water service area by 2036. Using the OSHG plant developed by the WSD Project, BTL will supply disinfected water to up to 64,000 residents in the other four districts of Timor-Leste. Through the Sanitation Activity, the WSD Project will initially connect approximately 106,165 residents of Dili to the new Wastewater Treatment Plant; however, the WSD Project treatment and conveyance infrastructure is sized to collect wastewater from up to 300,909 residents of Dili's wastewater service area (as projected in 2036 in accordance with the Government's 2018 Sanitation Master plan) when additional upstream conveyance infrastructure and collection systems are constructed following the expiration of this Compact. The WSD Project's design of selected additional wastewater collection service areas will enable the implementation of planned, additional connections.

c. Environmental and Social Mitigation Measures.

In compliance with Section 3.2(e), the Government shall ensure that all Projects and Activities undertaken, funded or otherwise supported in whole or in part (directly or indirectly) by MCC Funding under the Compact comply with the MCC Environmental Guidelines, including the environmental and social performance standards set forth in the *Performance Standards on Environmental and Social Sustainability of the International Finance Corporation* (as in effect from time to time, the "**IFC Performance Standards**") that have been incorporated by reference into the MCC Environmental Guidelines. Based on preliminary due diligence against MCC Environmental Guidelines criteria, the WSD Project is classified as a Category A project.

By providing a reliable disinfectant for drinking water, a sanitation system, household connections and flush toilets, and decommissioning pit latrines for 106,165 residents, the WSD Project will result in significant environmental and health benefits. However, land acquisition and potential relocations, community health and safety impacts associated with building a linear project in a densely populated urban area, construction of the marine outfall pipeline, and operational impacts on the marine environment are potentially significant and sensitive, and as such they will require more complex intervention and mitigation measures to address. The WSD Project will require an Environmental and Social Impact Assessment ("**ESIA**"), Environmental and Social Management Plans ("**ESMPs**"), and robust stakeholder engagement to assess these and other potential impacts and define appropriate mitigation measures to minimize adverse environmental impacts. In addition, land tenure issues in Timor-Leste are complex and there is little land available for relocation sites. The Government will provide all land required for the WSD Project, and has agreed to provide land acquisition and resettlement documentation for MCC review and to remedy

any inconsistencies with the IFC Performance Standards prior to initiating any land acquisition activities. A Resettlement Policy Framework (“**RPF**”) is being prepared, which will be followed by a Resettlement Action Plan (“**RAP**”).

The WSD Project will also generate significant volumes of biosolid wastes. Biosolids from the WSD Project are expected to be trucked to a Dili municipal landfill for disposal. The Government is working with donors to expand and upgrade this Dili municipal landfill to ensure future operations are environmentally sound.

d. Social Inclusion and Gender Integration

In compliance with Section 3.2(e), this Project and all its Activities will be implemented in compliance with the MCC Gender Policy, the MCC Counter-Trafficking in Persons Policy, and the MCC Gender and Social Inclusion Operational Milestones and Procedures.

The WSD Project involves significant construction in the capital city of Dili, which presents both risks and opportunities for women and vulnerable groups (including youth, rural migrants, and the unemployed). The Water Disinfection Activity, supported by the corresponding Household Water and Hygiene Activity-funded efforts, are expected to improve the health of household members in Dili. Businesses are also likely to benefit, since absenteeism of workers due to water-borne diseases is expected to diminish as water quality improves. Similarly, since the poor have more limited access to health care and are more likely to be exposed and suffer the consequences of a contaminated environment, the Sanitation Activity presents great potential to disproportionately benefit the poor and women.

Furthermore, in an effort to reach more poor households, the WSD Project will incorporate simplified sewer technology, which will facilitate access to the unstructured areas of Dili that tend to have higher concentration of poor and women-headed households. The Household Water and Hygiene Activity is structured to take into account the fact that women are the primary managers of water within the household and that they will play a critical role in the adoption of safe household water management practices and improved toileting practices.

As a part of the Institutional Reform Activity, MCC will provide technical assistance to the Government to develop a cost recovery plan (the “**Cost Recovery Plan**”), which will assess customers’ ability and willingness to pay, as well as include recommendations on customer assistance programs to effectively address affordability for women-headed and low-income households.

The risk of trafficking in persons (“**TIP**”) and gender-based violence will be continuously monitored, with measures taken during implementation to manage such risks, especially as they apply to women and children. The WSD Project will engage women and vulnerable groups in order to maximize income-generating opportunities for those populations.

e. Donor Coordination.

MCC and the Government coordinated closely with other donors during project development to maximize WSD Project benefits through a direct impact on diarrheal disease reduction. In particular, MCC and the Government are coordinating with the World Bank and the Asian Development Bank to align their components of the Dili Water Supply Project with the WSD

Project. The Dili Water Supply Project, which is jointly financed by the World Bank and the Asian Development Bank, will replace the existing water supply infrastructure in Dili, upgrade water treatment plants, increase groundwater supply, and construct water reservoirs and water distribution networks. Through the collaboration, the OSHG plant will provide sodium hypochlorite for disinfecting the drinking water provided by the World Bank and Asian Development Bank projects. MCC understands that the Asian Development Bank and the World Bank have also agreed to adopt the important policy conditions attached to the WSD Project, such as the Cost Recovery Plan, for their respective projects. The partnership will result in better quality and lower cost of water. Additionally, water supply facilities funded by other donors in the surrounding districts will be able to use the disinfectant produced in Dili.

MCC is also collaborating with other donors on an integrated policy and institutional reform agenda for BTL and ANAS, ranging from regulatory reforms to institutional development and capacity strengthening. Assistance mobilized through the Water Donor Forum (which includes MCC, World Bank, Asian Development Bank, AusAID, Japan International Cooperation Agency and the Government of Portugal) will support BTL and ANAS in strengthening the institutions and building their staff's capacity and systems.

f. USAID.

USAID is supporting efforts to strengthen water, sanitation, and hygiene systems in community health centers in Timor-Leste through a partnership with the Government's Ministry of Health and UNICEF. Such improvements will support the Government's ability to deliver quality health services to communities.

The WSD Project also broadly supports the objectives of USAID's Tourism for All Project in Timor-Leste and "Water for the World" strategy through activities aimed at developing sustainable, climate-resilient water and sanitation infrastructure and improving drinking water quality, water management, and hygiene at the household-level.

Although Timor-Leste is not currently identified as a "Water for the World Priority Country" by USAID, MCC intends to coordinate with USAID on related and complementary activities in support of mutually aligned objectives.

g. Sustainability.

Financial sustainability of the WSD Project investment relies principally on the development and implementation of the Cost Recovery Plan for BTL and ANAS to sustainably manage all assets. Assistance mobilized through the Water Donor Forum (which includes MCC, World Bank, Asian Development Bank, AusAID, Japan International Cooperation Agency and the Government of Portugal) will further support BTL and ANAS in strengthening the institutions and building their capacity and systems. Other aspects of the WSD Project's sustainability are associated with protecting and monitoring the marine environment, utilizing an experienced private operator at the Wastewater Treatment Plant, taking responsible measures to manage waste biosolids, and incorporating measures for climate adaption, mitigation, and resilient components. The design of the WSD Project takes both sector and social sustainability into account, as described above.

h. Policy, Legal and Regulatory Reforms.

An institutional development plan and reform agenda for the water sector in Timor-Leste was formally adopted by the Government when the independent water utility BTL and an independent water regulator ANAS were created in 2021. The plan is supported by development partners for implementation in the near and medium term. Consistent with the reform agenda, the Institutional Reform Activity will provide support to strengthen the institutional and asset management capabilities of the utility and regulator. The Government has also agreed to develop and promulgate decree-laws that will regulate the sanitation system and water quality monitoring in the country. The Institutional Reform Activity will fund technical assistance for the regulatory reform.

The Government has agreed to develop, approve, and implement a full Cost Recovery Plan so that sufficient funds will be generated for BTL to undertake operations and maintenance of all assets and systems at required levels. Approval and implementation of the plan will be a condition for periodic disbursements throughout the Compact. MCC understands that other donors have agreed to adopt elements of this Cost Recovery Plan as conditions in their respective project agreement(s) with the Government.

2. TALENT Project

a. Summary of Project and Activities.

The objective of the Teaching and Leading the Next generation of Timorese Project (the “**TALENT Project**”) is stated in Section 1.2. The TALENT Project seeks to achieve this Objective by improving the quality of teaching and school leadership in all secondary schools in Timor-Leste. Specifically, the TALENT Project aims to improve pedagogy, school and classroom management; increase opportunities for women in teaching and leadership positions; improve language and information and communication technology (“**ICT**”) instruction for future teachers; and enhance instructional leadership and create a supportive and inclusive learning environment. The TALENT Project is organized around the following four Activities:

(i) The Center of Excellence for Teacher Education Activity

This Activity will establish a new autonomous institution in Timor-Leste to provide professional training and certification to future secondary teachers entering the workforce, as well as training and certification of a portion of current secondary teachers.

A. *Establishing the Center of Excellence*

Under this Sub-Activity, MCC Funding will support the formal establishment and initial operations of the Center of Excellence, which will operate under the purview of the Ministry of Higher Education Science and Culture with the oversight of an executive board consisting of members from key Government entities. The Center of Excellence will be legally established, equipped with an organizational structure reflecting appropriate staffing and resources, and led by a competitively hired director. The Center of Excellence will also actively recruit women to leadership positions.

The establishment of the Center of Excellence will involve the development of an appropriate policy framework. This policy framework may include the modification of the Timor-Leste Education System Framework Law to require future secondary school teachers and school leaders to have a professional certificate from the Center of Excellence in order to be hired into Ministry of Education, Youth and Sport- or Ministry of Higher Education Science and Culture-supported positions (“*Ministry-supported Positions*”). Teacher trainees admitted to the Center of Excellence will subsequently be offered full-time teaching positions across Timor-Leste if they successfully complete their professional training and meet certification requirements.

B. Design and Build the Center of Excellence

Under this Sub-Activity, MCC Funding will support the design and construction or rehabilitation of a building to house the Center of Excellence, on land provided by the Government. The building will provide space for the training and professional development of teachers and support Center of Excellence staff in engaging in ongoing quality assurance, course development and refinement. While the Center of Excellence building is under construction or rehabilitation, the Government will provide any necessary temporary space where training for secondary teachers and leaders can commence. This Sub-Activity integrates design features that are expected to contribute to the goal of increasing the number of women in teaching and leadership positions.

(ii) Teacher Training Activity

MCC Funding will support the development and delivery of trainings to current and future secondary school teachers in Timor-Leste. All current secondary teachers are expected to receive some form of training to improve their pedagogical skills, including student assessment, in the areas of numeracy, literacy, and soft skill development. A sub-set of current secondary teachers will receive additional training to receive their professional certification from the Center of Excellence. Future teaching candidates will be trained at the Center of Excellence and receive practical training at secondary schools throughout Timor-Leste. They will then be offered full-time employment in Ministry-supported Positions.

A. Course Development

Within this Sub-Activity, MCC Funding will support the development of course modules, course content, and corresponding materials. These materials will be designed based on needs assessments and current materials from existing institutions to target key pedagogical practices, including student assessment, in the areas of numeracy, literacy, and soft skills. Materials will be inclusive and use gender-responsive and disability-appropriate pedagogical approaches in the classroom.

B. Training Current Teachers

MCC Funding will support the training of current secondary teachers through two training streams.

The first stream of training aims to reach all current secondary teachers (general and technical) to improve the quality of teaching in the areas of numeracy, literacy, and soft skills. This training will be provided by Center of Excellence staff in collaboration with both the Ministry of Education Youth and Sport and the Ministry of Higher Education Science and Culture.

The second stream of training will provide intensive training to a sub-set of current secondary teachers to enable them to receive full professional certification from the Center of Excellence, similar to the training provided to teacher trainees. Such teachers may provide mentorship to other teachers.

C. Training Future Teachers

Under this Sub-Activity, MCC Funding will support training of candidate secondary school teachers at the Center of Excellence. Training will focus on the development of teacher trainees' approaches to instruction (pedagogy) that will improve secondary students' performance in the areas of numeracy, literacy, and soft skills. The training will be carried out at the Center of Excellence and in situ at secondary schools throughout Timor-Leste and will target the skills required by teacher trainees for student-centered learning.

(iii) School Leadership Training Activity

Under the School Leadership Training Activity, MCC Funding will support the training of school leaders to create effective schools through strong school leadership, both in school management and in terms of instructional leadership. Training will focus on competencies in school leadership, including gender and social inclusion and ICT in education.

A. Developing Curriculum and Materials

In this Sub-Activity, MCC Funding will support training for school leaders and prospective school leaders on the design and delivery of curriculum and training materials, including:

- Management (interdisciplinary structures and community outreach), instructional leadership, and teacher assessment;
- Good practices in development planning and curriculum frameworks;
- Developing/improving teaching and learning materials and resources for current leaders, including the uses of ICT in education;
- Key issues related to gender and social inclusion; and
- Providing support to enhance skills in the language of instruction.

B. Training Delivery

MCC Funding will support the training of every current senior secondary school leader and approximately 650 prospective school leaders during the Compact Term through professional development courses, resources, and ongoing support through the Center of Excellence. Prospective women school leaders will be intentionally targeted for involvement. During and after Center of Excellence training, school leaders (approximately five per school) will also become trainers and mentors in their own schools for current leaders. School leaders in training will receive ongoing training and support from Center of Excellence staff, using different modalities, including online modules and face-to-face meetings, to enhance their instructional leadership and school management practices.

(iv) Ensuring Excellence Activity

This Activity consists of three Sub-Activities, all of which focus on ensuring the accessibility and quality of the Center of Excellence's services.

A. *Quality Assurance and Monitoring*

MCC Funding under this Sub-Activity will support the creation of a quality assurance team at the Center of Excellence. This team will facilitate the ongoing evidence-based improvement and oversight of the Center of Excellence's programs by developing evaluation tools to regularly analyze and report on the effectiveness of trainings. These tools, including online surveys and assessment tasks, will allow for collection and analysis of data gathered from trainees after they have completed individual modules and the full program. Data and analysis will support the Center of Excellence's continuous improvement of courses, teaching styles, and learning materials, as well as its responsiveness to emerging needs that prompt new courses, components, or modules.

B. *Women's Economic Empowerment in Education*

This Sub-Activity aims to increase women's access to the profession of teaching and school leadership at the secondary level by removing barriers for women to enter employment opportunities in education. Efforts supported by MCC Funding to achieve this aim may include the development and implementation of fair and transparent recruitment and promotion processes, incentive schemes for women working in education, support systems for women teachers and school leaders (such as an association or mentorship programs), support for women to participate in trainings (for example, childcare or transport stipends), and leadership programs tailored for women in education. MCC Funding for this Sub-Activity will also support community engagement through workshops to address barriers to entry into the workforce faced by women.

C. *Creating Language and ICT Supports*

To support trainees in the areas of language and ICT, MCC Funding will provide both ICT equipment for the Center of Excellence and language laboratories at the Center of Excellence. Additionally, MCC Funding will support the formulation of an ICT team at the Center of Excellence to support blended and online/distance learning. The Government will also explore forming partnerships with existing institutions that work in the area of language training,

b. Beneficiaries.

Beneficiaries are assumed to include all upper secondary graduates who were taught by Project-trained teachers and who subsequently entered the labor force, as well as members of their households. The total number of beneficiaries is estimated to be 957,721 and analysis suggests that at least initially, the poor will be moderately represented amongst those benefiting from the project.

c. Environmental and Social Mitigation Measures.

Through the provision of secondary teacher and school leader trainings, the TALENT Project will deliver significant social benefits, including potential career advancement for participants and improved educational outcomes for students in Timor-Leste. While the location of the Center of Excellence remains to be determined, no major negative environmental or social impacts are

anticipated with the construction or rehabilitation of the Center of Excellence building. Anticipated impacts include typical construction phase environmental and social risks associated with modest sized vertical structures and operational risks. The Center of Excellence building is categorized as Category B because impacts are expected to be readily manageable with appropriate mitigation measures.

During the design phase of the Center of Excellence building, an environmental review will be undertaken and Environment and Social Management Plans and Health and Safety Management Plans will be developed and implemented during construction. Opportunities to address climate change via energy efficiency, resiliency, and the use of solar panels will be considered, as will use of low flow faucets. A project-specific TIP assessment will outline management measures for the Center of Excellence construction or rehabilitation, taking into consideration risks related to the operation of the Center of Excellence. If temporary buildings are used to house the Center of Excellence prior to completion of construction, then an environmental, health and safety evaluation may be undertaken, and any required remediation will be performed prior to taking over the temporary location. Waste management plans will address risks if building or room upgrades are needed, or disposal of old equipment is required. The Government will provide land for any building and will need to document land ownership and conduct any required land acquisition in accordance with IFC Performance Standards, to MCC satisfaction, and document that the parcel is fit for purpose, free of contamination, and located outside flood zones.

d. Social Inclusion and Gender Integration

In compliance with Section 3.2(e), this Project and all its Activities will be implemented in compliance with the MCC Gender Policy, the MCC Counter-Trafficking in Persons Policy, and the MCC Gender and Social Inclusion Operational Milestones and Procedures. The TALENT Project will integrate social inclusion and gender equality components throughout all the project activities. In addition, the standalone Women's Economic Empowerment in Education Sub-Activity seeks to increase the number of women overall in secondary education teaching positions and increase women's access to leadership positions in secondary education in Timor-Leste. To do so, the Women's Economic Empowerment in Education Sub-Activity will focus on creating an enabling environment for women within the education system by undertaking activities to promote fair and transparent recruitment and selection processes for teachers and school leaders, in addition to providing leadership and/or mentorship support and training opportunities.

The TALENT Project focuses on taking an inclusive approach to education by building content into the teacher training curriculum that promotes gender equality and inclusivity. To promote women's participation in the trainings, the program will consider the needs of women, such as prioritizing shorter-term trainings that are in-person, avoid conflicts with school schedules and childcare, and use incentives (such as transport allowances and childcare services).

For the Center of Excellence, it is important to ensure that risks related to TIP and gender-based violence are addressed both during the construction phase as well as during the operation of the Center of Excellence moving forward.

e. Donor Coordination.

Within the education sector, the majority of investments have benefited early childhood education and primary education, with key support coming from the Australian Department of Foreign

Affairs and Trade, the Australian Ministry of Foreign Affairs and Trade, UNICEF, and more recently, the Global Partnership for Education and the World Bank. A donor mapping exercise carried out by the Global Partnership for Education revealed a lack of large-scale, comprehensive interventions at the secondary level. The TALENT Project fills this gap and builds on the success experienced with interventions at the primary-level to support teachers, school leaders, and students.

f. USAID.

Current USAID programming in economic growth and trade and health complement the TALENT Project.

Over the last two years, USAID has carried out a youth assessment to inform the development of a new Country Development Cooperation Strategy released in 2020. The 2020-2025 Country Development Cooperation Strategy includes a target that calls for the economic inclusion of women and youth to be expanded. While the TALENT Project aims to improve the skills of youth, the intention of the USAID programming is to increase employment opportunities for those youth.

g. Sustainability.

A primary consideration in the design of the TALENT Project is the long-term sustainability of programmatic impacts and the operation of the Center of Excellence. Investments in training in strong coordination and collaboration with the ministry(ies) responsible for education, the National Institute for Professional Education Training (“*INFORDEPE*”), and existing higher education institutions are critical for the sustainability of programmatic inputs and impacts. Therefore, the TALENT Project includes investments in training for current secondary teachers and school leaders in order to foster a supportive and enabling environment for future teacher trainees certified who have completed training at the Center of Excellence to apply pedagogical best practices by also including investments in trainings for current secondary teachers and school leaders. Furthermore, such teacher trainees will have the support of a more robust school leadership team who have also been trained in the new practices. Finally, during the Compact Term, additional trainings will be provided to universities and institutions of higher education to help build capacity to strengthen candidates who may enter the Center of Excellence. Overall, the TALENT Project strikes a balance by complementing existing systems and filling gaps where they exist. It provides existing institutions with additional resources during the life of the Compact to carry out surge training for individuals that are already in the system, while the new Center of Excellence readies itself to train individuals to fill future positions in secondary schools. Operations and maintenance planning for the Center of Excellence building will be included by the Government in post-construction budget cycles, following an initial Compact-funded investment in building operations and maintenance, as detailed in the multi-year financial plan. Members of the Government will be closely engaged on the executive board of the Center of Excellence to assist with planning and ensure that there is absorptive capacity at the secondary schools for the newly trained teachers and leaders. In addition, the technical review committee created by the Government to oversee the design of the TALENT Project may continue to provide support and advice to the Board of Directors of MCA-Timor-Leste and to the relevant MCA-Timor-Leste staff to ensure ongoing technical support for the TALENT Project.

h. Policy, Legal and Regulatory Reforms.

There are two key legal and regulatory reforms that will be required for the TALENT Project. The first is the legal recognition of the Center of Excellence as an autonomous institution under the Ministry of Higher Education Science and Culture via a decree-law.

In addition, it is anticipated that the Government will introduce changes to Education System Framework Law (Law 14/2008) to require secondary school teachers to receive professional certification from the Center of Excellence in order to be employed in Ministry-supported Positions. Current legislation requires secondary teachers to hold an undergraduate degree as their sole qualification. With this reform, all future teachers will be required to hold a professional certification to serve as a secondary school teacher. It should also be noted that a portion of current secondary school teachers will also be professionally certified during the life of the Compact. Such teachers will have to meet the same required standards as future candidates, including mandatory trainings and demonstrated competency. Furthermore, if teachers wish to pursue leadership positions, they will be required to participate in mandatory trainings and meet established requirements.

C. IMPLEMENTATION FRAMEWORK

1. MCA-Timor-Leste

(a) MCA-Timor-Leste Creation.

In accordance with this Compact and in view of implementing the Program, the Government will create, through a decree-law to be enacted by the Council of Ministers, a public institute (“*instituto publico*”) having legal personality and financial autonomy, named “*MCA-Timor-Leste*” with its head office located in Dili. The administrative and financial organization of MCA-Timor-Leste, as well as the general rules of its governance, will be promulgated by such decree-law.

(b) Independence and Autonomy.

MCA-Timor-Leste shall have operational and legal independence and full decision-making autonomy, including, inter alia, the ability, without consultation with, or the consent or approval of, any other party, to: (i) enter into contracts in its own name, (ii) sue and be sued, (iii) establish bank accounts with a financial institution in its own name and hold MCC Funding and the WSD Contribution in those accounts, (iv) expend MCC Funding and the WSD Contribution, (v) engage contractors, consultants and/or grantees, including, without limitation, procurement and fiscal agents, all in compliance with Section 3.6, and (vi) competitively engage one or more auditors of its accounts. In addition, any acts, contracts, and further documentation and procedures undertaken by MCA-Timor-Leste will not be subject to the preliminary supervisory power established in articles 30.º to 34.º of the Law 9/2011 of 17 August (with the amendments introduced by Law 3/2013), on the *Câmara de Contas do Tribunal Superior Administrativo, Fiscal e de Contas* (Timor-Leste’s Audit Court). Therefore, it is clear between the Parties that any such acts carried out by MCA-Timor-Leste using MCC Funding or the WSD Contribution, as well as the effect thereby produced are not, in any circumstances, and regardless of their value, subject to any type of approval or review by the *Câmara de Contas do Tribunal Superior Administrativo, Fiscal e de Contas*.

(c) Employment Requirements.

The Parties agree that the Law No. 4/2012, of 21 February shall apply to MCA-Timor-Leste. The Government shall regulate and specify any applicable rules deemed necessary to clarify any aspects of the legal regime applicable to MCA-Timor-Leste through a decree-law and to ensure MCA-Timor-Leste has the authority to recruit staff for a period exceeding 6 years during the Compact term through the Compact closure period. MCA-Timor-Leste will be permitted to extend such employment contracts ending at the expiration of the Compact Term for a closure period not to exceed 120 days to allow for the winding down of the Program, if deemed necessary by MCA-Timor-Leste. Such extension will not void the nature of or the category of the contract. For the avoidance of doubt, severance will not be due upon the expiration of such employment contracts.

MCA Timor-Leste will be permitted to: (a) arrange for any foreign personnel (staff, individual consultants or personnel of firms) providing goods, works or services under the Compact along with their family to be provided promptly with any necessary entry or work visas, and any such visas and their renewal will be exempt from any fees or costs payable to the Government; and (b) provide the foreign personnel (staff, individual consultants or personnel of firms) providing goods, works or services under the Compact with work permits and such other documents as shall be necessary to enable the foreign personnel to perform services and to remain in Timor-Leste for the duration of the Compact, without the need to exit the country for any period in the interim.

Foreign staff of MCA-Timor-Leste who are not resident in Timor-Leste at the time of their hiring are guaranteed the right to transfer their salaries or remuneration outside Timor-Leste without any restrictions.

(d) Corporate Governance.

The governance of MCA-Timor-Leste shall be set forth in more detail in the Program Implementation Agreement and the constitutive documents and internal regulations of MCA-Timor-Leste (or as otherwise agreed in writing by the Parties). Remuneration for members of the MCA-Timor-Leste Board of Directors shall be consistent with the MCC Program Guidelines.

MCA-Timor-Leste shall be administered, managed and supported by a board of directors (the “*Board of Directors*”) and an operations unit (the “*Operations Unit*”).

(e) Board of Directors.

The Board of Directors shall have ultimate responsibility for the oversight, direction, and decisions of MCA-Timor-Leste, as well as the overall implementation of the Program. The Board of Directors shall be comprised of seven voting members and one or more non-voting observers. As of the date hereof, the voting members of the Board of Directors shall include representatives from each of the following:

- Office of the Prime Minister (one representative);
- Office of the Presidency of the Council of Ministers (one representative);
- Ministry responsible for water, sanitation, and drainage infrastructure sectors (one representative);
- Ministry responsible for finance (one representative);

- Ministry responsible for education (one representative);
- Women’s organizations (one representative); and
- Civil society (one representative)

The number of voting members may be changed through amendments to MCA-Timor-Leste’s constitutive documents, while the identity of the voting members may be changed through changes to the Government’s relevant decrees regarding MCA-Timor-Leste, in both cases, with MCC’s approval. The process of selecting the members of the Board of Directors shall be further stipulated in the government decree-law setting out the legal framework for MCA-Timor-Leste. MCC’s resident country director and the Executive Director of MCA-Timor-Leste shall be non-voting observers of the Board of Directors.

(f) Operations Unit.

The Operations Unit shall report to the Board of Directors and have principal responsibility for the day-to-day operations and management of MCA-Timor-Leste and implementation of the Program. The Operations Unit shall be led by the Executive Director and shall be composed of the Key Staff (as defined in the PIA) as agreed between the Parties and selected after an open, competitive, and non-discriminatory recruitment and selection process (or its equivalent). The MCA-Timor-Leste Executive Director will be selected in the same manner and the MCA-Timor-Leste Board of Directors will solely be responsible for considering, approving, or disapproving the hiring and dismissal of the Executive Director, subject to MCC’s written approval. The Key Staff shall be supported by appropriate additional staff to enable the Operations Unit to execute its roles and responsibilities.

MCA-Timor-Leste shall develop and implement a stakeholder engagement plan for sustaining public consultation and engagement with the private sector, civil society organizations, and organizations representing women and vulnerable groups and allow them opportunities to provide advice and input.

2. Implementing Entities.

Subject to the terms and conditions of this Compact, the Program Implementation Agreement and any other related agreement entered into in connection with this Compact, the Government, acting through MCA-Timor-Leste (or prior to MCA-Timor-Leste’s establishment, the Compact Development Team), may engage one or more entities of the Government to implement and carry out any Project or Activity (or a component thereof) under this Compact (each, an “**Implementing Entity**”). The appointment of any Implementing Entity shall be subject to review and approval by MCC. The Government shall ensure that the roles and responsibilities of each Implementing Entity and other appropriate terms are set forth in an agreement, in form and substance satisfactory to MCC (each an “**Implementing Entity Agreement**”).

3. Fiscal Agent.

Unless MCC agrees otherwise in writing, the Government, acting through MCA-Timor-Leste (or prior to MCA-Timor-Leste’s establishment, the Compact Development Team), shall engage a fiscal agent (a “**Fiscal Agent**”), which shall be responsible for assisting the Government with its fiscal management and assuring appropriate fiscal accountability of MCC Funding, and whose duties shall include those set forth in the Program Implementation Agreement and such agreement

as the Government enters into with the Fiscal Agent, which agreement shall be in form and substance satisfactory to MCC.

4. Procurement Agent.

Unless MCC agrees otherwise in writing, the Government, acting through MCA-Timor-Leste (or prior to MCA-Timor-Leste's establishment, the Compact Development Team), shall engage one or more procurement agents (collectively, the "*Procurement Agent*") to carry out and certify specified procurement activities in furtherance of this Compact. The roles and responsibilities of the Procurement Agent shall be set forth in the Program Implementation Agreement or such agreement as the Government enters into with the Procurement Agent, which agreement shall be in form and substance satisfactory to MCC. The Procurement Agent shall adhere to the procurement standards set forth in the MCC Program Procurement Guidelines and ensure procurements are consistent with the procurement plan adopted by the Government pursuant to the Program Implementation Agreement, unless MCC agrees otherwise in writing.

ANNEX II
MULTI-YEAR FINANCIAL PLAN SUMMARY

This Annex II summarizes the Multi-Year Financial Plan for the Program.

A. General.

A multi-year financial plan summary (“*Multi-Year Financial Plan Summary*”) is attached hereto as Exhibit A to this Annex II. By such time as specified in the Program Implementation Agreement, the Government shall adopt, subject to MCC approval, a multi-year financial plan that includes, in addition to the multi-year summary of estimated MCC Funding, the annual and quarterly funding requirements for the Program (including administrative costs) and for each Project and Activity, projected both on a commitment and cash requirement basis. The multi-year financial plan for the WSD Contribution will be set forth in Annex IV to the Program Implementation Agreement.

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EXHIBIT A TO ANNEX II
MULTI-YEAR FINANCIAL PLAN SUMMARY

COMPONENT	Compact Facilitation Funding (CFF)	Year 1	Year 2	Year 3	Year 4	Year 5 + Program Closure	TOTAL COMPACT FUNDING
WATER SANITATION & DRAINAGE (WSD)	\$33,372,500	\$42,776,013	\$75,502,718	\$75,155,474	\$49,635,192	\$31,763,153	\$308,205,050
Activity 1: Water Disinfection	\$404,710	\$1,133,188	\$4,168,514	\$2,321,271	\$121,413	\$121,413	\$8,270,509
Activity 2: Sanitation	\$31,792,790	\$39,852,825	\$65,675,182	\$65,675,182	\$46,861,279	\$28,989,240	\$278,846,498
Activity 3: Associated Drainage			\$4,469,022	\$4,469,022			\$8,938,044
Activity 4: Institutional Reform	\$925,000	\$800,000	\$200,000	\$1,700,000	\$1,662,500	\$1,662,500	\$6,950,000
Activity 5: Household Water and Hygiene	\$250,000	\$990,000	\$990,000	\$990,000	\$990,000	\$990,000	\$5,200,000
TEACHING & LEADING THE NEXT GENERATION OF TIMORESE (TALEN)	\$3,000,000	\$5,485,986	\$8,050,665	\$8,504,830	\$9,034,938	\$6,114,119	\$40,190,538
Activity 1: Center of Excellence (CoE)	\$1,500,000	\$1,526,045	\$2,626,045	\$3,526,045	\$3,526,045	\$1,895,274	\$14,599,454
Activity 2: Teacher Training	\$1,000,000	\$2,560,902	\$2,815,160	\$3,269,319	\$2,509,382	\$2,509,379	\$14,664,142
Activity 3: School Leadership Training	\$250,000	\$709,566	\$1,019,990	\$1,019,993	\$1,019,993	\$1,019,993	\$5,039,535
Activity 4: Ensuring Excellence	\$250,000	\$689,473	\$1,589,470	\$689,473	\$1,979,518	\$689,473	\$5,887,407
MONITORING & EVALUATION	\$450,000	\$1,625,000	\$800,000	\$1,175,000	\$950,000	\$1,800,000	\$6,800,000
PROGRAM ADMINISTRATION	\$14,229,129	\$9,518,647	\$9,452,700	\$9,615,202	\$9,750,036	\$12,238,698	\$64,804,412
Activity 1: MCA Timor-Leste Administrative Expenses	\$11,829,129	\$7,118,647	\$7,052,700	\$7,215,202	\$7,350,036	\$8,998,698	\$49,564,412
Activity 2: Procurement Agent	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,550,000	\$7,300,000
Activity 3: Fiscal Agent	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,150,000	\$1,550,000	\$7,300,000
Activity 4: Audits	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$140,000	\$640,000
MCC TOTAL INVESTMENT	\$51,051,629	\$59,405,646	\$93,806,083	\$94,450,506	\$69,370,165	\$51,915,970	\$420,000,000

ANNEX III

COMPACT MONITORING & EVALUATION SUMMARY

This Annex III summarizes components of the monitoring and evaluation plan for this Compact (“*M&E Plan*”). The actual structure and content of the M&E Plan, which may differ from those specified in this Annex III, shall be agreed to by MCC and the Government in accordance with MCC’s *Policy for Monitoring and Evaluation of Compacts and Threshold Programs* (the “*MCC M&E Policy*”). In addition, the M&E Plan may be modified from time to time as described in the MCC M&E Policy without requiring an amendment to this Annex III. The M&E Plan shall be posted publicly on the MCC Website and updated as necessary.

1. Objective

MCC and the Government shall formulate and agree to, and the Government shall implement or cause to be implemented, an M&E Plan that explains in detail how and what MCC and MCA-Timor-Leste shall (i) monitor to determine whether the Projects are on track to achieve their intended results (“*Monitoring Component*”), and (ii) evaluate to assess implementation strategies, provide lessons learned, compare costs to benefits, and estimate the impact of compact interventions (“*Evaluation Component*”). The M&E Plan shall summarize all indicators that must be reported to MCC on a regular basis, as well as a description of any complementary data to be collected for evaluation of the Program. The M&E Plan shall also include any monitoring and evaluation (“*M&E*”) requirements that MCA-Timor-Leste must meet in order to receive Disbursements, and shall serve as a communication tool so that MCA-Timor-Leste staff and other stakeholders clearly understand the objectives and targets MCA-Timor-Leste is responsible for achieving. The results of M&E activities, measured by monitoring data and evaluations, shall be made publicly available on the website of MCA-Timor-Leste and on the MCC Website.

2. Program Logic

The program logic is an explanatory model that demonstrates how specific interventions lead to the expected outcomes, objectives, and goal of a compact program. This model reflects the design and implementation plans of a program, noting planned activities and outputs and the sequencing of results. Secondly, it reflects the economic logic, which forms the basis of the cost-benefit analysis that produces the Economic Rate of Return (“*ERR*”). Lastly, it notes critical risks and assumptions related to achieving results. The program logic forms the basis of the M&E Plan.

2.1 Logic Models

A description of the logic underlying each Project is included below:

Project 1: Water, Sanitation and Drainage Project

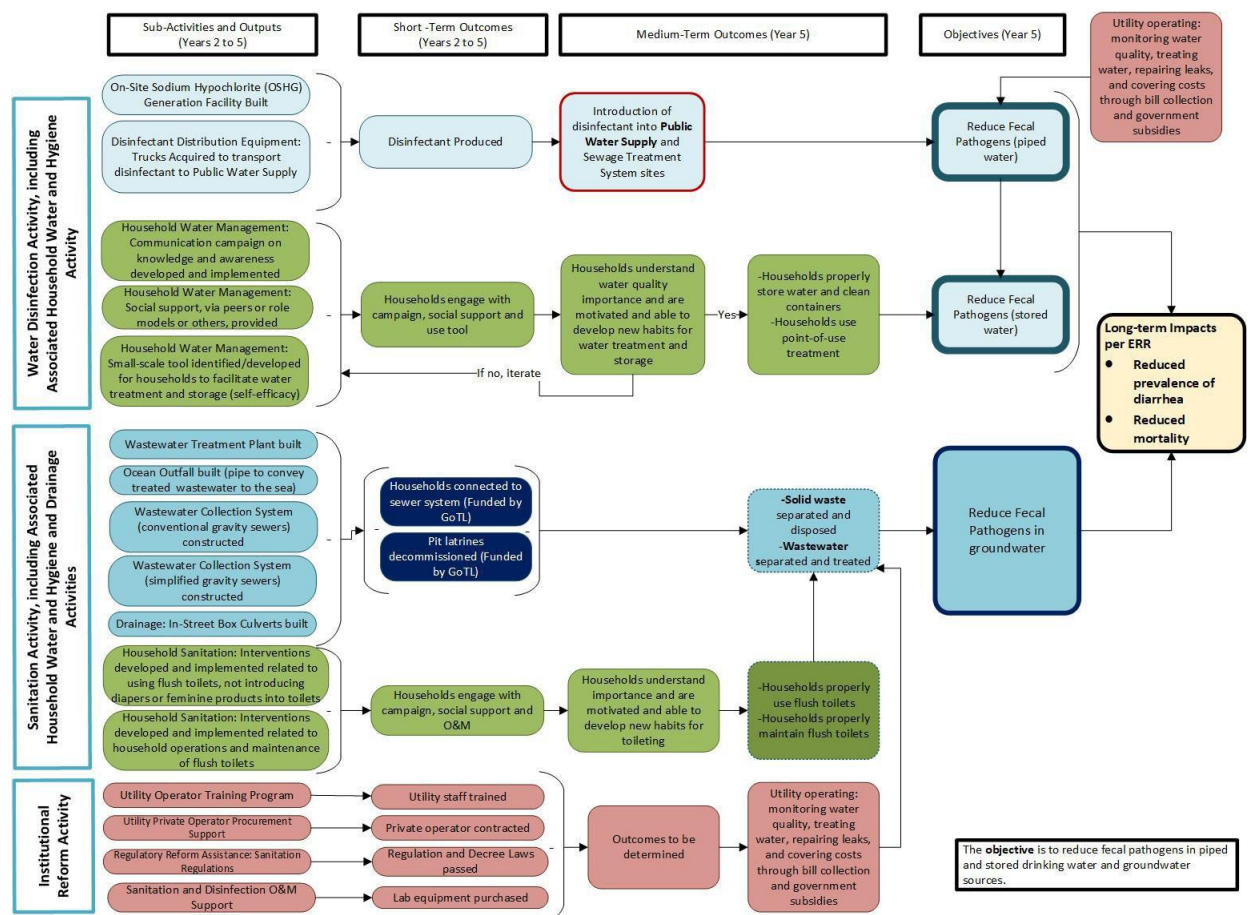
The objective of the **Water, Sanitation and Drainage Project** is to reduce fecal pathogens in piped and stored drinking water, and groundwater. The Project responds to the binding constraint of low human capital—specifically, to Timor-Leste’s high rate of stunting, where more than half of children under the age of five are stunted. The high incidence of fecal pathogens in the water system was identified as one of the root causes of this constraint, based on Government-provided water-quality data, which indicated widespread fecal contamination of the public water supply in Dili not localized to a certain water source.

The Project's theory of change, as shown below, starts with building key infrastructure, supporting institutional and regulatory reform, and supporting key household sanitation and water management practices.

The Water Disinfection Activity will construct the OSHG plant to provide a reliable supply of disinfectant for treating water via a new water network in Dili and four nearby districts. The logic of the Water Disinfection Activity is to reduce disease-causing pathogens in piped water through the production of disinfectant and the application of the disinfectant in the supply of water to households and businesses in Dili and four neighboring districts, resulting in drinking-quality water at the household-level. Disinfected water will be provided in Dili through a new water network funded by the Government and other donors.

To manage the results risks of delivering uncontaminated drinking water, the Project is coordinating with the World Bank and the Asian Development Bank's piped-water improvement projects and includes the Household Water and Hygiene Activity. MCC understands that the Government plans to use Compact-funded disinfectant for their projects and incorporate training and capacity building to BTL and ANAS in order to ensure regular and routine water treatment and monitoring of water quality during and beyond the Compact Term. To ensure households know how to treat and store water properly, the Project includes the Household Water Management Sub-Activity to improve household water storage habits and point-of-use treatment to address intermittent piped-water supply.

To reduce fecal pathogens in the groundwater, the Sanitation Activity includes establishing a sewer network with mandatory service connections, the Wastewater Treatment Plant, a septage receiving facility and biosolids disposal operation, and an open ocean outfall. The treated effluent will be disinfected with sodium hypochlorite generated by the OSHG plant. The Associated Drainage Activity includes constructing specific portions of the drainage system in areas where Compact-funded sewerage system will be constructed. The Project relies on integral investments from the Government as well as related institutional strengthening and behavior-change interventions. Realizing the objective of cleaner groundwater will require that enough households connect to the new sewer system and discontinue use of pit latrines and septic tanks. Household connections, and pit-latrines and septic-tank decommissioning is intended to be funded by the Government as part of the WSD Contribution. In addition, the complementary Household Sanitation Sub-Activity will focus on key toileting behaviors, including on properly managing and regularly maintaining flush toilets. Finally, given that the water utility is new and inexperienced, the Project includes an intense five-year institutional capacity-building component that is expected to extend for at least three years post-Compact Term to help mitigate related sustainability and results risks.



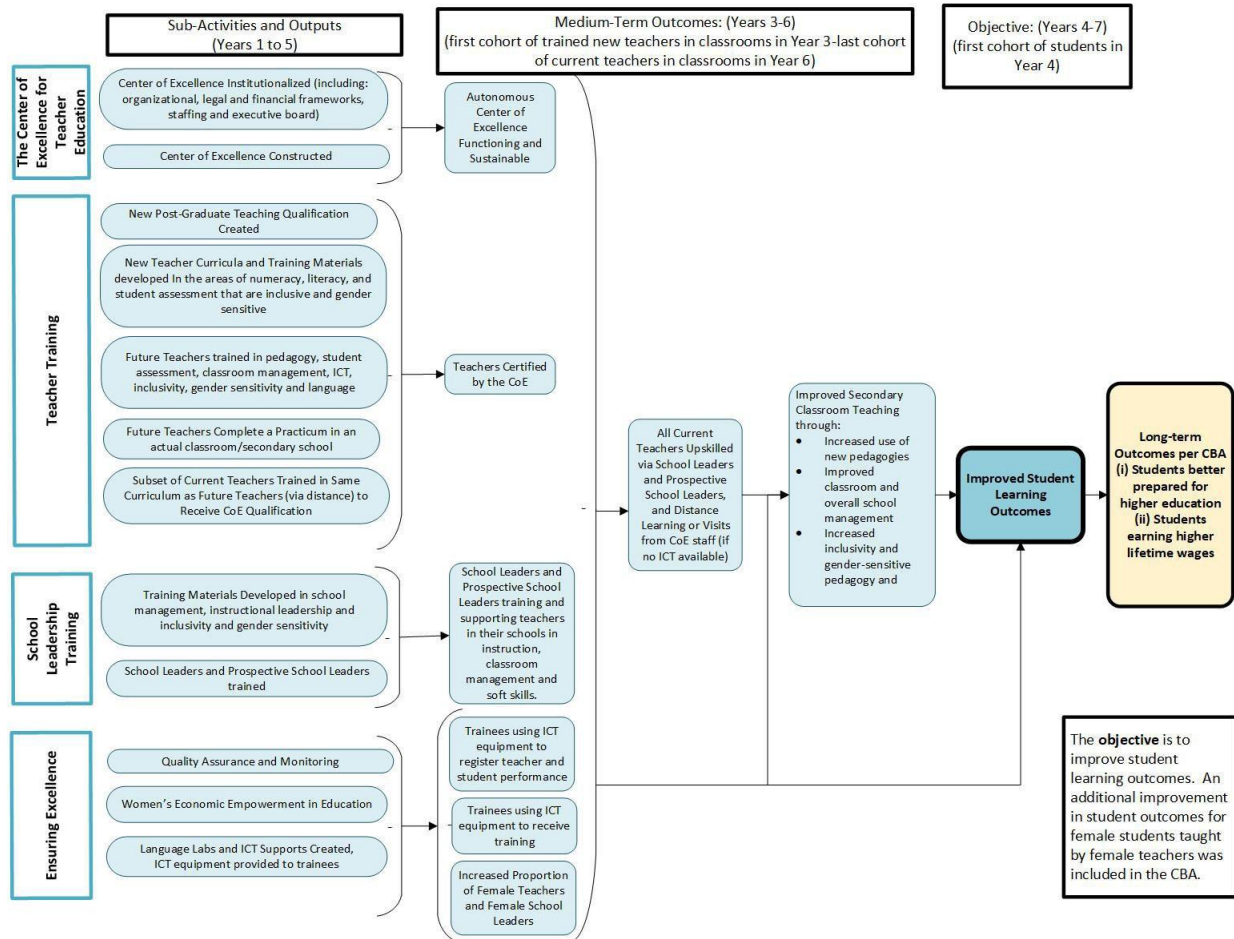
Project 2: Teaching and Leading the Next generation of Timorese (TALENT) Project

The **TALENT Project** responds to the binding constraint of low human capital, as noted in the MCC constraints analysis: “in the workforce, the lack of tertiary education is costly to firms and has resulted in 30-40% of professional jobs being filled by foreign nationals.” The root causes of this constraint were traced to low-quality secondary education, including student deficiencies in soft skills, numeracy and literacy.

The Project will construct and institutionalize a secondary school teacher training institute, the Center of Excellence. The Project will also (i) create and deliver new training curricula to both future and current secondary-school teachers and (ii) create and deliver training to school leaders and prospective school leaders, who will in turn help train and mentor current teachers in their schools. Lastly, the Project will embed quality assurance monitoring, women’s economic empowerment, language labs, and ICT services in the Center of Excellence to support trained teachers and school leaders.

To improve secondary instruction and student learning, the Project will need to manage results risks. First, instruction is currently delivered in a language students may not have mastered. Improving teachers’ mastery of Portuguese is part of the Project, but it remains that the students may not fully understand the language of instruction. Second, the Center of Excellence is being created because the current institutions that train teachers have not been able to adequately prepare teachers for the secondary classroom. To avoid creating another similar institution, the

Project has included quality assurance monitoring into the structure of the Center of Excellence, competitive and transparent recruitment of staff for the Center of Excellence, and a board to oversee the Center of Excellence. Third, the Center of Excellence will directly train a cadre of school leaders and prospective school leaders (current teachers) who are expected to impart this training to the teachers in their schools. To mitigate this risk, the Project is training up to five teachers and school leaders per school, and the Center of Excellence will provide routine oversight in the field.



2.2 Risks and Assumptions

The M&E Plan shall also outline key assumptions and risks that underlie the accomplishment of the theory of change summarized in the program logic. However, such assumptions and risks shall not excuse any Party's performance unless otherwise expressly agreed to in writing by the other Party. The known assumptions and risks include:

Project 1: Water, Sanitation and Drainage Project

Assumptions for Outputs	Assumptions for Outcomes	Assumptions for Objective	Assumptions for Long-term outcomes per CBA

<p>Access to required land is granted.</p> <p>Project retains support of GoTL², even when government changes.</p>	<p>Technical staff are trained to operate the new infrastructure.</p> <p>Disinfectant is delivered to all essential sites with indicated regularity.</p> <p>Utility monitors water quality to deliver appropriate levels of disinfectant.</p> <p>Construction quality is high and includes considerations for climate change-especially during the rainy season.</p> <p>Electricity disruptions do not harm the system.</p> <p>Open drainage canals are free of debris and trash, so drains do not overflow.</p> <p>Households can identify when their water is contaminated. The flush-toilet market for supplies and expertise (plumbers) will be available and affordable.</p>	<p>There is constant, positive pressure in pipes, so pathogens do not cause recontamination of piped water.</p> <p>There is sufficient water supply in the dry season to keep sewage moving and provide water to connected households.</p> <p>Cost-Recovery Plan developed and implemented</p> <p>Enough households connect to the sewage system to sufficiently reduce human waste burden in the environment.</p> <p>Other sources of contamination (animals, etc.) are not major drivers of contamination.</p> <p>Households use only stored water or water from pipes for consumption.</p> <p>Customers can afford and do pay their water bills Government takes ownership of the new system and performs routine operation and maintenance for long-term sustainability.</p>	<p>A key major cause of illness was from contaminated water and not from other causes, such as undernourishment.</p> <p>People benefit at places where they spend major amounts of time, including at home and at work.</p>
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Project 2: Teaching and Leading the Next generation of Timorese (TALENT) Project

<i>Assumptions for Outputs</i>	<i>Assumptions for Outcomes</i>	<i>Assumptions for Objective</i>	<i>Assumptions for Long-term outcomes</i>
<p>GoTL allocates reasonable budget for education.</p> <p>Land or appropriate building is allocated for CoE³ and transport issues are taken into consideration.</p> <p>CoE has an institutional home, is supported by all stakeholders, and has credibility.</p> <p>GoTL can forecast the future need for</p>	<p>GoTL operates and maintains the CoE beyond the Compact Term with the appropriate staffing and trainers to run the training center.</p> <p>CoE is well managed, accountable, and transparent.</p> <p>CoE curriculum & training is adequate and appropriate.</p> <p>Teacher pedagogy complements secondary school curriculum.</p> <p>There is an adequate process to certify secondary school</p>	<p>Future teachers who have credentials are placed into positions in Timor-Leste.</p> <p>Teachers are not absent from the job.</p> <p>Teachers transfer new and/or improved pedagogy and curriculum into the classroom.</p> <p>Teachers can confidently use the determined language (Portuguese).</p> <p>School leaders transfer knowledge and are motivated to improve school management.</p> <p>There are routine current teacher checks and training opportunities.</p>	<p>Secondary (or higher) education and the skills gained are valued in Timor-Leste.</p> <p>Secondary students can transfer their skills to the labor market in Timor-Leste or to attain higher education.</p> <p>After attaining higher education, students enter the labor market in Timor-Leste.</p>

² For use in the tables in this Annex III and the M&E Plan, “GoTL” refers to the Government.

³ For use in the tables in this Annex III and the M&E Plan, “CoE” refers to the Center of Excellence.

<p>secondary teachers and fills that need.</p> <p>GoTL will retire older teachers to make room for future teachers.</p> <p>Curriculum reform is addressed and teachers are trained in the correct curriculum content.</p> <p>Teachers want to and can improve their teaching methods.</p> <p>There is a demand for secondary teaching positions and acquiring the required credentials.</p> <p>Enough future teachers who meet the prerequisites apply to the CoE, including female teachers.</p> <p>The CoE secondary teacher education is affordable.</p> <p>Language won't be a barrier to enter the CoE.</p> <p>INFORDEPE trains trainers and updates training materials.</p>	<p>teachers and this process is being used.</p> <p>Future teachers can find teaching positions in Timor-Leste and will be adequately paid for their credentials.</p> <p>Future teachers know both Portuguese and local language.</p> <p>INFORDEPE is adequately staffed to train/re-train current teachers /school leaders.</p> <p>School leaders and prospective school leaders adequately train and support teachers in their schools (cascade model).</p>	<p>There is routine teacher supervision and support with an accountability and reward mechanism.</p> <p>Parents and the local community are engaged in the learning process and value secondary education.</p> <p>Secondary students are enrolled in and attending secondary school.</p> <p>Secondary students can learn in the determined language.</p> <p>Secondary schools have adequate infrastructure to promote learning and be effective.</p> <p>National exams are in an accessible language for secondary students.</p>	
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2.3 Projected Economic Benefits and Beneficiaries

The economic analysis of compact programs consists of a cost-benefit analysis, which is summarized by an estimated ERR and a beneficiary analysis. This analysis for the Program is summarized below.

2.3.1 Projected Economic Benefits

Cost-Benefit Analysis (“*CBA*”) is completed to determine the cost effectiveness of MCC investments. A threshold of 10% is typically used to inform investment decisions.

The underlying economic logic of the CBA models follow the project logics depicted above. Additionally, several of the variables included in the model become key indicators to monitor the Program and evaluate whether the Program reached the intended outcomes, as well as determining its cost effectiveness. Each model includes estimated benefits and the total estimated costs to reach

those intended benefits, whether costs are incurred by MCC, another donor, the Government, or another entity. These are typically examined over a 20-year period, unless otherwise noted.

The table below provides a summary of the estimated ERRs across this Compact’s projects. The text following the table describes the general methodology and logic of the CBA model(s), as well as the key benefit streams, costs, assumptions, risks, etc. for each of the calculated ERRs.

Project/Activity	Estimated Economic Rates of Return
WSD Project	7.5-11.7%
TALENT Project	15.6%

Project 1: WSD Project

The benefits of the WSD Project are derived from improved health outcomes of the beneficiary population. Recent literature has found that reducing disease burden through water, sanitation, and hygiene interventions require a “transformative” set of interventions that are complementary and comprehensive.

Thus, the WSD Project is designed to complement and enhance the impact of other investments in the water and sanitation sector in Timor-Leste, in line with a master plan developed by the Government. The WSD Project will construct a wastewater infrastructure backbone in Dili, which will be expanded upon in the future by other donors and financiers so that the system can function efficiently and at a low cost. Therefore, the full benefits (and thus the ERR) of the Project depend on whether additional investment occurs that builds on the backbone provided through the WSD Project.

MCC evaluated a range of plausible scenarios based on the extent to which additional investments leverage Project-funded infrastructure. The estimated ERR for the Project without subsequent investments from other sources (e.g., the Government, other donors, and/or the private sector) is 7.5 percent (lower ERR scenario). If the Government’s entire master plan is implemented by 2036, the ERR of the combined WSD Project and additional buildout is estimated at 11.7 percent (higher ERR scenario). MCC determined the higher ERR scenario to be sufficiently probable to proceed with the WSD Project. Given the expected long-term benefits, including serving as a foundational investment for the system, MCC decided to proceed with the WSD Project even in the lower ERR scenario.

The benefits of the WSD Project are derived from improved health outcomes of the beneficiary population. The largest benefit stream driving the rate of return is increased child survival.

Project 2: TALENT Project

The economic analysis of the TALENT Project is based on the aggregate earnings of all projected upper secondary graduates who enter the labor force. The program is assumed to result in increased human capital through the training of teachers and school leaders and the increase in the share of

secondary school teachers who are female. Students taught by program-trained teachers are expected to be subsequently compensated in the labor market via higher wages.

Given the large number of beneficiaries, benefits are large in absolute terms and relative to costs, and the baseline economic rate of return is estimated to be 15.6%.

3.3.2 *Projected Program Beneficiaries*

The M&E Plan shall also define the persons or entities expected to benefit from the Program. Beneficiary analysis is an extension of the CBA and seeks to disaggregate the total increase in income to determine specifically which segments of society will benefit from the Projects and Activities. MCC considers beneficiaries of Projects and Activities to be those people who experience better standards of living as a result of the Project or Activity (as the case may be) through higher real incomes.⁴ For definitional purposes it is important to note that not all project participants are necessarily project beneficiaries. The expected beneficiaries of this Compact over 20 years (unless otherwise noted) are shown in the following table. The text below the table provides a description of the beneficiaries.

Project/Activity	Estimated Beneficiaries*
<i>WSD Project: Water Disinfection</i>	429,000 residents of Dili 64,000 residents of four Dili-adjacent districts
<i>WSD Project: Sanitation</i>	301,000 residents of Dili
<i>TALENT Project</i>	957,000 students

*There is some anticipated overlap in beneficiaries across the projects so the beneficiaries cannot simply be added together to estimate total compact beneficiaries.

Because poor households suffer higher disease burden than non-poor households, maximizing disease burden reduction meant maximizing the inclusion of the poor. The footprint of the sanitation system was thus chosen to maximize inclusion of poor households, given engineering and design constraints. Thus, while the poor represent just over 20% of the beneficiary population of the WSD Project, around 30% of the disease burden reduction and lives saved is expected to come from poor households.

Given the broad scope of the TALENT Project, beneficiaries are assumed to include all upper secondary graduates who were taught by Project-trained teachers and who subsequently entered the labor force, as well as their co-householders. The total number of beneficiaries is estimated to be 957,721, and the beneficiary analysis suggests that at least initially, the poor will be moderately under-represented amongst beneficiaries.

⁴ As used in this Compact, the term “beneficiary” has the meaning described in MCC’s *Guidelines for Economic and Beneficiary Analysis*.

4. Monitoring Component

As defined in the MCC M&E Policy, monitoring is the continuous, systematic collection of data on specified indicators to provide indications of progress toward objectives and the achievement of intermediate results along the way. To monitor progress toward the achievement of results of this Compact, the Monitoring Component of the M&E Plan shall identify (i) the Indicators (as defined below), (ii) the definitions of the Indicators, (iii) the sources and methods for data collection, (iv) the frequency for data collection, (v) the party or parties responsible for collecting and analyzing relevant data, and (vi) the timeline for reporting on each Indicator to MCC. It should be noted that some indicators shall continue to be tracked after the Compact Term as necessary.

4.1 Outcome, Output, and Process Indicators

The full M&E Plan shall measure the results of the Program using quantitative, objective, and reliable data (“*Indicators*”).

4.1.1 Baselines

The full M&E Plan shall establish baselines for every Indicator (each a, “*Baseline*”). An Indicator’s Baseline should be established prior to the start of the corresponding Project, Activity and/or Sub-Activity. Baselines demonstrate that the problem can be specified in measurable terms and are thus a pre-requisite for adequate intervention design. The Government shall collect Baselines on the selected Indicators or verify already collected Baselines where applicable.

4.1.2 Benchmarks and Targets

The full M&E Plan shall establish a benchmark for each Indicator that specifies the expected value and the expected time by which the result shall be achieved (“*Target*”).

4.1.3 Disaggregation of Indicators

The full M&E Plan shall indicate which Indicators shall be disaggregated by gender, income level, and age, and beneficiary types to the extent practical and applicable.

4.1.4 Outcome, Output, and Process Indicators

Outcome, output and process Indicators are all defined in the MCC M&E Policy.

4.1.5 Common Indicators

MCC’s Common Indicators (as described in the MCC M&E Policy) shall also be included as relevant.

4.1.6 Revisions to Indicators and Targets

Subject to prior written approval from MCC and in accordance with the MCC M&E Policy, the Government may add Indicators or refine the definitions and Targets of existing Indicators.

4.1.7 Indicator Tracking Table

MCA-Timor-Leste must report to MCC on monitoring Indicators in the M&E Plan on a quarterly basis using an Indicator Tracking Table (“*Indicator Tracking Table*” or “*ITT*”) in the form provided by MCC. No changes to Indicators, Baselines or Targets may be made in the ITT until the changes have been approved in the M&E Plan. Additional guidance on Indicator reporting is contained in the *MCC Guidance to Accountable Entities on the Quarterly Disbursement Request Package*. In the case that MCA-Timor-Leste submits a six-month disbursement request, the ITT must still be submitted quarterly.

The M&E Plan shall contain the monitoring Indicators listed in Schedule A.

5. Evaluation Component

While good program monitoring is necessary for program management, it is not sufficient for assessing ultimate results. MCC therefore advocates the use of different types of evaluations as complementary tools to better understand the effectiveness of its programs. As defined in the MCC M&E Policy, evaluation is the objective, systematic assessment of a program's design, implementation and results. MCC is committed to making its evaluations as rigorous as warranted in order to understand the causal impacts of its programs on the expected outcomes and to assess cost effectiveness.

5.1 Independent Evaluations

Every Project must undergo a comprehensive, independent evaluation (impact and/or performance) in accordance with the MCC M&E Policy. The Evaluation Component of the M&E Plan shall describe the purpose of the evaluation, methodology, timeline, required MCC approvals, and the process for collection and analysis of data for each evaluation. All independent evaluations must be designed and implemented by independent, third-party evaluators. If the Government wishes to engage an evaluator, the engagement shall be subject to the prior written approval of MCC. Contract terms must be acceptable to MCC and ensure non-biased results and the publication of results.

For each independent evaluation, MCA-Timor-Leste is expected to review and provide feedback to independent evaluators on the evaluation design reports, evaluation materials (including questionnaires), baseline report (if applicable), and any interim/final reports in order to ensure proposed evaluation activities are feasible, and final evaluation products are technically and factually accurate.

Project 1: WSD Project

The evaluation methodology will be an impact evaluation if a comparable control group can be identified. If not, the evaluation methodology will be a performance evaluation. The Evaluation Questions follow:

- Was the program implemented according to plan (in terms of quantity and quality of outputs?)
- Did the program achieve its targeted outcomes, particularly its stated objective of reducing fecal pathogens in piped and stored water and in groundwater, in the timeframe and magnitude expected? Why or why not? The outcomes related to MCC's learning agenda include household water and toileting practices, household drinking-water quality, and utility operation. Depending on statistical power and program implementation, MCC may be able to assess the project's contribution to lowering disease prevalence.
- Do the results of the program justify the allocation of resources toward it?

Project 2: TALENT Project

The Evaluation Methodology for this Project is yet to be finalized. There may be an opportunity to compare outcomes between teachers trained earlier in the Project with those trained later in the project. In addition, there may be an opportunity to assess the cascade approach in different sized schools, i.e., does the percentage of teachers receiving centralized training affect teachers' adoption of new practices.

The Evaluation Questions follow:

- Was the program implemented according to plan (in terms of quantity and quality of outputs?)
- Did the program achieve its targeted outcomes, particularly its stated objective of improving secondary-student learning outcomes, in the timeframe and magnitude expected? Why or why not? The outcomes related to the learning agenda include changes in classroom management and content, effects of female teachers on girls' and boys' learning and effects of the cascade approach.
- Do the results of the program justify the allocation of resources toward it?

6. Data Quality Reviews

Data Quality Reviews (“**DQR**”) are a mechanism to review and analyze the utility, objectivity, and integrity of performance information. DQRs are to cover: a) quality of data, b) data collection instruments, c) survey sampling methodology, d) data collection procedures, e) data entry, storage and retrieval processes, f) data manipulation and analyses and g) data dissemination. MCC requires that an independent entity conduct the DQR, such as a local or international specialized firm or research organization, or an individual consultant, depending on the size of the program or project in review. The frequency and timing of data quality reviews must be set forth in the M&E Plan; however, MCC may request a DQR at any time. DQRs should be timed to occur before or early enough in the Compact Term that meaningful remedial measures (if any) may be taken depending on the results of the review. The methodology for the review should include a mix of document and record reviews, site visits, key informant interviews, and focus groups.

7. Other Components of the M&E Plan

In addition to the monitoring and evaluation components, the full M&E Plan shall include the following components:

7.1 Data Management System

The M&E Plan shall describe the information system that shall be used to collect data, store, process and deliver information to relevant stakeholders in such a way that the Program information collected and verified pursuant to the M&E Plan is accessible and useful to those who wish to use it.

7.2 Budget

A detailed cost estimate for all components of the M&E Plan.

Description	CFF	Year 1	Year 2	Year 3	Year 4	Year 5	TOTAL
MONITORING & EVALUATION	\$ 450,000	\$ 1,625,000	\$ 800,000	\$ 1,175,000	\$ 950,000	\$ 1,800,000	\$ 6,800,000

Data collection and surveys	\$ 350,000	\$ 850,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 1,100,000	\$ 2,750,000
Performance Indicator Monitoring	\$ -	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000
Data quality reviews and audits		\$ 225,000		\$ 225,000	\$ 100,000		\$ 550,000
Capacity building and training	\$ 100,000	\$ 200,000	\$ 150,000	\$ 150,000	\$ 50,000	\$ 50,000	\$ 700,000
Monitoring Systems and Equipment		\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000
Other	\$ -	\$ 50,000	\$ 200,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 1,300,000

8. Responsibility for Developing the M&E Plan

MCC desires to “[refrain] from requesting the introduction of performance indicators that are not consistent with countries’ national development strategies.”⁵ For this reason, primary responsibility for developing the M&E Plan lies with the M&E directorate of MCA-Timor-Leste with support and input from MCC’s M&E and economist staff. The M&E Plan must be developed in conjunction with key stakeholders, including MCA-Timor-Leste leadership and sector leads, the MCC Resident Country Mission, and other MCC staff (such as cross-cutting leads), as well as external stakeholders, as applicable. While the entire M&E Plan must be developed collaboratively, MCC and MCA-Timor-Leste Project/Activity leads are expected to guide the selection of Indicators at the process and output levels that are particularly useful for management and oversight of Projects and Activities.

9. Approval and Implementation of the M&E Plan

The approval and implementation of the M&E Plan, as amended from time to time, shall be in accordance with the Program Implementation Agreement, any other relevant Supplemental Agreement and the MCC M&E Policy. All M&E Plan modifications proposed by MCA-Timor-Leste must be submitted to MCC for prior written approval. The M&E Plan may undergo peer review within MCC before the beginning of the formal approval process.

Table 1.1: Indicators

The table below lists the preliminary set of monitoring and evaluation indicators linked to each result in the project logic. Key Indicators that can be reported on at least an annual basis shall be included in quarterly monitoring indicator reports, while Indicators that require survey data or a longer time period to track shall be included in evaluation reports.

Table 1.1: Project 1: WSD Project Indicators

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
Outcome Indicators						
Water Disinfection and Associated Social and Behavior Change Activities						

⁵ Busan Partnership for Effective Development Cooperation, Busan Outcome Document, 1 December 2011, p. 5

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>Reduce Fecal Pathogens (piped water)</i>	Proportion of tests passing drinking water quality criteria (WS-21)	The percentage of recommended total number of samples tested for residual chlorine that pass the relevant standard (for drinking water, WHO recommends: 0.2 mg/L < residual chlorine concentration < 5 mg/L)	percentage	Value: Dili : 60% (rainy season) and 80% (dry season) of tested public water supply sites passed tests. Year: 2019	Value: 99% for points of entry Year: 2029 Value: 90% for taps Year: 2029	N
<i>Reduce Fecal Pathogens (stored water)</i>				Value: TBD Year: TBD	Value: TBD Year: TBD	N
<i>Introduction of disinfectant into public water supply sites</i>	Treated Water Quantity	The volume of treated water supplied to the entire distribution system, which equals the total volume of water produced and treated by the utility for a reference period of time.	m ³	Value: TBD Year: TBD	Value: TBD Year: 2029	N
<i>Households properly store water and clean containers and use point-of-use treatment</i>	Use of safely managed drinking water (WS-12)	The percentage of households in the project areas whose main source of drinking water is through safely managed drinking water services.	percentage	Value: 23% Year: 2021	Value: 70% Year: 2029	N
<i>Households understand water quality importance and are motivated and able to develop new habits for water treatment and storage</i>	The percentage of households that perform at least one type of water treatment for drinking water	The percentage of households that perform at least one type of water treatment (boiling or adding bleach) for drinking water	number	Value: 28% Year: 2021	Value: 70% Year: 2029	N
<i>Disinfectant Produced</i>	Disinfectant produced	Annual indicator	kg of FAC (Free Available Chlorine)	Value: 0 Year: 2021	Value: 70,566 Year: 2029	Y
<i>Households engage with change campaign, social support and use tool</i>	Households receiving water treatment and storage messaging	The number of households that receive communication via radio, TV or other source	number	Value: 0 Year: 2021	Value: 20,000 Year: 2029	Y
	Households that receive tool	The number of households that receive storage/treatment tool	number	Value: 0 Year: 2021	Value: 1,000 Year: 2029	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
Output Indicators						
Water Disinfection and Associated Social and Behavior Change Activities						
<i>OSHG plant built</i>	OSHG plant built	Date on which OSHG plant is completed.	date	Value: 0 Year: 2021	Value: 1 Year: 2028 (compact year 5, quarter 1)	Y
<i>Disinfectant Distribution Equipment: Trucks acquired to transport disinfectant to public water supply</i>	Disinfectant delivered	Annual volume of disinfectant, based on a uniform 0.8% sodium hypochlorite solution delivered to public water systems in Dili, Aileu, Ermera, Liquica and Manatuto	liters	Value: 0 Year: 2021	Value: Dili: 2,826,000 Aileu: 205,000 Ermera: 196,000 Liquica: 119,000 Manatuto: 552,000 Year: 2028 (compact year 5, quarter 1)	Y
<i>Communication campaign on knowledge and awareness developed and implemented</i>	Communication campaign on knowledge and awareness developed and implemented	Campaign may include radio or TV or other media	date	Value: 0 Year: 2021	Value: TBD (determined Dec 2022) Year: TBD (determined Dec 2022)	Y
<i>Social support via peers or role models or others provided</i>	Individuals trained in social and behavioral change	The number of individuals in a community trained towards achieving a specific social or behavior change, particularly pertaining to sustaining access to services, and to hygiene behaviors that block the fecal-oral pathogen transmission pathways	number	Value: 0 Year: 2021	Value: 5000 Year: 2029	Y
<i>Small scale tool identified/developed for households to facilitate water treatment and storage</i>	Tool completed	Tool for treatment/storage will be piloted/tested to determine appropriate design	date	Value: 0 Year: 2021	Value: TBD (determined Dec 2022) Year: TBD (determined Dec 2022)	Y
Outcome Indicators						
Sanitation and Associated Social and Behavior Change Activities						
<i>Reduce fecal pathogens in groundwater</i>	Proportion of tests passing water quality criteria	The percentage of recommended total number of samples tested for fecal pathogens that pass the relevant standard.	percentage	Value: Dili: 31% of tested private wells without E.coli detected Year: 2019	Value: 90% Year: 2029	N
<i>Solid waste separated and disposed</i>	Total suspended solids collected at Wastewater Treatment Plant	TBD	kilograms	Value: 0 Year: 2021	Value: 2,300,000 Year: 2028 (year 5, quarter 1)	N
<i>Wastewater separated and treated</i>	Proportion of wastewater treated (WS-22)	The percentage of the total collected sewage volume that receives at least primary wastewater treatment	percentage	Value: 0 Year: 2021 Source: TetraTech Pre-Feasibility Study (FS)	Value: TBD Year: 2028 (year 5, quarter 1) Source: TBD	N

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
	Disinfectant delivered	Disinfectant delivered to wastewater treatment plant	kg of FAC	Value: 0 Year: 2021 Source: TetraTech Pre-Feasibility Study (FS)	Value: 39,380 Year: 2028 (year 5, quarter 1) Source: TetraTech Pre-Feasibility Study (FS)	N
<i>Households properly use and maintain flush toilets</i>	Use of safely managed sanitation facility	Proportion of households in the project area using safely managed sanitation ('improved') services. 'Improved' sanitation facilities include flush toilets to sewer systems.	percentage	Value: TBD (December 2022) Year: TBD	Value: TBD (December 2022) Year: TBD	N
	Households maintain their flush toilets	Proportion of households in the project area that do not throw trash (diapers, feminine products, etc.) into flush toilets.	percentage	Value: TBD (December 2022) Year: TBD	Value: TBD (December 2022) Year: TBD	N
<i>Households understand importance & motivated & able to develop new habits for toileting</i>	TBD	TBD	TBD	Value: TBD (December 2022) Year: TBD	Value: TBD (December 2022) Year: TBD	N
<i>Households connected to sewer system</i>	Sanitation facilities constructed (WS-26)	Number of sanitation facilities constructed as part of the Project. The facility is counted as operational when it has been handed over to the community for use. Sanitation facilities to be included in this indicator include flush toilet.	number	Residential, conventional Value: 0 Year: 2021	Residential, conventional Value: 8,292 Year: 2028 (year 5, quarter 1)	Y
				Residential, simplified Value: 0 Year: 2021	Residential, simplified Value: 5,318 Year: 2028 (year 5, quarter 1)	
				Non-residential Value: 0 Year: 2021	Non-residential Value: 1,775 Year: 2028 (year 5, quarter 1)	
<i>Households connected to sewer system</i>	Total customer connections, sanitation (WS-25)	Total number of wastewater connections operational through billing by the utility in a year	Number	Residential, conventional Value: 0 Year: 2021	Residential, conventional Value: 9,951 Year: 2028 (year 5, quarter 1)	Y
				Residential, simplified Value: 0 Year: 2021	Residential, simplified Value: 6,382 Year: 2028 (year 5, quarter 1)	
				Non-residential Value: 0 Year: 2021	Non-residential Value: 2,130 Year: 2028 (year 5, quarter 1)	
<i>Pit latrines decommissioned</i>	Total pit latrines decommissioned	TBD.	Number	Residential, conventional Value: 0 Year: 2021	Residential, conventional Value: 7,740 Year: 2028 (year 5, quarter 1)	Y
				Residential, simplified Value: 0 Year: 2021	Residential, simplified Value: 4964 Year: 2028 (year 5, quarter 1)	
				Non-residential Value: 0 Year: 2021	Non-residential Value: 1657 Year: 2028 (year 5, quarter 1)	

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>Households engage with campaign, social support and O&M</i>	Households receiving SBC toileting messaging	The number of households that receive communication via radio, TV or other source	number	Value: 0 Year: 2021	Value: TBD (December 2022) Year: TBD (December 2022)	Y
	Individuals trained in social and behavioral change (WS-6)	The number of individuals in a community trained towards achieving a specific social or behavior change, particularly pertaining to sustaining access to services, and to hygiene behaviors that block the fecal-oral pathogen transmission pathways	Number	Value: 0 Year: 2021	Value: 5,000 Year: 2029	Y
Output Indicators						
Sanitation and Associated Social and Behavioral Change Activities						
<i>Wastewater Treatment Plant built</i>	Wastewater Treatment Plant constructed	Date on which construction is completed.	Date	Value: 0 Year: 2021	Value: 2028 (year 5, quarter 1) Year: 2028 (year 5, quarter 1)	Y
<i>Ocean outfall built</i>	Ocean outfall constructed	Date on which construction is completed.	Number	Value: 0 Year: 2021	Value: 2028 (year 5, quarter 1) Year: 2028 (year 5, quarter 1)	Y
<i>Wastewater collection system constructed (conventional gravity sewers)</i>	Length of sewers constructed (WS-28)	Total length in kilometers of the sewage network constructed or replaced including service network and interceptors. This indicator should include all sewers including laterals to individual homes and interceptors conveying the sewage to a treatment facility. The sewers are considered completed and counted in this indicator after handover to the utility by the contractor and once operational.	kilometers	Value: 0 Year: 2021	Value: 289 Year: 2028 (year 5, Q1)	Y
<i>Wastewater collection system constructed (Simplified gravity sewers)</i>	Length of sewers constructed (WS-28)	Total length in kilometers of the sewage network constructed or replaced including service network and interceptors. This indicator should include all sewers including laterals to individual homes and interceptors conveying the sewage to a treatment facility. The sewers are considered completed and counted in this indicator after handover to the utility by the contractor and once operational.	kilometers	Value: 0 Year: 2021	Value: 1,775 Year: 2028 (year 5, Q1)	Y
<i>In-street box culverts built</i>	In-street box culverts constructed		Number	Value: 0 Year: 2021	Value: 4 Year: 2028 (year 5, Q1)	Y
<i>Interventions developed and implemented related to</i>	TBD	TBD	TBD	TBD	TBD	TBD

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>using flush toilets</i>						
<i>Interventions developed and implemented related to household</i>	TBD	TBD	TBD	TBD	TBD	TBD
<i>O&M of flush toilets</i>	TBD	TBD	TBD	TBD	TBD	TBD
Outcome Indicators						
Institutional Reform Activity						
<i>Utility operating</i>	Indicators TBD	TBD	TBD	TBD	TBD	TBD
	Utility staffed to manage wastewater system	Number of Full-Time Equivalents, target is based on approximately 6.6 FTEs per 1000 connections to the wastewater system	Number	Value: 0 Year:	Value: 135 Year:	Y
<i>Utility staff trained</i>	Number of BTL staff managed and trained by private operator	Private operator will train staff to operate and maintain new infrastructure in years 4 and 5 of the Compact plus 3 years post Compact	Number	Value: 0 Year:2021	Value: TBD Year: TBD	Y
<i>Private operator contracted</i>	Date on which private operator is contracted		Date	Value: 0 Year: 2021	Value: TBD Year: TBD	Y
<i>Regulation and Decree-Laws passed</i>	Regulation and Decree-Laws passed	TBD				TBD
<i>Lab equipment purchased and in use</i>	Planned water-quality tests completed	BTL and/or ANAS routinely tests public water and wastewater quality, including independent sampling and analysis to hold water suppliers and dischargers into the wastewater system accountable.	Percent	Value: 0 Year:2021	Value: TBD Year: TBD	Y
Output Indicators						
Institutional Reform Activity						
<i>Utility operator training program</i>	Utility staff training developed	Trained to include operation and maintenance of new infrastructure	Date	Value: 0 Year: TBD	Value: 0 Year: TBD	Y
<i>Utility private operator</i>	Private operator Terms of	Private operator will provide management and training to BTL	Date	Value: 0 Year: TBD	Value: TBD Year: TBD	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>procurement support</i>	Reference completed	for a period of 5 years, beginning in Year 3 of the Compact				
<i>Regulatory reform assistance: sanitation regulations</i>	TBD	TBD	TBD	TBD	TBD	Y
<i>Sanitation and Disinfection O&M Support</i>	Standards and enforcement measures for potable water and wastewater effluent quality created	Develop standards in the following (1) effluent quality from the Wastewater Treatment Plant, (2) wastewater discharges from industrial customers (treatment before entering piped sanitation collection system, (3) decommissioning of septic tanks and mandatory connections when a central collection system is made available, and (4) septic tank regulations for areas without piped water.	Number	Value: 0 Year: TBD	Value: 0 Year: TBD	Y
Long-Term Outcomes per CBA						
<i>Long-term outcomes per CBA</i>	Prevalence of diarrhea, children under 5	The percentage of individuals reported as having diarrhea in the two weeks preceding the survey.	percentage	Value: 15.5 (Dili) Year: 2016	Value: 11.6 Year: 2029	N

Table 1.2: Project 2: TALENT Project Indicators

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
Outcome Indicators						
<i>Improved student learning outcomes (literacy, numeracy, soft skills)</i>	Student test scores	Average test scores on standardized tests for secondary students	standard deviation	Value: TBD Year: TBD	An increase in test scores of: 0.14 SD for students taught by current teachers trained 0.14 for students taught by trained future teachers 0.04 SD for girls taught by Female Teachers	N
<i>Improved secondary classroom teaching</i>	Time on task	Per class period, the amount of time the teacher spends on instruction versus discipline and out of the classroom	percentage	Value: TBD Year: TBD	Value: TBD Year: TBD	N
	Percentage of school day that school leaders spend observing and coaching teachers	Per school day, the amount of time the school leader spends on observing teachers during class and giving feedback.	percentage	Value: TBD Year: TBD	Value: TBD Year: TBD	N
	Number CoE-trained secondary teachers placed in schools	Future teachers placed in secondary schools	number	Value: 0 Year: 2021	Value: 400 Year: 2029	Y
	Number of schools with CoE-trained teachers	Secondary schools	number	Value: 0 Year: 2021	Value: 167 Year: 2029	Y
	(E-6) Students participating in Project-supported education activities	The number of students enrolled or participating in Project-supported educational schooling	number	Value: 0 Year: 2021	Value: 74,000 Year: 2029	Y
<i>Current teachers upskilled</i>	(E-5) Instructors trained, current	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the compact training activity. Teachers trained in their schools by prospective school leaders and school leaders and CoE. To avoid double counting, the target is calculated as the total number of teachers (4400-1000 current teachers certified – 600 future teachers certified -835 prospective school leaders trained)	number	Value: 0 Year: 2021	Value: 1965 Year: 2029	Y
<i>Autonomous CoE functioning and sustainable</i>	CoE operational	TBD	date	Value: 0 Year: 2021	Value: 2029 Year: 2029	Y
	Number of future instructors certified	Number of classroom instructors receiving CoE qualification (future teachers)	number	Value: 0 Year: 2021	Value: 600 Year: 2029	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
<i>Teachers certified by the CoE</i>	Number of current instructors certified	Number of classroom instructors receiving CoE qualification (current teachers)	number	Value: 0 Year:2021	Value: 1000 Year:2029	Y
	Number of school leaders and prospective school leaders certified	Number of classroom school leaders and prospective school leaders receiving CoE qualification	number	Value: 0 Year:2021	Value: 167 (school leaders) 668 (prospective school leaders) Year:2029	Y
<i>School leaders and prospective school leaders training and supporting teachers in their schools</i>	Instructors supported	The number of classroom instructors who are supported by their school leaders and prospective school leaders (cascade model)	number	Value: 0 Year: 2021	Value: 3565 (4400 total teachers minus 835 school leaders and prospective school leaders) Year: 2029	Y
<i>Trainees using ICT equipment to register teacher and student performance</i>	Percentage of teachers and students entered into monitoring system	TBD	percentage	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>Trainees using ICT equipment to receive training</i>	Number of instructors and school leaders taking computerized training courses	TBD	number	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>Increased proportion of female teachers and female school leaders</i>	Percentage of female secondary-school teachers	Percentage of female secondary-school teachers divided by all secondary school teachers	percentage	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
	Percentage of female secondary-school leaders	Percentage of female secondary-school leaders divided by all secondary school leaders	percentage	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
Output Indicators						
<i>CoE institutionalized</i>	CoE with executive board and organizational , legal and financial frameworks drafted	Dates for each of these milestones: executive board populated, and organizational, legal and financial frameworks drafted	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
	CoE staffed	Staffing requirements fulfilled	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>CoE constructed</i>	(E-4) Educational facilities constructed or rehabilitated	The number of educational facilities constructed or rehabilitated according to standards stipulated in MCA contracts signed with implementers.	number	Value: 0 Year: 2021	Value: 1 Year: 2029	Y
<i>New post-graduate teacher qualification created</i>	Post-graduate teacher qualification created	TBD	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>New teacher curriculum and training materials developed</i>	Teacher education curriculum developed	Inclusive and gender-sensitive teacher education curriculum developed	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y

Result	Indicator	Definition	Unit	Baseline	Compact Target	ITT Indicator (Y/N)
	Training materials developed	Dates on which training materials are completed: to include numeracy, literacy, and student assessment, that are gender sensitive and inclusive	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>Future teachers trained in pedagogy, student assessment, classroom management, ICT, inclusivity, gender sensitivity, and language</i>	(E-5) Future instructors trained	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the Teacher Training Activity. Trained by CoE staff.	number	Value: 0 Year: 2021	Value: 600 Year: 2029	Y
<i>Future teachers complete a practicum in an actual classroom</i>	Future teachers complete practicum	TBD	Number	Value: 0 Year: 2021	Value: 600 Year: 2029	Y
<i>Subset of current teachers trained in same curriculum as future teachers</i>	(E-5) Current instructors trained	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the Teacher Training Activity. Trained by CoE staff.	number	Value: 0 Year: 2021	Value: 1000 Year: 2029	Y
<i>Training materials developed in school management, instructional leadership</i>	Training materials developed	Dates on which training materials are completed: to include school management and instructional leadership	date	Value: TBD Year: 2021	Value: TBD Year: TBD	Y
<i>School leaders and prospective school leaders trained</i>	(E-5) School leaders and prospective school leaders trained	The number of classroom instructors who complete Project-supported training focused on instructional quality as defined by the Teacher Training Activity. Trained by CoE staff.	number	Value: 0 Year:	Value: 167 (School Leaders) 668 (prospective school leaders) Year:	Y
<i>Quality Assurance Monitoring Sub-Activity</i>	TBD					
<i>Women's Economic Empowerment in Education Sub-Activity</i>	TBD					
<i>Language labs and ICT supports created, ICT equipment provided to trainees</i>	TBD					

ANNEX IV
CONDITIONS PRECEDENT
TO DISBURSEMENT OF CFF

This Annex IV sets forth the conditions precedent applicable to Disbursements of Compact Facilitation Funding (each a “*CFF Disbursement*”). Upon signature of the Program Implementation Agreement, each CFF Disbursement shall be subject to the terms of the Program Implementation Agreement in addition to the terms set forth in this Annex IV.

1. Conditions Precedent to Initial CFF Disbursement.

Each of the following must have occurred or been satisfied, in form and substance acceptable to MCC, prior to the initial CFF Disbursement:

- (a) The Government (or MCA-Timor-Leste) has delivered to MCC an interim fiscal accountability plan acceptable to MCC; and
- (b) The Government has put in place a CFF procurement plan acceptable to MCC.

2. Conditions Precedent to all CFF Disbursements (Including Initial CFF Disbursement).

Each of the following must have occurred or been satisfied prior to each CFF Disbursement:

- (a) The Government (or MCA-Timor-Leste) has delivered to MCC the following documents, in form and substance satisfactory to MCC:
 - (i) a completed Disbursement Request, together with the applicable Periodic Reports, for the applicable Disbursement Period, all in accordance with the Reporting Guidelines;
 - (ii) a certificate of the Government (or MCA-Timor-Leste), dated as of the date of the CFF Disbursement Request, in such form as provided by MCC;
 - (iii) if a Fiscal Agent has been engaged, a Fiscal Agent Disbursement Certificate; and
 - (iv) if a Procurement Agent has been engaged, a Procurement Agent Disbursement Certificate.
- (b) If any proceeds of the CFF Disbursement are to be deposited in one or more bank accounts, MCC has received satisfactory evidence that (i) the Bank Agreement has been executed and (ii) the Permitted Accounts have been established.
- (c) Appointment of an entity or individual to provide fiscal agent services, as approved by MCC, until such time as the Government provides to MCC a true and complete

copy of a Fiscal Agent Agreement, duly executed and in full force and effect, and the fiscal agent engaged thereby is mobilized.

(d) Appointment of an entity or individual to provide procurement agent services, as approved by MCC, until such time as the Government provides to MCC a true and complete copy of the Procurement Agent Agreement, duly executed and in full force and effect, and the procurement agent engaged thereby is mobilized.

(e) MCC is satisfied, in its sole discretion, that (i) the activities being funded with such CFF Disbursement are necessary, advisable or otherwise consistent with the goal of facilitating the implementation of this Compact and shall not violate any applicable law or regulation; (ii) no material default or breach of any covenant, obligation, or responsibility by the Government, MCA-Timor-Leste, or any Government entity has occurred and is continuing under this Compact or any Supplemental Agreement; (iii) there has been no violation of, and the use of requested funds for the purposes requested shall not violate, the limitations on use or treatment of MCC Funding set forth in Section 2.7 of this Compact or in any applicable law or regulation; (iv) any Taxes paid with MCC Funding through the date 90 days prior to the start of the applicable Disbursement Period have been reimbursed by the Government in full in accordance with Section 2.8(c) of this Compact; and (v) the Government has satisfied all of its payment obligations, including any insurance, indemnification, tax payments, or other obligations, and contributed all resources required from it, under this Compact and any Supplemental Agreement.

(f) For any CFF Disbursement occurring after this Compact has entered into force in accordance with Article 7: MCC is satisfied, in its sole discretion, that (i) MCC has received copies of any reports due from any technical consultants (including environmental auditors engaged by MCA-Timor-Leste) for any Activity since the previous Disbursement Request, and all such reports are in form and substance satisfactory to MCC; (ii) the Implementation Plan Documents and Fiscal Accountability Plan are current and updated and are in form and substance satisfactory to MCC, and there has been progress satisfactory to MCC on the components of the Implementation Plan for any relevant Projects or Activities related to such CFF Disbursement; (iii) there has been progress satisfactory to MCC on the M&E Plan and Social and Gender Integration Plan for any relevant Projects or Activities and substantial compliance with the requirements of the M&E Plan and Social and Gender Integration Plan (including the targets set forth therein and any applicable reporting requirements set forth therein for the relevant Disbursement Period); (iv) there has been no material negative finding in any financial audit report delivered in accordance with this Compact and the Audit Plan for the prior two quarters (or such other period as the Audit Plan may require); (v) MCC does not have grounds for concluding that any matter certified to it in the related MCA Disbursement Certificate, the Fiscal Agent Disbursement Certificate, or the Procurement Agent Disbursement Certificate is not as certified; and (vi) if any of the officers or key staff of MCA-Timor-Leste have been removed or resigned and the position remains vacant, MCA-Timor-Leste is actively engaged in recruiting a replacement.

(g) MCC has not determined, in its sole discretion, that an act, omission, condition, or event has occurred that would be the basis for MCC to suspend or terminate, in whole or in part, this Compact or MCC Funding in accordance with Section 5.1 of this Compact.

ANNEX V
ADDITIONAL CONDITIONS PRECEDENT
TO ENTRY INTO FORCE

The following additional conditions must be met before this Compact enters into force:

- (a) MCA-Timor-Leste must have submitted to MCC evidence in form and substance satisfactory to MCC that MCA-Timor-Leste has secured, or the appropriate Government entity has secured and made available to MCA-Timor-Leste, land for the Wastewater Treatment Plant and the OSHG plant to be able to comply with the IFC Performance Standards, including the IFC Performance Standard on Land Acquisition and Involuntary Resettlement.

ANNEX VI DEFINITIONS

Activity has the meaning provided in Section B of Annex I.

Additional Representative has the meaning provided in Section 4.2.

ANAS has the meaning provided in Section B.1(a)(iv) of Annex I.

Annex has the meaning provided in Section 6.1.

Audit Guidelines has the meaning provided in Section 3.8(a).

Audit Plan has the meaning provided in Section 3.8(a).

Bank means the financial institution approved by MCC to hold MCA-Timor-Leste's Permitted Account.

Bank Agreement means an agreement, in form and substance satisfactory to MCC, between MCA-Timor-Leste and the Bank that sets forth the signatory authority, access rights, anti-money laundering and anti-terrorist financing provisions, and other terms related to MCA-Timor-Leste's Permitted Account.

Baseline has the meaning provided in Section 4.1.1 of Annex III.

Board of Directors has the meaning provided in Section C.1(d) of Annex I.

BTL has the meaning provided in Section B.1(a)(iv) of Annex I.

CBA has the meaning provided in Section 2.3.1 of Annex III.

CDF Agreement has the meaning provided in Section 3.2(b).

CFF Disbursement has the meaning provided in Annex IV.

CFF Disbursement Request means a Disbursement Request pertaining to CFF.

Compact has the meaning provided in the Preamble.

Compact Facilitation Funding or *CFF* has the meaning provided in Section 2.2(a).

Compact Goal has the meaning provided in Section 1.1.

Compact Records has the meaning provided in Section 3.7(a).

Compact Term has the meaning provided in Section 7.4.

Cost Recovery Plan has the meaning provided in Section B.1(d) of Annex I.

Covered Provider has the meaning provided in the Audit Guidelines.

Detailed Financial Plan means the financial plan developed and implemented by MCA-Timor-Leste for each quarter for the upcoming year and on an annual basis for each year of the remaining years of the Compact, in accordance with the Reporting Guidelines, setting forth funding requirements for the Program (including administrative costs) and for the Project, broken down to the sub-activity level (or lower, where appropriate), and projected both on a commitment and cash requirement basis.

Disbursement has the meaning provided in Section 2.4.

Disbursement Period means each quarter, or any other period of time as agreed between MCA-Timor-Leste and MCC, during which MCA-Timor-Leste submits to MCC a Disbursement Request for funding.

Disbursement Request means a request by MCA-Timor-Leste to MCC for Program Funding or CFF, respectively, submitted in accordance with the Reporting Guidelines.

DQRs has the meaning provided in Section 6 of Annex III.

ERR has the meaning provided in Section 2 of Annex III.

ESIA has the meaning provided in Section B.1(c) of Annex I.

ESMP has the meaning provided in Section B.1(c) of Annex I.

Evaluation Component has the meaning provided in Section 1 of Annex III.

Excess CFF Amount has the meaning provided in Section 2.2(d).

Fiscal Accountability Plan means the manual, to be developed and implemented by MCA-Timor-Leste (as approved by MCC) setting forth the principles, mechanisms and procedures that MCA-Timor-Leste shall use to ensure appropriate fiscal accountability for the use of MCC Funding.

Fiscal Agent has the meaning provided in Section C.3 of Annex I.

Fiscal Agent Agreement means an agreement between MCA-Timor-Leste and the Fiscal Agent, in form and substance satisfactory to MCC, that sets forth the roles and responsibilities of the Fiscal Agent and other appropriate terms and conditions.

Fiscal Agent Disbursement Certificate means a certificate of the Fiscal Agent, substantially in the form provided by MCC.

Government has the meaning provided in the Preamble.

Grant has the meaning provided in Section 3.6(b).

ICT has the meaning provided in Section B.2(a) of Annex I.

IFC Performance Standards has the meaning provided in Section B.1(c) of Annex I.

Implementation Letters has the meaning provided in Section 3.5.

Implementation Plan refers to the collective nine Implementation Plan Documents, in form and substance approved by MCC, elaborating the framework for implementation of the Program.

Implementation Plan Document means each of nine documents further described in the PIA, including (i) a Work Plan, (ii) a Detailed Financial Plan, (iii) an Audit Plan and (iv) a Procurement Plan.

Implementing Entity has the meaning provided in Section C.2 of Annex I.

Implementing Entity Agreement has the meaning provided in Section C.2 of Annex I.

Indicator Tracking Table and **ITT** have the meaning provided in Section 4.1.7 of Annex III.

Indicators has the meaning provided in Section 4.1 of Annex III.

INFORDEPE has the meaning provided in Section B.2(g) of Annex I.

Initial CFF Disbursement means the first Disbursement relating to CFF.

Inspector General has the meaning provided in Section 3.7(c).

Instituto publico has the meaning provided in Section C.1(a) of Annex I.

Intellectual Property means all registered and unregistered trademarks, service marks, logos, names, trade names and all other trademark rights; all registered and unregistered copyrights; all patents, inventions, shop rights, know how, trade secrets, designs, drawings, art work, plans, prints, manuals, computer files, computer software, hard copy files, catalogues, specifications, and other proprietary technology and similar information; and all registrations for, and applications for registration of, any of the foregoing, that are financed, in whole or in part, using MCC Funding.

M&E has the meaning provided in Section 1 of Annex III.

M&E Plan has the meaning provided in Annex III.

MCA Act has the meaning provided in Section 2.2(a).

MCA-Timor-Leste has the meaning provided in Section 3.2(b).

MCC has the meaning provided in the Preamble.

MCC Environmental Guidelines has the meaning provided in Section 2.7(c).

MCC Funding has the meaning provided in Section 2.3.

MCC Gender Policy means the MCC Gender Policy (including any guidance documents issued in connection with such policy).

MCC M&E Policy has the meaning provided in Annex III.

MCC Program Closure Guidelines means the MCC Program Closure Guidelines (including any guidance documents issued in connection with such guidelines).

MCC Program Grant Guidelines has the meaning provided in Section 3.6(b).

MCC Program Procurement Guidelines has the meaning provided in Section 3.6(a).

MCC Website means the MCC website at www.mcc.gov.

Ministry-supported Positions has the meaning provided in Section B.2(a)(i)(A) of Annex I.

Monitoring Component has the meaning provided in Section 1 of Annex III.

Multi-Year Financial Plan Summary has the meaning provided in Annex II.

O&M has the meaning provided in Section B.1(a)(iv) of Annex I.

Operations Unit has the meaning provided in Section C.1(d) of Annex I.

Orgão Fiscal means the body or individual responsible for monitoring and ensuring MCA-Timor-Leste's compliance with legal, regulatory, and financial requirements, as well as the provisions of this Compact, the PIA, or any Supplemental Agreement.

OSHG has the meaning provided in Section B.1(a)(i) of Annex I.

Party and Parties have the meaning provided in the Preamble.

Periodic Reports means the reports and information that MCA-Timor-Leste shall periodically provide to MCC, in form and substance satisfactory to MCC, as required by the Reporting Guidelines.

Permitted Account has the meaning provided in Section 2.4.

Principal Representative has the meaning provided in Section 4.2.

Procurement Agent has the meaning provided in Section C.4 of Annex I.

Procurement Agent Agreement means the agreement that MCA-Timor-Leste shall enter into with the Procurement Agent, in form and substance satisfactory to MCC, that sets forth the roles and responsibilities of the Procurement Agent with respect to the conduct, monitoring and review of procurements and other appropriate terms and conditions.

Procurement Agent Disbursement Certificate means a certificate of the Procurement Agent, substantially in the form provided by MCC.

Procurement Plan means the plan prepared by MCA-Timor Leste for acquiring the goods, works, and consultant and non-consultant services needed to prepare and implement the Compact.

Program has the meaning provided in the recitals to this Compact.

Program Assets means any assets, goods or property (real, tangible or intangible) purchased or financed in whole or in part (directly or indirectly) by MCC Funding.

Program Funding has the meaning provided in Section 2.1.

Program Guidelines means collectively the Audit Guidelines, the MCC Environmental Guidelines, the MCC Policy for Accountable Entities and Implementation Structures, MCC Program Grant Guidelines, the MCC Program Procurement Guidelines, the Reporting Guidelines, the MCC M&E Policy, the MCC Cost Principles for Government Affiliates, the MCC Program Closure Guidelines, the MCC Gender Policy, the Gender and Social Integration Milestones and Operational Procedures, the MCC Guidelines for Economic and Beneficiary Analysis, the MCC Standards for Global Marking, the MCC Guidelines for Country Contributions, the MCC Counter-Trafficking in Persons Policy, the Policy on Preventing, Detecting and Remediating Fraud and Corruption in MCC Operations, and any other guidelines, policies or guidance papers relating to the administration of MCC-funded compact programs, in each case, as such may be posted from time to time on the MCC Website.

Program Implementation Agreement and PIA have the meaning provided in Section 3.1.

Project has the meaning provided in Section 1.2.

Project Objective has the meaning provided in Section 1.2.

Provider means (a) any entity of the Government that receives or uses MCC Funding or any other Program Asset in carrying out activities in furtherance of this Compact or (b) any third party that receives at least US\$50,000 in the aggregate of MCC Funding (other than as salary or compensation as an employee of an entity of the Government) during the Compact Term.

RAP has the meaning provided in Section B.1(c) of Annex I.

Reporting Guidelines means the MCC Guidance to Accountable Entities on the Quarterly Disbursement Request Package.

RPF has the meaning provided in Section B.1(c) of Annex I.

Social and Gender Integration Plan means the plan prepared in accordance with the MCC Gender Policy and the Gender and Social Integration Milestones and Operational Procedures, as further described in the Program Implementation Agreement.

Supplemental Agreement means any agreement between (a) the Government (or any Government affiliate, including MCA-Timor-Leste) and MCC (including, but not limited to, the PIA), or (b) MCC and/or the Government (or any Government affiliate, including MCA-Timor-Leste), on the one hand, and any third party, on the other hand, including any of the Providers, in each case, setting forth the details of any funding, implementing or other arrangements in furtherance of, and in compliance with, this Compact.

Target has the meaning provided in Section 4.1.2 of Annex III.

Taxes has the meaning provided in Section 2.8(a).

TIP has the meaning provided in Section B.1(d) of Annex I.

United States has the meaning provided in the Preamble.

United States Dollars or US\$ means the lawful currency of the United States of America.

USAID means the United States Agency for International Development.

Wastewater Treatment Plant has the meaning provided in Section B.1(a)(ii) of Annex I.

Work Plan means the plan, in form and substance satisfactory to MCC that MCA-Timor-Leste shall develop and implement for the overall administration of the Program.

WSD Contribution has the meaning provided in Section 2.6(a).

WSD Project has the meaning provided in Section B.1(a) of Annex I.

ANNEX 2. Project Classification Document



GABINETE DO PRESIDENTE

ke. Eze,

Ref^o : 36/GP-ANLA, I.P / MTA / X/2023

Dili, 02 October 2023

To : Ex^{mo}. Presidente BE'E Timor –Leste (BTL, E.P)
Mr. Carlos Peloi dos Reis, STP, M.S

① Scan no save
② Kopia ba DEF, DOCA
UP BUS no MCA.

Subject: Issued of project Category

Reference:

1. BE'E Timor –Leste (BTL, E.P) submission of PD to ANLA, I.P 18 July 2023
2. ANLA issued technical comment of PD, 16 August 2023
3. BE'E Timor –Leste (BTL, E.P), re-submission of PD to NAEL/ANLA, 15 September 2023
4. ANLA issued categorization, 02 October 2023.

Oct. 04, 2023

Referring to the Project document (PD) which was submitted to Autoridade Nacional de Licenciamento Ambiental, Instituto Público (ANLA, I.P.) dated 15 September 2023, ANLA through the Internal Committee reviewed and concluded the project as Category A. This classification reference based on the Decree Law Environmental License No.39/2022 first amendment of Decree Law 5/2011, article 4, and paragraph 1.a , “Category A” - includes projects that may potentially cause significant environmental impacts, and are subject to the procedure of Environmental Impact Assessment (EIA), this based on Impact Analysis and Environmental Management Plan (EMP) in accordance with the provisions in this law.” Therefore, the proponent must follow category A process, where proponent should conduct public consultation for the Term of reference (ToR) document after that submitted Term of reference (ToR) document to ANLA in soft copy and hard copy for review and approval.

Yours sincerely


António Lelo Taci, M. Sc.
President of ANLA, I.P.

Autoridade Nacional de Licenciamento Ambiental, Instituto Público

1890

GABINETE PRESIDENTE BTL, E.P.

Entrega Husi: _____

Simu Husi : Sobnye

Data : 04/10/2023

No Kontaktu : _____

STP



Vice – Primeiro Ministro
 Ministro do Túrismo e Ambiente
 IX GOVERNO CONSTITUCIONAL



Autoridade Nacional de
 Licenciamento Ambiental,
 Instituto Público (ANLA, I.P.)

Sec. Fzo;
 ① Scan no Save.
 ② Kopia bn DE I, ~~DE I~~ NCA
 UP SUR; DOCA.

GABINETE DO PRESIDENTE

Oct. 04, 2023

Ref N° : ~~361~~/GP-ANLA, I.P. / MTA / X / 2023

Dili, 02 October 2023

To : President BTL, E.P
 Mr. Carlos Peloi dos Reis, STP, M.S.

Subject: Technical Comment of the Project Document (PD)

Referring to the Project document (PD) that submitted to Autoridade Nacional de Licenciamento Ambiental (ANLA) dated 15 September 2023. Through Internal Committee for Environmental Impact Assessment (ICEIA) has reviewed the document, which the BE'E Timor –Leste (BTL, E.P) – Ministry of Public Works as the proponent that will construct Waste water Collection system, in urban area of Timor-Leste especially in Dili Municipality

All section of Project Document is noted, therefore the proponent no need to revise the Project Document.

For your information please see enclosure of technical comments on the next page.

If you have any questions at all, please contact Mr. Salvador S. Ximenes +670 78510589 or email infonael2019@gmail.com

Sincerely yours,

Antonio Lelo Taci
Antonio Lelo Taci, M.Sc
 Presidente

Autoridade Nacional de Licenciamento Ambiental, Instituto Publico

GABINETE PRESIDENTE BTL, E.P.	
Entrega Husi:	<i>Carlito</i>
Simu Husi :	<i>Solange</i>
Data :	<i>04 No/2023</i>
No Kontaktu :	
Assinatura :	<i>SFF</i>



Vice - Primeiro Ministro
Ministro do Turismo e Ambiente
IX GOVERNO CONSTITUCIONAL



Autoridade Nacional de
Licenciamento Ambiental,
Instituto Público (ANLA, I.P.)

KOMITE AVALLIASAUN IMPAKTU AMBIENTAL (KAIA)

Proponent	Be'e Timor Leste Empresa Publica (BTL, E.P)
Location of the project	City of Dili, post Administrative Vera Cruz, such as, Colmera, Vila Verde, Motel, Kampung Alor, and the village of administrative post of Dom Aleixo such as, Fatuhada, Bairro Pite, Manluhana, and Comoro.
Type of the project	Wastewater Collection system
Date of submission	15-09-2023

Evaluated by	Signature
1. Idalia de Jesus Sousa	
2. Antonio dos Santos	
3. Alice Joana	
4. Agostinho T. Carvalheira	
5. Salvador Soares Ximenes	
6. Emmanuel Carceres	
7. Date of Evaluation :	16-29 OF September 2023

Technical comments for Project Document (PD)

Num	Pages	Sections	Sub-Sections	Ratings	Comments
1.	1	Details of the proponent	This information should also contain the principal contact person for the proponent (name, title, phone number and email address)	A	Noted
2.		Location and scale of the project	a. Maps and plans of the location of the project, showing		Noted

			<p>v. National parks, protected areas, community managed reserves or grounds, habitats of species that require special protection (i.e. threatened species) or other environmentally sensitive areas</p> <p>vi. Fisheries and fishing areas</p> <p>vii. Hunting areas</p>		A	Noted
			d. Photographs of the proposed project location, where possible		A	Noted
			e. Description of the legal ownership of the land to be used for the proposed project, including any title, deed or documentation, or lease or other authorization.		A	Noted
3.		District and Villages	<p>Provide the name of the district in which the proposed project will be located. Where the project may have any impact on another district, provide details of those likely affected districts.</p> <p>Provide the name of the village or villages in which the proposed project will be located. Where the project may have any impact on another village, provide details of those likely affected villages.</p>		A	Noted
4.		Plans and technical			A	Noted

5.		drawing Feasibility studies of the proposed project	This section should include a summary of the technical studies on the feasibility of the proposed project. The studies themselves may be included as annexes to this Document. Where the feasibility studies are not included, they shall be made available to the Environmental Authority upon request at any time during the environmental assessment process.		A	Noted
6.		Land and water use	Describe any land uses or water uses that may be affected by the proposed project		A	Noted
7		Environmental Impact	A. Biophysical impacts		A	Noted
			a. a description of the physical and biological components,		A	Noted
			b. a description of the physical and biological components that may be negatively affected by the proposed project.		A	Noted
			c. whether there are likely to be any cross-border impacts and, if so, the nature and extent of those likely impacts		A	Noted
			d. whether there are likely to be any global impacts, including climate change impacts, and, if so, the nature and extent of those likely impacts		A	Noted

			<p>b. An overview of key comments and concerns expressed to date by stakeholders and any responses that have been provided.</p> <p>c. An overview of any ongoing or proposed stakeholder consultation activities.</p> <p>d. A description of any consultations that have occurred with other jurisdictions that have environmental assessment or regulatory decisions to make with respect to the project.</p>		A	Noted
9.		<p>Consultation with other authorities</p>	<p>If there has been any consultation with any other authority, this should be summarized here. This section should also indicate any permissions, permits or licenses that the project proponent will have to obtain from any other authority.</p>		A	Noted
10.		<p>The proposal for classification of the proposed project</p>	<p>Taking account of the information provided, and the definitions of the three categories of project set out in Article 4 of the ELL and Annexes 1 and 2 of that law, the proponent shall make a proposal for the classification of the proposed project with reasons for the proposed category.</p>		A	Noted
11.		<p>Executive summary</p>	<p>The Executive Summary shall summarize the information</p>		A	Noted

			provided in the above sections.			
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Rating scale:

- A – Excellent** : Overall good, no need to revise;
- B – Good** : Overall good and satisfactory, very little mistake;
- C – Sufficient** : Satisfactory but need to complete some part;
- D – Not good** : Some part are incomplete, not satisfied;
- E – Poor** : All are incomplete and not satisfied;
- N/A** : The review section is not applicable/incomplete

Annex 3: Stakeholder Engagement Plan



MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA



TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

STAKEHOLDER ENGAGEMENT PLAN



March 2024

MCA – TIMOR LESTE

TIMOR-LESTE WATER, SANITATION AND DRAINAGE PROJECT

STAKEHOLDER ENGAGEMENT PLAN

REF: 20960.240109.NOD.REP.007

**Nicholas O’Dwyer Ltd
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March 2024

PROJECT NO. Project No.					
Revision	Reason for Revision	Prepared by	Reviewed by	Approved by	Issue Date
-	First Issue	Britta Lammers	Liza Van Der Merwe	Carol Young	22/01/2024
A	Updated for additional meetings	Britta Lammers	M. Hickey	Terry O’Flanagan	05/03/2024
B					
C					
D					

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LIST OF ACRONYMS AND ABBREVIATION

ACbit	Associaçaon Chega Ba Ita
AJAR	Asia Justice & Rights
ANLA	National Authority for Environmental Licensing
BTL	Bee Timor–Leste, Empresa Publica
CDT-TL	Compact Development Team
CED	Compact End Date
CODIVA	Coalition on Diversity and Action
DD	Due Diligence
DFAT	Australian Government’s Department of Foreign Affairs and Trade
EIB	European Investment Bank
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
ESIA	Environmental and Social Impact Assessments
ESS	Environmental and Social Standards
Fokupers	Forum Komunikaun Ba Feto Timor Loro Sa'e
FS	Feasibility Study
GoTL	Government of Timor–Leste
GSI	Gender and Social Inclusion
IFC	International Finance Corporation
LGBTQIA+	lesbian, gay, bisexual, transgender, queer, intersex, asexual and others
MCA-TL	Millennium Challenge Account – Timor–Leste
MCC	Millennium Challenge Corporation
NGO	Non–Governmental Organizations
NOD	Nicholas O'Dwyer
OSHG	Onsite Sodium hypochlorite generation
PAP	Project Affected Person
PEA	Project Executing Agency
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEFOPE	Secretariat of State for Vocational Training and Employment
SEP	Stakeholder Engagement Plan
TIP	Trafficking in Persons
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
WASH	Water, sanitation, and hygiene
WB	World Bank
WSD	Water, Sanitation and Drainage
WWTP	Wastewater Treatment Plant

1 INTRODUCTION

1.1 Overview

This document presents the Stakeholder Engagement Plan (SEP) for the Water, Sanitation and Drainage (WSD) Project in Timor–Leste. The WSD project is part of a Compact programme developed between the United States of America, acting through the Millennium Challenge Corporation (MCC), and the Government of Timor–Leste (GoTL). The main objective of the compact program is to improve public health by reducing the incidence of waterborne disease largely caused by the poor sanitary conditions in Timor–Leste. This will be achieved by providing access to a wastewater collection, treatment and disposal system to an estimate of 300,909 inhabitants by 2036. The area covered by the WSD Project includes Area 106 (population of 106,165 inhabitants) and the priority extension areas of: Hallibur, Lorio, Moris Ba Dame, Terra Santa, Golgota, and 12 de Outubro.

Nicholas O'Dwyer (NOD) was engaged to provide consulting services for the preparation of designs, tender documents, Environmental and Social Impact Assessments (ESIAs) and Resettlement Action Plans (RAPs) for the WSD project.

As part of the Compact Development, MCC and GoTL created Compact Development Team Timor–Leste (CDT–TL) to represent GoTL in the initial phase of the WSD project. Since that time, the Millennium Challenge Account–Timor–Leste (MCA–TL) has been established. MCA–TL is an agency of the GoTL and is responsible for administration, execution, and management of the MCC Compact.

The project proponent is Bee Timor–Leste, Empresa Publica (BTL), which will assume responsibility for the facilities constructed under the Compact. For the duration from the present to Compact End Date (CED), MCA–TL, it's designated Consultants, and BTL share responsibility for Stakeholder Engagement, but will be functionally led by MCA–TL's Consultant, Nicholas O'Dwyer (NOD) for the duration of NOD's contract. After the end of the five–year Compact when MCA–TL will dissolve, we expect BTL will assume responsibility for any ongoing Stakeholder Engagement, including maintenance and management of the Grievance Redress Mechanism (GRM).

MCA–TL, through it's overall responsibility for implementation for the Compact including the WSD elements of Compact workflow, will coordinate communications among the GoTL and all consultants and contractors and stakeholders within the Compact. BTL will assume responsibility for operation and maintenance of the built facilities after compact implementation.

For the purposes of this SEP, stakeholders are defined as individuals, groups, or organizations who have an interest in the Project, or who may be affected by it, directly or indirectly, positively, or negatively. According to International Finance Corporation (IFC) Performance Standard 1 (IFC, 2012), *“stakeholder engagement is the basis for building strong, constructive, and responsive relationships that are essential for the successful management of a project's environmental and social impact”*. The discussion of key project related issues, benefits, concerns, with local communities, their representatives, government and non–governmental organizations (NGOs) is a key step during project planning and feasibility stage, building relationships based on trust. The ESIA process and the RAP, in looking ahead to detailed design and construction, anticipate communication with all stakeholders, providing information on the Project, its impacts and the proposed measures, to obtain input in form of concerns and suggestions to be taken into consideration in decision making processes.

This SEP outlines how stakeholders were previously and will be engaged during the planning and construction stage of the WSD Project in Timor–Leste. Further, it provides information and guidance to BTL for managing and facilitating future stakeholder engagements during operation. It presents the principles underlying effective engagement, based on internationally recognized standards.

The document draws on insights from stakeholder engagement by Tetra Tech (February 2019 to April 2022^a) augmented by further engagement by NOD in November 2023 during project initiation.

1.2 Objectives and Scope of Stakeholder Engagement

The SEP is a tool to plan, record, and manage engagement with governmental and local Project stakeholders through information disclosure, consultation and participation in decision making processes. It will guide the MCA–TL and BTL to define an effective risk mitigation strategy, undertaking meaningful engagement with stakeholders during Project design, implementation and operation.

Key objectives of stakeholder engagement:

- Identify key stakeholders that are interested and affected, and/or able to influence the Project and its activities;
- Assess stakeholders to determine their interest and possible influence on the Project to inform engagement planning and implementation;
- Gather feedback and input from stakeholders on the Project to inform the locally required Environmental Impact Statement (EIS), the Environmental Management Plan (EMP) Reports and the final ESIA report;
- Build good relationships and trust between MCA–TL, Consultants, Contractors and stakeholders;
- Actively manage stakeholder expectations to avoid the creation or development of unrealistic expectations about potential Project benefits;
- Ensure the timely, transparent and accurate disclosure of Project related information;
- Establish a process for informed consultation and participation;
- Provide a simple and accessible communications mechanism for receiving, documenting and addressing any questions, comments or project related grievances in a timely manner.

The stakeholder engagement and consultation aim to open a two-way flow of information and dialogue between MCA–TL, Consultants, Contractors, stakeholders and the public.

The construction activities for the different components of the WSD Project include:

Phase 1

Wastewater treatment facility: Construction of a new 51,044 m³/day Wastewater Treatment Plant (WWTP). This is a discrete site that lies adjacent to the east side of the mouth of the Comoro River. The facility will generate treated liquid effluent and sludge. Treated effluent will be discharged to the ocean through a submarine outfall. Sludge will be trucked to and disposed at the Tibar landfill by GoTL.

Ocean outfall: On the north edge of the site, an ocean outfall will be constructed which will discharge treated wastewater to the ocean. The outfall will extend outward from the shore for approximately 430 meters along the ocean bottom at a maximum depth of approximately 60 meters.

Onsite Sodium hypochlorite generation facility (OSHG): Sodium hypochlorite is needed as a disinfection agent both at the WWTP proposed under the WSD Project and the water supply project, which is an activity separate from the WSD Project.

Phase 2

^a TetraTech, 2022. *Draft Environmental and Social Impact Assessment. Consulting Services for Preparation of the Feasibility Project, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for Water Disinfection, Sanitation and Drainage Program, Timor–Leste Compact.* Prepared for Millennium Challenge Corporation. Order No: 95332420F0044.

Pump stations: At least six pump stations will be designed and constructed to receive raw sewage and direct it to force mains (pressurized pipes) that feed to the WWTP. Pump stations will be sited within the collection network and will include pumphouses and associated facilities on small parcels of land owned by GoTL.

Conventional sewer: Conventional systems include a combination of gravity and force mains to move raw waste WWTP. This consists of two parts: 1) design and construction of a conventional wastewater collection system including approximately 130 km of sewer pipeline in mostly paved public roads with force main, designated as Area 106 and represents the core service area of the collection system, and 2) design of an additional conventional collection system zone in three expansion areas (roughly an additional 30% of the city) that may or may not be constructed under the MCC Compact, but may be constructed with other donor funds.

Simplified gravity sewer: Design and construction of simplified sewer collection system including approximately 60 km of gravity sewer pipeline. This design solution will be located in areas of informal housing without public road access.

Building connections and facilities: The WSD Project intends to provide all house connections in Area 106 and house connections to conventional sewers in priority expansion areas. In addition to household connections, the WSD project plans to provide working toilets at properties that do not have such facilities.

The *WWTP, OSHG facility, the pump stations* and the ocean outfall will be designed to minimize the footprint and therefore the physical displacement. The sewage system will be underground, utilizing roads and footpaths as much as possible to avoid any physical resettlement.

Associated Drainage: Construction of in-street box culverts within the wastewater collection area at specific locations where proposed drainage lines cross the excavation corridor of the wastewater collection lines associated with the sanitation infrastructure development. This is required to prevent conflicts between the sewer lines and stormwater drainage channels at some specific locations.

1.3 Structure of the Stakeholder Engagement Plan

This SEP is organized as follows:

- **Section 2, Regulatory Context** outlines international standards (IFC and MCC) and the national legislative context that will govern how stakeholder engagement.
- **Section 3, Project Stakeholders** provides an overview of project interested and affected parties, including government ministries, parastatals, non-governmental organizations (NGOs) and community-based organizations (CBOs), the business sector, the health and educational sector, as well as individuals and groups who may be interested and affected.
- **Section 4, Stakeholder Engagement Process** sets out the Project stakeholders engagement process.
- **Section 5, Grievance Mechanism** presents a high-level overview of the grievance mechanism that will be developed for the Project.
- **Section 6, Monitoring and Reporting** presents recommendations for periodic reports that describe progress made relating to the Project's management plans on issues that involve ongoing risk to or impacts on affected communities and on issues that the consultation process or grievance mechanism have identified.
- **Section 7, SEP Review** present requirements for SEP revision
- **Section 8, References** provides a list of references cited in this SEP.

2 LEGAL AND REGULATORY FRAMEWORK

The SEP has been developed according to international, national and MCC/MCA-TL principles and good practice standards. IFC Performance Standard 1 is taken as the benchmark for international best practice in stakeholder engagement, as required by MCC Environmental Guidelines.

2.1 MCC and IFC Performance Standards

The MCC Environmental Guidelines require that compact projects are developed and implemented in ways to conform to the IFC Performance Standards on Environmental and Social Sustainability. IFC Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts defines standards guiding the disclosure of project information, the identification and engagement of stakeholders, and on how to allow for meaningful opportunities to participate and express views, and document the results of consultations. Consultation is also an integrated part of other performance standards as IFC PS 5: Land Acquisition and Involuntary Resettlement.

IFC Performance Standard 1 and its associated Guidance Note (IFC, 2012) detail recommendations for assessing and managing environmental and social risks. Stakeholder engagement is identified as a key aspect of the risk assessment and management process. IFC identifies five key elements of stakeholder engagement. These are:

- **Stakeholder analysis and engagement planning:**
 - Identify stakeholders likely to be interested and affected by the project.
 - Plan engagement activities according to stakeholders' respective needs and expectations in relation to the project.
 - Verify (and triangulate) that community representatives (e.g. *Suco*^b and *Aldeia*^c Chiefs) represent the views of affected communities and can be relied upon to truthfully communicate the views of constituents,
 - Ensure active engagement with marginalized or vulnerable groups and individuals by facilitating their participation through additional measures such as providing for special engagement opportunities to ensure meaningful engagement with young people, women, the elderly, the chronically ill or people who speak a minority language.
- **Disclosure of information:**
 - Provide ongoing and regular project planning and progress updates with stakeholders, including structured and *ad hoc* reporting to local government structures, NGOs, CBO's, religious groups, project affected persons and others, to share.
- **Consultation:**
 - Provide affected communities and other stakeholders with opportunities to express their views on project risks, impacts and mitigation measures for the Client's consideration and response.
 - Allow for two-way consultation from project inception to close-out to enable meaningful and informed conversations between MCA-TL and the affected communities regarding identification and management of environmental and social risks and impacts.
 - Ensure that the extent and degree of engagement is commensurate with expected project risks and impacts, and the concerns raised by affected communities.
 - Ensure that information sharing and consultation is carried out in a culturally appropriate local language(s) and format for it to be accessible and understandable to stakeholders and affected communities especially.
 - Ensure all engagements are documented, including photographs.
- **Grievance management mechanism:**
 - Establish a formal, yet simple and accessible communication mechanism and process to enable stakeholders and the public to communicate with the project authority and their representatives, through raising questions, concerns and possible grievances in a structured way.

^b Suco – roughly translated as “village”, consisting of “aldeias”.

^c Aldeia – roughly translated as “community”.

- Ensure that all communications, particularly grievances are captured in writing, and referred to the relevant authority to be addressed in a timely, consistent, and culturally appropriate manner, without impeding stakeholders' access to local judicial or administrative processes.
- Ensure that stakeholders are informed on how and where to use the grievance mechanism throughout the project planning and implementation phases.
- **Ongoing reporting to 'Affected Communities':**
 - MCA–TL with the support of their consultants are responsible to provide periodic progress reports specifically relating to the project's environmental and social management plans, ongoing risks, grievances or impacts on affected communities as identified during the consultation process. The reporting frequency should be proportionate to the interest and concerns of stakeholders, but not less than annually.

2.2 Legal and Policy Context

The implementation and operations of the proposed WSD Project, will be governed by the environmental impact assessment and management context of Timor–Leste. Figure 1 shows the key legal components of the process.



Figure 1. Key legal components of the process

The **WSD Project** is classified as a **Category A project** in terms of Annex I: Table of Classification of Category A Projects of the Decree law 5/2011 Chapter VII: Sanitation Sector as the proposed WWTP will service $\geq 10,000$ families / eq.

Category A projects may potentially cause significant environmental impacts and therefore require an EIS and EMP, therefore, the proponent will prepare a (Project) Scoping and Terms of Reference for consideration and guidance by ANLA on how to proceed with the environmental assessment process. Figure 2 shows the ANLA process.



Figure 2. ANLA environmental Licensing process

The environmental assessment process requires a regulated public consultation process spanning its various phases. This is captured in Ministerial Decision No. 47/2017 on the **Regulation on procedures for Public Consultation and Requirements during the process of environmental assessment.**

The key requirements are:

- Chapter II, **Announcement of the Classification of the Proposed Project**
 - Notification of the applicant of ANLA’s opinion on the classification of the proposed project and publication thereof by way of a site notice within (15 working days)
- Chapter III, **Public Consultation on the Terms of Reference**
 - The project proponent is responsible to issue a public notice (in both official languages of East Timor) on submission of the Scoping and Terms of Reference to ANLA. A copy of which must be submitted to ANLA as proof. Failing to do so will render the scoping phase invalid.
 - Submission of questions and comments by the public and interested and affected parties to ANLA in response to the public notice on the Scoping and Terms of Reference.
- Chapter IV: **Public Consultation during the EIS and EMP study phase**

- Public consultation during the study phase aims at providing and gathering project information from the public. This includes inviting comments on the draft EIS and EMP to incorporate it into the documents before submission to the Client and the environmental authority.
- Public consultation must use appropriate engagement mechanisms and follow local communication and engagement protocols to facilitate engagement with marginalized and vulnerable persons and groups, in particular female headed households (HH), the elderly and disabled, the unemployed, youth and child headed HH amongst others.
- Record keeping of all public consultations including names, contact details and discussion content regarding the environment, socio-economic, land and cultural issues as well as any other comments.
- Distribution for comment of the draft EIS and EMP to the public before document submission to ANLA. This may require providing the EIS, EMP and a Non-Technical Summary (NTS) thereof in Tetum and possibly a second language, if required. Documents to be made available free of charge at the project proponent's head office and on their website, at an accessible public venue such as a church hall, community centre or school, and at project affected *Suco* offices.
- Announcement via radio and television and advertising of public consultation meetings shall be done in at least both official languages, at least two weeks before the consultation will take place, and at least 7 days after the documents have been made available to the public. Suitable meeting venues must be agreed with *Suco* and or *Aldeia* Chiefs.
- Submission of written comments must happen no less than 2 weeks after public consultation meetings or at least 24 days after publication of the Public Consultation notice.
- All costs associated with the public consultation events must be borne by the project proponent, and with due respect for local traditions and customs, If necessary, this should include providing appropriate interpreters.
- The EIS and EMP shall reflect the opinions and comments received from the public. jointly with the applicant's responses.
- **Chapter V: Public Consultation on the EIS and EMP for Category A Projects**
 - After submission of the EIS and EMP to ANLA, the Evaluation Commission shall make it available to the public for comment.
 - Documents shall be made available free of charge at ANLA's head and district offices and on their website, at an accessible public venue for 24 days or until the deadline for public consultation expires.
 - The Evaluation Commission shall issue a notice for the public to advertise the public consultation process. The notice will be posted on ANLA's in both official languages of East Timor and other languages if considered necessary.
 - If the Evaluation Commission considers it necessary, further public consultations may be held to discuss the EIS and EMP. The cost of which will be for the account of the project proponent. Such meetings will be conducted within 14 days of the public consultation period to allow members of the public enough time to submit written comments to the Environmental Authority in writing.
 - Written comments from the public submitted to ANLA, will be submitted to the Evaluation Commission, whose responsibility will be to provide an account thereof in their final technical report and technical opinion on the proposed project.

Important to note is that ANLA, where duly justified, has the authority to extend regulated response timeframes from them to the proponent, by informing the proponent in writing of their reasons for doing so.

3 PROJECT STAKEHOLDERS

Stakeholder identification and analysis aims to help understand the likely relationship between stakeholders and the project and helps to identify appropriate engagement methods for each stakeholder. Stakeholder identification is an ongoing process, which requires regular review as the project progresses.

The main stakeholder groups identified comprise Timor–Leste Government agencies, municipal administration, households and businesses, civil society organizations, multilateral aid agencies, and foreign government agencies.

Stakeholder engagement has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns through key informant interviews and focus group discussions.

The information in this section is based on this stakeholder engagement planning and stakeholder engagement activities conducted to date.

3.1 Stakeholder identification

Stakeholder mapping/identification was conducted to identify key contacts and roles for organizations active in the area (e.g., regulatory institutions at the national, regional and district level), leaders or representatives within affected *Sucos*, who would serve as contact persons during the project lifecycle.

The first step of the stakeholder mapping was a review of existing documents and publicly available information about the project prior to the site visit. The mapping exercise was refined during the field activities in November 2023. However, the engagement for the Project started in February 2020 and extended until April 2022 (with an extended period of limited engagement due to COVID–19). Further engagement activities took place November 2023. Engagement activities included kick–off meetings, key informant interviews, meetings with Project representatives, i.e., MCC, CDT–TL/MCA–TL, MCC Due Diligence Consultant and various stakeholders from government agencies (ANLA, BTL, National Directorate of Land and Property).

Broad stakeholder groups have been identified, based on likely common interests in Timor–Leste’s sanitation and water issues. Table 1 lists these groups along with a brief description of each.

Table 1: Stakeholder groups

Stakeholder Group		Description	Connection to the Project
Timor-Leste agencies	Government	Country-wide government ministries and agencies. It includes Bee Timor–Leste (BTL), Secretary of Land and Registry, the National Authority for Water and Sanitation (ANAS), National Authority for Environmental Licensing (ANLA), Ministry of Public Works, and the Secretariat of State for Vocational Training and Employment (SEFOPE), etc. Some of the previously existing Authorities will need to be verified due to the political change and the possible elimination, like ANAS and others will need to be added.	<ul style="list-style-type: none"> Of primary political importance to the Project Giving recommendations and guidance on Timor–Leste regulations, procedures and requirements; Granting permits and other approvals for the Project, and monitoring and enforcing compliance with local law throughout all stages of the Project life-cycle

Stakeholder Group	Description	Connection to the Project
Municipal administration, Households and businesses	This group includes Municipality, Suco and Aldea authorities. This includes specifically the Dili Municipality Authority, Ermera Municipality Authority, Municipal Planning Agency for Dili Municipality, and Dili Municipality Water and Sanitation Services.	<ul style="list-style-type: none"> • They also hold important baseline data; • They will support the Consultant in the public consultation and participation process; • They will be particularly interested in the environmental and social aspects of the Project, especially its potential impacts on livelihood improvement through the reduction disease burden caused by contaminated water sources as well as the negative impacts mainly occurring during construction.
Affected Sucos, Households and businesses	<ul style="list-style-type: none"> • Sucos, Aldeias in the project area – Suco chiefs and Aldea chiefs acting as representatives of their Communities. • Community based organizations 	<ul style="list-style-type: none"> • Households and businesses that may be directly affected by the Project • Households and businesses that may have expectations regarding development and benefits in their local area • Local organizations representing key interest groups within the Suco • Vulnerable groups that may be disproportionately affected by the Project; their social status may make them harder to engage • Communities/Sucos have limited influence over the Project, but they have the potential to cause delays and disruption, as well as to provide some limited labour and services to it.
Civil society	This group include NGOs (both international and national) involved in the water, sanitation, and hygiene (commonly referred to as 'WASH') sector in Timor–Leste and other NGOs that may have an interest in the Project (e.g., NGOs that support development for women and vulnerable persons as well as Conservation International).	<ul style="list-style-type: none"> • Some NGOs are likely to have a direct interest in the Project, and its social and environmental impacts; they may also have useful data and insight into the Project area and affected Sucos and may be able to become partners to the Project in areas of common interest e.g., educational support
Bilateral and multilateral aid agencies as well as foreign government agencies	International aid organizations, such as UNICEF, the Asian Development Bank and the World Bank as well as Australian Government's Department of Foreign Affairs and Trade, Japanese International Cooperation Agency and USAID, European Investment Bank	<ul style="list-style-type: none"> • They sponsor or implement programs in Timor–Leste. • Special attention to be given to ongoing or planned water and sanitation infrastructure investment project throughout Timor–Leste for coordination of activities

3.2 Stakeholder Registry and Analysis

Based on the groups of stakeholders identified, the preliminary list of Project Stakeholders is mapped out. A preliminary stakeholder registry listing all stakeholders identified to date (December 2023), is provided in Annex A. The database will need to be periodically updated by MCA–TL with support of the Consultants throughout the Project lifetime.

The registry also presents an analysis of the stakeholder, in terms of stakeholder role in the Project, interest and influence, and engagement strategy (e.g., partnership, information gathering, information giving, consultation and dialogue).

The influence (high or low) represents the stakeholder's capacity to influence the Project. Influence (high or low) may derive from their ability to affect decision-making and approvals for the Project, their ability to influence others, their access to information and their role as a key player or partner in the Project. The interest measures the significance of the Project to the stakeholder either because of the Project's direct impact on them or because of a political, financial, social, cultural, scientific or technical interest in the Project.

4 STAKEHOLDER ENGAGEMENT PROGRAM

This section summarizing engagement undertaken for up to now and the issues raised, and then details the engagement to be undertaken during the stages of Project development and implementation.

Further consultations are required and will be planned by NOD for the EIS/EMP and RAP preparation in the next 18 months.

Once the Project design phase and consultations supporting the Detailed Design, the EIS/EMP/RAP and ESIA preparation is complete, the proposed program will assist the MCA-TL, future consultants and BTL managing and facilitating future stakeholder engagements through the various stages of the Project's life cycle.

4.1 Engagement Approach

Deciding the most appropriate approach to engagement for each stakeholder is based on the following considerations:

- The extent to which the stakeholder can influence the Project
- The extent to which the stakeholder can be affected by the Project (positively or negatively)
- The type of stakeholder being engaged as well as the purpose of engagement
- The extent on how many stakeholders (people) need to be reached.

The level of influence of the stakeholder on the project and the extent of impact of the Project on the stakeholder should be considered when deciding the frequency and intensity of engagement. As influence or impact increase, engagement with that stakeholder group should intensify and deepen in terms of the frequency and the intensity of the engagement method used.

Examples of different engagement methods are:

- Correspondence by phone / email / text / instant messaging
- Print media, radio announcements and social media
- One-on-one interviews
- Formal meetings, focus group meetings and public meetings
- Surveys
- Workshops

4.2 Previous consultation

Stakeholder engagement for the Project has involved informing key stakeholders of the proposed project and baseline data collection and initial identification of potential issues or concerns (February 2020 to March 2022). As part of this stakeholder engagement the MCC ESIA consultant:

- Provided stakeholders with preliminary information regarding the potential project.
- Collected data to support the project deliverables (e.g., Feasibility Study (FS), Preliminary Assessment of Environmental and Social (including gender) Impacts, draft ESIA, Resettlement

Policy Framework (RPF), Social and Gender Assessment) through key informant interviews and focus group discussions.

- Identified and examined existing and potential issues from the perspective of key stakeholders.

The engagement for the Project commenced in February 2020, with kick-off meetings and key informant interviews in Dili. The consultation activities included meetings with the MCC, CDT-TL and Tetra Tech with various stakeholders from government agencies, bilateral and multilateral aid agencies, and civil society. A list of the engagement undertaken is provided in Table 2. The engagement program was put on hold in March 2020 due to the COVID-19 pandemic and recommenced in March 2022.

Table 2: Stakeholder engagement to date (including Kick off meeting period November 2023)

Date	Stakeholder
17-Feb-20	Ministry of Public Works
18-Feb-20	Ministry of Public Works and Housing, National Directorate of Basic Sanitation
18-Feb-20	National Directorate of Water & Sanitation, Japanese International Cooperation Agency
18-Feb-20	Ministry of Public Works and Housing
19-Feb-20	National Authority for Environmental Licensing (ANLA)
20-Feb-20	National Directorate of Land and Property
20-Feb-20	Conservation International
21-Feb-20	National Directorate for Basic Sanitation
21-Feb-20	Inter-ministerial Commission on Expropriation and presentation by Aguas de Portugal
21-Feb-20	National Directorate of Roads, Bridges and Flood Control
24-Feb-20	Aguas de Portugal, Ministry of Public Works and Housing
25-Feb-20	National Directorate of Roads, Bridges and Flood Control
25-Feb-20	Sistema Nacional de Cadastro
25-Feb-20	Timor-Leste's Business Registration and Verification Service
25-Feb-20	Dili's Chefe of Suco and village
27-Feb-20	Aguas de Portugal
27-Feb-20	National Directorate for Basic Sanitation
28-Feb-20	Port of Dili
28-Feb-20	Rede ba Rai Team
28-Feb-20	Pertamina
28-Feb-20	National Development Agency
02-Mar-20	Ministry of Agriculture and Fisheries
03-Mar-20	Sistema Nacional de Cadastro
04-Mar-20	National Directorate of Land and Property
09-Mar-20	Timor-Leste's Business Registration and Verification Service
11-Mar-20	Dili Municipality
11-Mar-20	Suco chiefs
1-Mar-22	Asian Development Bank
3-Mar-22	UNICEF
3-Mar-22	Suco Chief Bebonuk focus group
4-Mar-22	Suco Chief Vila Verde focus group
4-Mar-22	Suco Chief Comoro focus group

Date	Stakeholder
4-Mar-22	Female informal housing area representatives from Suco Vila Verde focus group
4-Mar-22	Female formal housing area representatives from Suco Comoro focus group
4-Mar-22	WaterAid
7 to 18-Mar-22	Female formal business representatives
9-Mar-22	Department of Foreign Affairs and Trade (Australia)
11-Mar-22	Youth representatives focus group
15-Mar-22	Female informal business representatives
24-Mar-22	CODIVA LGBTQIA+ community NGO
30-Mar-22	National Directorate of Housing under the Ministry of Public Works
7-Nov-23	Kick-Off Meeting MCC, MCC DD Consultant, MCA-TL, BTL, Minister of Finance
8-Nov-23	MCC, MCC DD Consultant, MCA-TL, BTL
10-Nov-23	National Authority for Environmental Licensing (ANLA)
13-Nov-23	EnviPro as Local consultant to support with local understanding, culture challenges, etc.
14-Nov-23	MCA-TL, BTL, EnviPro, NOD
15-Nov-23	National Directorate of Land and Property, Director of Cadastral Office
15-Nov-23	Gender Based NGOs (ACbit & Fokupers)
15-Nov-23	Gender Based NGOs (AJAR)
15-Nov-23	National Authority for Environmental Licensing (ANLA), EnviPro, NOD
15-Nov-23	Institute for Statistics
15-Nov-23	Suco Chief Comoro
16-Nov-23	Conservation International
29-Jan-24	AORTIL
30-Jan-24	EDTL
23-Feb-24	Suco Chiefs of Comoro, Vila Verde, Madohi, Motael, Bairo-Pite, Fatu-Hada, Maleuna
27-Feb-24	ANLA
27-Feb-24	Forestry Directorate
04-Mar-24	ANLA
04-Mar-24	National Directorate of Land and Property
05-Mar-24	BTL

As part of the community stakeholder engagement conducted in 2022, there were 69 people who were spoken to in the Suco focus group discussions and business key informant interviews. Of the total, 46% identified as female and 54% male. Of the 69 informants that provided input to this report, their ages ranged from 22 to 73 years of age, and they spoke a range of languages at home including Tetum, Portuguese, Indonesian, Japanese, Mandarin and mother tongues such as Makasae. The informants' household size ranged from 2 to 12 people, with only 7 women (10% of the informants) identifying as the head of their household.

The following Table provides a summary of the main concerns and comments gathered between February 2020 and March 2022.

Table 3: Summary of Stakeholder issues between February 2020 and March 2022

Women and vulnerable groups	Suco chief focus groups	NGO key informants
Water access – How do you access drinking water supplies for your home?		
<p>The majority use bore water (SANYO) to the house and for households that can afford it they buy drinking water. One household reported that they share a bore with three neighbours and fill containers to carry to their house. Some households in the informal areas carry or pump water from the river.</p>	<p>The majority (75%) of residents in Suco's use bore water with only some areas connected to the BTL supply. Most people in the Suco's interviewed rely on bore water because it is more reliable than the BTL supplies. One Suco chief reported <i>'it is very concerning that numbers of population are increasing but the reliability and accessibility to the clean water are decreasing too'</i>.</p>	
Water quality: what can you tell us about the water quality? Have you or your family ever been sick from the water? how bad was this sickness?		
<p>The quality tended to change with the seasons. In the rainy season there were issues with the colour (brown or yellow), salty taste and smell. For those with no job they boil and filter the creek water supplies because they cannot afford to buy water. Other issues related to sand coming through the pipes (creek and bore supplies) to the holding tanks at the house were also reported. Sicknesses related to water quality varied according to its source. For female residents and business owners in the formal settlement areas they did not report sicknesses – <i>'because we consume good water'</i>. However, residents and business owners in the informal areas reported diarrhoea, dengue and malaria related to water supply and clogged waste-water pipes and trash left in the drainage system. In relation to diarrhoea treatment, initially traditional methods are used to treat, and when it is bad they go to the hospital.</p>	<p>The quality of the bore water is dependent upon the depth of the bore. For those who connect to the BTL supply, the quality varies and is very poor in the rainy season (Villa Verde: <i>we suspect the pipe is too old now and should replace to a new one</i>). It was suggested in one of the Suco meetings that the current water pipes have been in place since the Indonesian or even Portuguese time and that the capacity needs to be increased to connect to all the residents. If the new pipes are installed it will <i>'also settle the issue of illegal pipes connected by irresponsible people within our community'</i>.</p>	<p>UNICEF pointed out that residents may not understand the connection between leaking wastewater pipes, full septic tanks, waste disposal and water quality from the boreholes. There is no data on the underground water supplies (quality, quantity, sustainable yield). A key feature of the social and behaviour change program should focus on creating this understanding not only to improve health outcomes through behaviour change, but to also create demand (and willingness to pay) for clean water supplies from BTL.</p>
Water reliability: Are there any issues with the reliability of supply?		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
The main issue with reliability is that piped water is not available to all households and where it is available it is only for certain times of the day. Bore water is used more frequently by all groups (including youth) because it is a more reliable source that can be tapped into from their own land.	The main issue with the government (BTL) supplied water is that there is no schedule for when it will be supplied. Bore water provides a more reliable, but poorer quality supply. Supply varied in the rainy season	Not discussed.
Water supply conflicts		
There were issues related to neighbours refusing to allow water supply pipes to be placed through their own land for other households to access.	Illegal pipes where some people destroy the government pipes and redirect for their sole use. This results in the supply of lean water for those with access and not going to all residents. There was also a report that a business has established a pipe from the supply that was established for the school and its nearby residents.	Not discussed.
Use of nearby water environments: beaches		
Not used for swimming or fishing because there is too much trash in the ocean.	Some swimming and fishing in the Bebonuk beach area.	Flooding creates contaminated surface water flows that affects the creek and beach environments and drinking water quality of underground supplies.
Use of nearby environments: freshwater such as rivers		
Nil reported use of creeks for recreational use. Bathing and showers are done at home.	Concerns that there is not a strong law or regulation to control <i>'our communities to dig their own wells which destroys the environment and quality of land'</i> . Bathing and showers are done at home.	
Toilet facilities at home		
All used private facilities in their home. The design and construction of these varied.	All had private facilities. Most used modern toilets and some used traditional toilet systems (hole in the ground). Most residents have installed a wastewater box (permeable septic tank). The main issues identified with the wastewater box system were construction standards, emptying the tank appropriately when it is full and digging water bores near the toilet system.	Not applicable
Toilet safety issues: using shared facilities in the community or work place		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
<p>The informal female business owners only had access share toilet facilities. These were deemed inaccessible, unsafe, and unhygienic. If they needed to go to the toilet they went home if they could or alternatively went with someone else for security.</p>	<p>Not discussed</p>	<p>There were reports of violence and sexual assault to trans and gender diverse people in public toilets (including at schools) and they were deemed to be unsafe to use. This reduced school attendance which in turn impacts upon their education and employment opportunities in life for trans, gender diverse and people with disabilities.</p>
<p>Design of new shared facilities to improve safety and accessibility.</p>		
<p>To involve the community in the design so that they <i>'may collaborate together'</i>. Other design concerns raised included hygiene and cleanliness of the facility once constructed, to have the water and wastewater properly disposed of, and nothing plastic to be flushed down the toilet.</p>	<p>Not discussed</p>	<p>People with disabilities are unable to access toilets or government buildings as they have not been designed to be universally accessible to people of all abilities. There are no statutory building and plumbing codes to regulate the design of public or private toilet systems. Any new public toilets (including at schools) should include provision for use by people of all abilities, ages and gender identities.</p>
<p>Open defecation or use of canal or waterways</p>		
<p>Not discussed.</p>	<p>Despite all households within each Suco having their own private toilet at their home, open defecation is an ongoing issue within each of the Suco's interviewed. One Chief reported <i>'We have identified those people [who go directly into a canal or waterway], but we can't control – it is related to the capacity of family financial'</i>. The main concern raised was related to where the wastewater is diverted – either into a lake, canal or waterway. The Suco Chiefs understand that this is an issue but are powerless to control. One Suco Chief reported <i>'the issue is that everyone builds their houses depending on their will – we don't have a law to regulate the construction yet and how to regulate the agreement when building a house or to have a design.'</i></p>	<p>Not discussed.</p>
<p>Issues involved in providing sanitation services to households including household barriers to uptake and maintenance of sanitation services.</p>		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
Not discussed.	<ul style="list-style-type: none"> • Need to raise awareness and educate people on sanitation • No building laws to regulate development • Financial because the service is expensive • Waste treatment service can't get to the house where the latrine tank is located (the tube is not long and the pump not strong enough) • Some have no common sense • Local authorities address the complaints, but it continues to happen • People who raise pigs in the resident without proper treatment • No access to private land for maintenance • Reliability and availability of clean water • Proper treatment to the latrine tank • Destroying the water supply pipe and creating illegal connections for their private use • Using the canal or waterway for their wastewater from dishes and laundry • Open defecation in lakes • Those who live in the front create their own wastewater that goes through the houses of people living in the rear. 	<ul style="list-style-type: none"> • Lack of awareness of sanitation and hygiene importance and connection to health and related to that potential community will not value sanitation service. • Maintenance of infrastructure.
Community safety issues associated with sanitation services		
	<ul style="list-style-type: none"> • Using the canal and waterway for their wastewater and rubbish • Land access for the clean water pipes • Odors from full latrine tanks areas. • When new houses are constructed, no space is left for the wastewater and it goes through the neighbour's house 	Access to lots to pump out septic tanks is restricted in some areas by lack of easements and poor lot layout design in informal settlement areas. This lack of access has resulted in some septic tanks being emptied or diverted to drainage canals which in turn spreads through the underground water supply that is the primary water source in most areas.
Opportunities or benefits from improved sanitation services to your Suco		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
Not discussed.	<ul style="list-style-type: none"> • We observe that so far, we don't have strict or proper regulation to apply for controlling safety and healthy environment • Regulate wastewater from people who are living near the sea • Creating building laws • Education and engagement of the community with the government • Maintenance of the canals and waterways • Built drainage 	Not discussed.
Proportion of houses suffer from diarrheal disease in the past 6 months		
Not discussed.	<ul style="list-style-type: none"> • In the rainy season everyone gets diarrhoea due to the quality of the water • When it is dusty people get diarrhoea • Diarrhoea is a common disease that everyone has and it is not serious. • We are concerned about dengue and the number of children that have passed away because of dengue recently. 	Not discussed.
What causes diarrheal disease		
	<ul style="list-style-type: none"> • Poor living conditions or sanitation in the Suco. • Consuming contaminated water. • Canal is filled with rubbish and wastewater from dishes, laundry or toilet. • A child passed away we suspect it was due to diarrhoea because of consuming the contaminated water from the lake. • People raise pigs and dirty waste from the pigs is not cleaned. • Children poop everywhere. 	
Past experience with infrastructure projects: what has been good or bad		

Women and vulnerable groups	Suco chief focus groups	NGO key informants
<p>The past experiences shared included: incomplete projects; dust in the dry and mud from the rain; concerns about the quality of the final works - one example was that in the construction phase of a drainage project the community had to build their own cover over an open drain to create a walkway through the construction area. The main message was to <i>'engage with community so that they co-operate and use the infrastructure correctly'</i>.</p>	<p>All reported that it was critical to engage with the community about the project before it starts and throughout the project stages. Other considerations from their past experience:</p> <ul style="list-style-type: none"> • Take care of the resettlement and compensation • Pay attention to the quality of the works • Control the contractor, select qualified contractors who have discipline and financial capacity to implement the project • Many complaints about works left unfinished without any clarity about project continuation. 	<p>Several issues were raised about the capacity of the GoTL to manage, deliver and maintain the project once built. These included:</p> <ul style="list-style-type: none"> • BTL being poorly funded and under resourced • Lack of building and plumbing regulations to manage growth and impacts of development • Capacity of BTL to maintain <p>Other concerns included:</p> <ul style="list-style-type: none"> • Poor record of construction safety practices, including the death of a child during construction of an infrastructure project (pit was left open and the child fell in and died). • Lack of locally sourced materials such as pipes for the project and bathroom accessories must be imported as there is a lack of manufacturing industries in Timor-Leste. This will create cost and timing implications to the project. • Lack of funding for operations and maintenance once constructed. • There are few construction companies who have the capacity to meet all of the prequalification standards often required to building infrastructure of this magnitude. • In country experience is weak and need to be enhanced.
Recommendations to reduce impacts of the project during construction		
<p>Consultation:</p> <ul style="list-style-type: none"> • To avoid conflicts • So everyone understands the project • So that everyone works together • To discuss compensation if businesses need to close 	<p>All the Suco workshop participants emphasized the importance of engaging with the community and local authorities throughout the project stages particularly in relation to resettlement and compensation.</p> <p>Inclusive engagement (representatives of youth, traditional leaders and elders).</p>	<p>Engagement throughout the project cycle was identified by each of the NGO/government informants. One informant advised <i>'consult, consult and consult with the community about the project'</i>.</p> <p>Create opportunities for youth to be trained in masonry and plumbing skills, building and installing latrines.</p>

Women and vulnerable groups	Suco chief focus groups	NGO key informants
<p>Other recommendations highlighted concerns for safety measures:</p> <ul style="list-style-type: none"> To avoid sickness and death in the community Provide safety equipment for workers including portable toilets for the workers Safety for children including keeping materials secured <p>Provide jobs to local people, give jobs to local people.</p>	<p>'Control the contractors to not abandon their jobs or leave things undone'.</p>	<p>Employ educated youth in the design of the infrastructure such as involving young engineers and the women's engineering group. Discussions about resettlement and compensation need throughout the stages need to be considered. Concern was raised by one informant that the GoTL paid below unit rates compensation and this created conflict.</p>

The main purpose of the stakeholder engagement activities in November 2023 was the introduction of the new team working on the project

4.3 Next steps for the Basic Design, Detailed Design and EIS/ESIA study

After this second initial engagement with stakeholders, to introduce the team, NOD is currently planning the next phase of stakeholder engagement, which on one hand is the regulatory required Stakeholder engagement on the ToR taking place after the approval of the TOR by MCA-TL and ANLA and on the other hand the baseline data collection for the detailed design. Following stakeholder activities will take place in the first quarter of 2024

- Government (formal meetings, workshop): information of all relevant governmental stakeholders to inform them about the next steps of project implementation and to encourage them to support the consultant as much as possible in relation to data collection.
- Municipality, Suco and Aldea (public meetings) in all affected Sucos to inform the community representatives about the project and upcoming surveys. Preparation of PowerPoint Presentations, handouts and brochures. It will be further assess and consulted on how to best reach the majority of the population (social media, print media, radio). The public meetings will be carried out in close cooperation with MCA-TL, the Suco chiefs and Aldeia representatives.
- Public Meeting with the Comoro Suco to identify possibly impacted people by the Ocean outfall construction.
- Small RAP Survey (one-to-one interviews for baseline data collection) at the Ocean Outfall area, if required
- Design survey (short one-to-one interviews baseline data collection) of all houses/properties to be connected to the Wastewater Collection Network.
- Key Informant Interviews (e.g., local authorities, health sector, education sector, business owners, vulnerable people, land ownership and land tenure and other). and Focus Group Discussions (Allows a smaller group of between 8 and 15 people to provide their views and opinions of targeted baseline information e.g. TIP and GSI)

After this set of stakeholder engagement the need for further consultations to inform the ESIA study will be evaluated by NOD during the EIS preparation to inform later Public consultation and Stakeholder engagement for the RAP Survey (Project Affected Person (PAP) census, socio-economic, asset identification and evaluation questionnaire). The preliminary Stakeholder Registry will be kept regularly updated and will be used as the basis for planning stakeholder engagement activities.

Priority will be given to the engagement with the ANLA. Engagement with affected communities will be largely limited to Suco leaders and community representatives as well as the PAP. The community representatives will be also engaged to large parts in information enrolment and data collection activities.

4.4 Ongoing and Future Stakeholder Engagement during Project Implementation

As discussed, this SEP is concerned with engagement undertaken as part of the ESIA study. It is important, however, that the Project Proponent builds on and maintains the relationships that will develop during the ESIA process. Stakeholder engagement will continue to be used as a tool to manage social risk and address key community issues throughout the Project construction by MCA-TL and should be carried out by the Project proponent throughout Project life cycle. This will be achieved by maintaining and strengthening relationships with stakeholders through an ongoing process of information disclosure, consultation and dialogue.

The Project Proponent will continue to develop contacts with a wide range of sectors, including public relations officers, project focal points in the various government line departments, district administration, and agencies, political representatives, civil society, communities, consultants, women and vulnerable groups during the Project's life cycle. The Project Proponent will work with

communities to put in place Community stakeholder liaisons and Community liaison team to keep in regular contacts with them.

As the Project progresses, stakeholders should be kept updated on the following:

- Project impacts
- Management of environmental, social and health issues including results of monitoring
- Employment and economic opportunities
- Activities about to commence in their area of interest (e.g., traffic police, road users, etc.)
- Project schedule and delays
- Changes to the project
- Project progress and outcomes
- Future stages of development – preparation for this and what it will involve

Meetings with key stakeholders will be organized as and when required to share significant Project updates. Most importantly, besides of continuing contacts to institutions, the contact with Project Affected Communities will be carried out in two main ways:

- Direct contacts to affected communities and households, considering also the future preparatory work for the RAP and construction (socio-economic survey of economical affected households)
- Upcoming public meetings in the project area for discussing the ESIA and related issues, as part of the official ESIA procedure

5 GRIEVANCE MECHANISM

A grievance mechanism or process is a cornerstone of international good practice in stakeholder engagement.

A grievance is a concern or complaint from anyone affected by a project about project activities, or perceived project incidents or impacts. Grievances maybe raised at different stages of the project cycle. A grievance mechanism is a process for receiving, evaluating, and addressing project-related grievances from affected communities or other stakeholders.

5.1 Grievance Principles

The Project feedback and grievance mechanism will be developed to align with the World Bank's (WB) Environmental and Social Standard (ESS) 10.. The key requirements are as follows:

- Be appropriate to the scale of impacts and risks presented by the Project
- Be communicated to stakeholders as early as possible in the engagement process
- Show transparency, clarity in procedures, processes
- Be accessible to all affected parties, including vulnerable groups, without cost
- Enable affected persons to raise grievances confidentially without retribution
- Not impede access to judicial or administrative processes
- Address grievances promptly, in a reasonable time frame that prevents grievances from dragging on unresolved, and in a manner that is transparent and understandable to the affected party
- Show any evidence of social and cultural appropriateness of the systems, approaches, and methods adopted
- Have flexibility in decision-making processes, considering the unique and diverse character of grievances
- Record in writing including the date and nature of the complaint, any follow up actions taken, the final decision and how this was communicated to the stakeholder
- Where grievances are unresolved, allow the affected party to redirect the grievance through a formal route to external or neutral experts to address

5.2 Grievance Mechanism Process

Complainants should be able to submit grievances directly to Project Proponent, in writing (including letter or email), over the phone or in person. Individuals will also have the option of raising their grievance with a community representative who can then forward the issue to the Project Proponent on the individual's behalf.

The Project Proponent will record the grievance in a Grievance Register on the day of receipt and a named person within the company will be allocated to it. An acknowledgement will be sent to the complainant within 5 working days of the grievance being received, with an explanation of the process to be undertaken and the expected response period. Each grievance will have a tracking number that will be shared with the complainant.

The Project Proponent will investigate the grievance and formulate an appropriate response that will be shared with the complainant in no more than 4 weeks from receipt of the grievance. The investigation period may necessitate meetings with the complainant or other parties. Grievances that require more urgent attention will be prioritized and if necessary, the response time may be shortened.

The response of the complainant will be recorded to help assess whether the grievance is closed or whether further action is required. Where it has not been possible to resolve the grievance, the grievance will be re-investigated and both the complainant and the Project Proponent will have the right to redirect the grievance to an external body to seek a resolution. The final documentation on the Project Proponent's and the complainant's response will be agreed and signed off by both the company and the individual that submitted the grievance to ensure that all parties are satisfied that the grievance has been resolved.

The Project Proponent will also have the responsibility for giving regular feedback to the complainants about the progress of the grievance process. The monitoring will include the progress of implementation of grievance resolutions and the timeliness of grievance redress, follow up grievances to be sure they are attended to, and document details of complaints received and the progress in solving them. All grievances and the Project Proponent and complainant responses will be recorded in a grievance database to ensure that there is a record of every grievance.

It is recommended that the Project Proponent sets up and maintains a database of all grievances received and the actions taken to resolve them. It will record the following:

- The grievance that has been raised by the complainant
- Date the grievance was submitted
- Name and contact details of the complainant if possible (Note: in some cases, the complainant may wish to submit a grievance anonymously. Such grievances will still be logged and investigated. However, where possible, the complainant will be informed that without contact details it will not be possible to provide information about action taken to resolve the grievance.)
- Information about any proposed corrective action communicated to complainant
- Date of response from the Project Proponent
- Record of any correspondence between the complainant and the Project Proponent
- Whether further action is required
- The date the grievance was closed out

A grievance sheet template and a register is provided in Annex B

6 MONITORING AND REPORTING

6.1 Monitoring

The Project Proponent should maintain a record of all public consultation, disclosure information and grievances collected throughout the Project using the following tools:

- Stakeholder Registry: The Stakeholder Registry (Annex 1) should continue to be used to keep a record of all stakeholders and track consultation activities that have been undertaken.
- Meeting Record: To ensure that an accurate and detailed record of information and views is gathered at every stakeholder meeting, a meeting record (Annex 2) should be saved with the Stakeholder Engagement Plan.
- Commitment Register: A commitment register should be established to record any public commitments made by the Project or public concerns raised about the Project that require action. This register should be in addition to the grievance register (Annex 3).
- Grievance mechanism: A Complaint and Grievance Procedure provides a mechanism for communities and affected parties to raise complaints and grievances and allows the project to respond to and resolve the issues in an appropriate manner.
- Reporting Back to Community: A registry developed under the Grievance Mechanism will be used to capture all grievances (Annex 3). Communications will use the stakeholder consultation forums to also report back to the community on project management feedback, the number of complaints received, reviewed or resolved and finally pending.

Stakeholder engagement should be periodically evaluated by the Project Proponent, assisted by the team responsible for SEP implementation. The effectiveness of consultation activities will be evaluated against the objectives of the SEP. The results and any lessons learned will then be incorporated into further updates of the SEP as the project evolves.

Suggested indicators to be used in the evaluation will include, but not be limited to, the following:

- The extent to which activities were implemented against what was planned in the SEP
- Level of understanding of the Project amongst stakeholders
- Monthly grievances received and how they have been addressed
- Stakeholder perceptions on the efficacy of the grievance mechanism
- Employee awareness of the grievance mechanism process
- Attendance at public meetings

To measure these indicators, the following data will be used:

- Issues and management responses linked to meeting minutes
- Monthly reports
- Feedback from primary stakeholder groups (through interviews with sample of affected people)
- Commitment and concerns registered
- Grievance registered

6.2 Reporting

Reporting is an essential step in building stakeholder trust and promoting understanding between a project and the public. Both internal and external reporting will be required during entire Project's life cycle.

Programming regular reporting to external stakeholders is a key part of ongoing and future stakeholder engagement during Project implementation e.g. quarterly reports to MCA-TL. Reporting should use a combination of the methods and be both formal, through periodic Project information releases that provide an update on Project activities, and informal or ad hoc, through meetings and

one-to-one correspondence with key stakeholders on specific issues. Reporting should provide information on:

- Project updates
- Results of monitoring and evaluation on implementation of environmental and social management measures
- Follow-up actions taken since any previous stakeholder meetings
- Progress update on any public commitments made

7 SEP REVIEW

At a minimum, this document will be reviewed on the following occasions:

- When ongoing stakeholder engagement provides new information or requires a change in strategy or approach
- When Project Proponent and key Project milestones change
- On completion of key stages in the Project
- Following changes in applicable national legislation and/or regulatory requirements for the Project
- Following changes in applicable international standards (IFC Performance Standards)

8 REFERENCES

International Finance Corporation (IFC). 2007. Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets.

International Finance Corporation (IFC). 2012. Performance Standards on Environmental and Social Sustainability.

TetraTech, 2022a. Draft Environmental and Social Impact Assessment. Consulting Services for Preparation of the Feasibility Project, Draft Environmental and Social Impact Assessment (ESIA) and Resettlement Policy Framework (RPF) for Water Disinfection, Sanitation and Drainage Program, Timor–Leste Compact. Prepared for Millennium Challenge Corporation. Order No: 95332420F0044. 2022.

ANNEX 1: STAKEHOLDER REGISTER

Stakeholder Key Informant	Execution Function			Level of		Role in the Project	Engagement Strategy	Medium of Communication	Type of Activity
	Input	Appr.	Monitor	Interest	Influence				
Internal Stakeholders									
MCA-TL	X	X	X	High	High	Forward thinking risk analysis and oversight of mobilization of resources to meet milestones and project deadlines and required approvals processes. Provide technical, operational and policy guidance and approvals for Project deliverables.	Partnership, Participation, Consultation, Push Communication, Pull communication, Negotiations	Formal report and deliverables submissions via email, routine coordination and technical correspondence via Emails, Video /Teleconferencing.	several meetings
Principal External Stakeholders									
Provincial Public Utility Corporations									
BTL	X	X	X	High	High	BTL will supervise the PIC and will take over the operation and maintenance of the Sewage System once constructed and trained in operation.	Partnership, Participation, Consultation, Information Gathering, Dialogue	One-on-one interviews, Formal Meetings, Email, Phone	Meeting
Provincial Agencies									
ANLA	X	X	X	High	High	ANLA serves as the principal authority for managing and regulating environmental quality, including environmental and social impact assessments process.	Information Disclosure and Partnership, Information Gathering, consultation on ESIA procedure.	One-on-one interviews, Formal Meetings, Email, Phone	Meeting with representatives
National Directorate of Land and Property, Director of Cadastral Office	X	X	X	High	High	Understand land allocation system; Will be part of the process. Defines easement regulation where not clear.	Information Disclosure and Partnership, Information Gathering and consultation on any land aspects, dialogue	One-on-one interviews, Formal Meetings, Email, Phone	contacted
Local Government Institutions									
Municipality, Sucos and Aldeias	X			High	High	Engage local stakeholder on the Project site for consultations and data collection	Information Disclosure, Information Gathering, consultation, dialogue	One-on-one interviews, Formal Meetings, Phone	Public meeting,
Community based organizations and associations									
WASH and SWD Group	X			High	Low	Engage local stakeholder on the Project site	Information Gathering, Information Giving, Dialogue	Public Meetings with representatives; Surveys; Posters, pamphlets in local language to disseminate to the whole community; Focus Groups; Workshop.	Public meeting
Youth Groups	X			High	Low				
Gender based Groups	X			High	Low				
Religious based Groups	X			High	Low				
Business and Trade Groups	X			High	Low				
PAPs - Direct and Indirect									
PAPs	X			High	High	Engage local stakeholder on the Project site – direct affected Aldeias/Sucos	Information Gathering, Information Giving, Dialogue	Public meeting, focus groups e.g., for vulnerable people	Public meeting, focus groups, Field survey

ANNEX 2: MEETING REGISTER

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
2023-11-07	Kumar Ranganthan Patrick Davis Shajan Jojrutoj Mariano Carmo Placido Pereira Hergui Livina F.Alves Constâncio Pinto Carlito Armamar Beatriz Pereira Almeida Boavida Sidónio Freitas Carlos Dus Reis Peloi João Cardoso Roberto Rodrigues	MCC Senior Director H&S / MCC Due Diligence Engineers H&S / MCC Due Diligence Engineers MCA-TL Vice President MCA-TL WSD Specialist MCA-TL EP Senior Advisor MCA-TL Coordinator Bee-TL Environmental Specialist Ministry of Finance Bee-TL Manager Bee-TL Director Bee-TL Presidente Bee-TL Director Bee-TL	Terry O'Flanagan (NOD Project Director) Sean Cleary (NOD Team Leader) Mafalda Pinto (NOD Deputy Project Manager) Michel Davitt (NOD Director) Maria Panjaitan (NOD Administrator) Ronan McGee (NOD Administrator Project Engineer) Carlos Hurtado (NOD Administrator Project Engineer) Demir Muftuoglu (NOD Lead WWTP) Georgios Kazantzis (NOD Lead Sewer Network) Britta Lammers (NOD/KIMA- ESIA specialist)	The Consultant elaborated on a presentation of the Preliminary Work Plan: <ul style="list-style-type: none"> • Scope and Objectives • Task 1 – Project Initiation • Task 2 – Field Surveys • Task 3 – Basic Design • Task 4 – EIS/EMP and ESIA • Task 5 – Resettlement Action Plan • Task 6 – Contractor PQQ • Preliminary Schedule • Staffing Plan • Potential Impediments Key aspects discussed: <ul style="list-style-type: none"> • When will the Consultant deploy all Key Experts? 3 of the 4 Key Experts are in attendance; the remaining one has already been provided with available data. • Does the Consultant have a timeline for completing the environmental procedures with ANLA? A Meeting is organised for the 10.11.2023. Project has been classified as Category A. • What provisions is the Consultant making for the O&M training? Requirements of the Contract will be implemented, more hands-on training will be provided under the Works Contract. • Is the Consultant experienced in seismic design? Yes • The acquisition of the Pumping Stations sites is almost concluded and that any changes to location and size could prove problematic. • Timelines for implementation of works contracts? The Design-Build Contract to be submitted by mid-December 2023, the Employer's Design the following month • Sea Outfall: how are you ensuring, suitably competent contractors were prequalified and selected? The prequalification assessment matrix will be designed to ensure that previous experience on deep sea outfalls, is essential.
2023-11-10	Salvador S Ximenes	Director Environmental Licensing Unit	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator)	<ul style="list-style-type: none"> • Introduction of the NOD Environmental person in country • Short discussion on the project, explanation of the main aspects.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
	Heider Juvencio Da Costa Amaral Antonio dos Santos	Professional Technician, HR & Procurement	Mafalda Pinto (NOD Deputy Team Leader)	<ul style="list-style-type: none"> • Clarification that both parts are classified category A. • Requirement on two scoping documents and EIS/EMP Documents for Licencing process. • Next step is the development of the Terms of Reference. Agreement on the TOC of the TOR. ToR need to contain the methodology used to assess the different receptors. • Agreement on workshop in relation to EMP implementation after approval of the EIS. • Agreement to introduce the local consultant as soon as EnviPro is on Board
2023-11-14	Carlito Amaral Mariano Carmo Placido Pereira	Bee-TL, Environ. Specialist MCA-TL, Vice President MCA-TL, WSD Specialist	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Quirmado A. Pinto (EnviPro-Team) Marcio da Piedade (TIP Expert) Francisco Neto (EnviPro-ESIA Sp.) Arsenia Da Cruz (Waste Manag. Sp.) Noelia Pereira (EnviPro team) Fedra da Costa (EnviPro team)	<p>Aspects discussed</p> <ol style="list-style-type: none"> 1.1. Introduction of EnviPro to MCA-TL 1.2. Agreement on communication chain 1.3. Update on the RAP aspects for the WWTP 1.4. Explanation by BTL of the project 1.5. Request for any available data in relation to the RAP 1.6. Request for any available data from BTL in relation to the existing water treatment plant and solid waste plant as well as recycling of old oil <p>Issues arising from other Meetings:</p> <ol style="list-style-type: none"> 1.7. Scoping and ToR of the EIS 1.8. Missing public Notification of classification
2023-11-15	Nuncio T.C.P Nestre Alfonso Dn.C Bolo	National Directorate of Land and Property, Director of Cadastral Office Chefe Cadastro	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Fedra da Costa (EnviPro team) Noelia Pereira (EnviPro team) Marcio da Piedade (TIP Expert)	<ul style="list-style-type: none"> • Short introduction • National Directorate of Land and Property requested presence of BTL and MCA in the future meeting, to ensure same information has been communicated among the relevant parties • There is no official cadastral map available at the moment for the drainage network in Dili • National Directorate of Land and Property are currently in discussion with BTL only about the land to be used for the wastewater treatment plant, not about the wastewater network • National Directorate of Land and Property has a draft of the cadastral map for Dili, but it has not being publicized yet • Graves in private property in Dili have not been mapped, hence NOD will need to identify them • They also provide a list of laws that are relevant to land

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
2023-11-15	Judith Ribeiro Conceicao (FOKUPERS) Maria Manuela Leong Pereira (ACbit)	Gender Based NGOs (ACbit & Fokupers)	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Fedra da Costa (EnviPro team) Noelia Pereira (EnviPro team) Marcio da Piedade (TIP Expert)	<ul style="list-style-type: none"> Short introduction FOKUPERS is the first organization in Timor-Leste looking after women's Rights FOKUPERS have four (4) specific program that include: (1) Raising awareness and advocacy; (2) early Childhood education; (3) Victim Assistance/Survivor empowerment (Iconic program); (4) audit (focusing on sanitation program) In relation to sanitation, the public toilet construction has big impact on community, particularly for pregnant and adolescent women There is around 250-300 cases per year of gender-based violence reported Both FOKUPERS and ACbit will provide any additional information required by NOD in the future, that is deemed relevant to the project
2023-11-15	Jose Luis de Olivem	Gender Based NGOs (AJAR) Director	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Fedra da Costa (EnviPro team) Noelia Pereira (EnviPro team) Marcio da Piedade (TIP Expert)	<ul style="list-style-type: none"> Short Introduction AJAR did not have prior context regarding the project and objective of the meeting, hence they were not able to provide much information during the meeting AJAR's work was mainly related to justice related work They will assist NOD in the future, with any information they have that may be relevant to the project
2023-11-15	Antonio Lelo Taci (President of ANLA) Salvador Ximenes (Director of Environmental Licencing) Rafael Do Carmo (Secretary General of ANLA) Anibal (Director of Monitoring and Evaluation)	ANLA	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Francisco Neto (RAP Specialist) Arsenia Da Cruz (Environmental Sp.) Fedra da Costa (EnviPro team)	<ul style="list-style-type: none"> Short Introduction NOD to submit the ToR to ANLA on 19th December 2023 For ANLA, there will be two ESIA documents submitted, as for MCC there will be only one ESIA document submitted TOR "Scoping Document" will include methodology on how to carry out the survey, data collection for primary data and secondary data ANLA is under the Ministry of Tourism and Environment and this Higher Environment Authority i.e. Ministry will approve the document ANLA's organic Structure/organogram is described in the Decree law no.41/2022 President of ANLA suggested to contact Dili Municipality Administration for community structure mapping and Ministry of Strategic Planning and Investment for further consultation for information on urban planning

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> ANLA suggested to organize Public consultation workshop
2023-11-15	Silvino Lopes	Institute for Statistics Director of system and Report	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Arsenia Da Cruz (Environmental Sp.) Fedra da Costa (EnviPro team)	<ul style="list-style-type: none"> Short introduction Social survey and maps availability All census data can be provided by Instituto Nacional Estatistica Timor-Leste-INETL, IP., upon request by email Geo-references are not published yet with specific details on Suco level, therefore can be requested to the INETL, IP. Statistics mapping team INETL, IP is still under the Ministry of Finance administratively, thus might require letter of acknowledgement to the ministry 452 Sucos/villages report are available each Suco and can be requested including infrastructures mapping such as health centre, schools and other facilities Raw data also are available for analysis even in shape file or kmz file NOD can make a list of data and information needed to INETL, IP. And directly to Director Silvino in the Statistics Directorate
2023-11-15	Enrico da Costa de Jesus	Former Suco Chief Comoro	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator)	<ol style="list-style-type: none"> Short introduction Discussion on the current political situation and that a new Suco chief has been elected He will help to support the new Suco Chief to support NOD during the required surveys
2023-11-16	Arimesh Kar Natalino Baboo Mortines	Conservation International Program Manager Deputy Program Manager	Britta Lammers (NOD-ESIA/RAP Sp.) Maria Panjaitan (NOD Administrator) Quirmado A. Pinto (EnviPro team) Fedra da Costa (EnviPro team)	<ul style="list-style-type: none"> Short introduction CI-TL's focus in TL is on the protected area and biodiversity There are currently 44 terrestrial protected areas and 23 marine protected areas Some of the protected areas are currently being occupied by the local community
2024-01-29		APOINTIL	Sean Cleary (NOD) Mathew Holmes (NOD) Admas Mekonner (NOD)	<ul style="list-style-type: none"> Short introduction Outline of the scope and Timing Apointil advised that DNTM will be the primary governmental agency dealing with this matter Consultant will provide Coordinates for the undersee corridor to APOINTIL APOINTIL will advice on limitations on design, construction and operation

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> NOD will provide the Feasibility report on the Ocean outfall It was agreed that regular meetings will take place to keep the information flow going It was noted that the Harbourmasters should be invited to the next meeting
2024-01-30	XXisto Caetano Ximines Paulo Da Silva Gilberto C. De. Jesus	EDTJ PCE DPSE	Sean Cleary(NOD) Mathew Holmes (NOD) Georgeos Kazantzis (NOD) Carlos Hurtado (NOD) Placido da Silva (MCA_TL)	<ul style="list-style-type: none"> Short introduction Outline of the scope and proposed sit locations and preliminary electric load estimates Query related EDTL's requirements for the application of ne connections for project components Final Version of the Basic Design should be provided to EDTL EDTL will provide a quotation Power supply regulations Sub Stations
2024-02-23	Mr. Eligio J.S. Marcal Mr. Abdul M. Arrnahado Mr. Serafin Masado Mr. Martinho E.D.S. Mr. Bernadino da Costa.F Mr. Jacob Tilman Soares	MCA MCC BTL EP Suco Comoro Suco Vila-Verde Suco Bebonuk Aldeia Chief, Suco Bebonuk Suco Madohi Representative of Suco Motael Representative Suco Bairo-Pite Representative Suco Fatu-Hada Suco Manleuna Representative o Ministry of Finance.	Mr. Constancio Pinto (MCA-TL) Fedra Costa (Environmental Assistant) Bendita Pereira (Social/Gender Sp.) Marciano Ximenes (Environmental Sp.) Francisco Neto (RAP Sp.)	<ul style="list-style-type: none"> Introduction Power Point Presentation to introduce the project and to explain the large technical survey All Suco chiefs affirmed their support to the project <p>Mr. Eligio J.S. Marcal: Fear of mobilization and economic difficulties during construction period.</p> <p>Recommendations:</p> <ul style="list-style-type: none"> provide maps outlining the construction timeline for each Suco to have early communication and ease movement in their communities information should be shared to community members regarding the project or census by means of social media, radio (highly recommended), brochure/pamphlet/poster, and TV. <p>Mr. Martinho E.D.S. (Aldeia Chief, Suco Bebonuk): Bebonuk community will be most affected by this project, specifically Legin Satu sub-village.</p> <p>Concerns</p> <ul style="list-style-type: none"> some communities will cooperate throughout the project, others may not, particularly those whose properties will be impacted.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<p>Suggestions</p> <ul style="list-style-type: none"> proper mechanism to compensate properties affected by WWTP is required recruitment of enumerators shall include youth members from each affected Sucos as they know the area better. <p>Mr. Bernadino da Costa.F (Suco Chiefs Madohi): the communities are informed, it is time to implement the project.</p> <p>Concerns</p> <ul style="list-style-type: none"> The environment That the GOTL is not listening to the communities <p>Suggestions</p> <ul style="list-style-type: none"> Facilitation of the dissemination of information to the communities as long as brochures are prepared and distributed to them. Land acquisition: follow those references of previous project <p>Mr. Jacob Tilman Soares (Manleuna Suco Chief): Three meetings since 2019 and nothing has moved forward</p> <p>Concerns</p> <ul style="list-style-type: none"> Dili is suffering from flooding there is no drainages system. When that happened, disease also quickly spread due to poor sanitation. <p>Mr. Serafin Masado (Suco chief of Bebonuk): the main problem is the land acquisition for the project especially in his community.</p> <p>Concerns:</p> <ul style="list-style-type: none"> Some families owned the land but they are not living in Timor-Leste. Some bought the land during the time Bebonuk was still part of Suco Comoro. At present, BTL has not been able to identify these owners. Environmental problems associated with the WWTP e.g. odor to the surroundings . <p>Suggestions</p>

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> • MCA-TL should work closely with the central government to address the compensation approach to those community members who have agreed to relocate. • The consultant needs to prepare detailed engineering design when introducing/ talking to the community. <p>Several questions in relation to minimization of impacts and risk to the people and the environment</p> <p>Mr. Abdul Mancoli Arrnahado (suco chief of Vila Verde): Congratulates GOTL for signing the agreement with the American government.</p> <ul style="list-style-type: none"> • Vila Verde has 9 sub-villages (Aldeia) and many of his community members live up on the hills. Will they be part of this project as well? • He is willing to mediate discussions. <p>Delegado from Motael recommended that this project must be carried out well. It is important to anticipate for mitigating the negative environmental impacts to people and nature. The government and companies must work together with local authorities to engage and recruit young Timorese to work together.</p> <p>Mr. Marcio informs that this discussion will focus mainly on the survey part. However, team will try our best to respond to other concerns as well.</p> <ul style="list-style-type: none"> • The consultant kindly asked any Sucos to volunteer to be part of the pilot survey that will take place soon. Four sucos agreed to be part for the pilot survey. They are Motael, Vila-Verde, Madohi and Bebonuk <p>Mr. Francisco informed that the concerns about environmental impact raised by the Suco chiefs will be addressed in stages forward:</p> <ul style="list-style-type: none"> • through meetings and informative brochures distributed to the communities and stakeholders as well as by public consultations on the ToR, EIS for Environmental Licensing. • The communities will be given access to the ToR, comments will be discussed, addressed and included the final ToR. <p>Mr. Constancio Pinto addressed the concerns of the Suco Chiefs:.</p>

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> • The MCA, MCC and GOTL will conduct most rapid implementation, as we work on a timeline set by MCC. • We need data and information to help implement the project and require your full support and cooperation along the way by facilitating and providing us the data we may need such as with the upcoming survey. • MCC has a strict timeline of 5 years for this project. Therefore, we can't afford any delay. • The project will create temporary job opportunities to the locals. • Odor will be minimum and that the direction of the wind will blow to the direction of the sea. • Concern in regards to equipment failure is valid, however this particular project will use state-of-the-art technology and hence there is no need to worry about equipment failure or even explosion. • Communities in Suco Vila-Verde who live up on the hill, will not be part of the current project. They will however be included at the later stage after the conclusion of this project. • Survey is very important and local authorities must actively support it. • Enumerators will also come from the 11 Sucos. • Thanks for the willingness of the Suco Chiefs for this project.
2024-02-27	Salvador S. Ximenes Anibal A.Souares	Director of Environmental Licencing ANLA Director of Monitoring and Evaluation ANLA	Julião de Jesus (NOD) Marciano B. Ximenes (EnviPro) Francisco Neto (EnviPro) Fedra da Costa (-EnviPro)	<ul style="list-style-type: none"> • Short introduction • Objective: The mechanisms of TOR submission and Public Consultation • Main Challenge: Approval of TOR and conduct Public Consultation. While timeline is defined clearly within the law, however, expect some delay along the way. • Submission of the ToR together with the Public Notice • ANLA suggests that public notice may be published through several ways, as websites, social media platform, directly to Chefe Sucos/Aldeia, and through BTL and MCA/MCC websites. Apart of that, ANLA will also publish via their Facebook page. • Comments on ToRs shall be submitted to ANLA for track record. • Information from the census will contribute to the design phase, can we conduct the census prior to the approval of the ToR? Yes, that is totally fine.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> Who will be organizing the PCs? According to the Decree Law 05/2011 (39/2022), the proponent will organize both PCs in coordination with ANLA. For PC on ToR, since there are 11 affected Sucos, we are planning to group 2 Sucos for one meeting. ANLA will advice based on the information on the ToR. The Authority needs to verify the impact radius from both the WWTP and the network lines so to include not only the 11 proposed sucos. Director Salvador's highlight that to proceed with the census might be a good approach so to identify challenges in regards to how to distribute pipes in people's house especially in the areas that are disorganized. Mr. Anibal informed that it is very important for consultant to discuss with ANLA on the list of the participants who are involved in the public consultation. This is done to make sure that we receive relevant inputs from the relevant stakeholders. Mr. Anibal pointed out that there should be a proper mechanism to minimize impacts from construction of the network lines which can disrupts movements and businesses. Mr. Anibal recommended that proponent should make sure to involve relevant ministries, such as Public Works, Land & Properties, etc...
2024-02-27	Pedro Pinto	Diretor Nacional de Floresta	Marciano Borges Ximenes (EnviPro) Bendita Ximenes (EnviPro)	<ul style="list-style-type: none"> Short introduction Information regarding the pump station # 07 that located in the protected area Main Challenge: The pump station # 07 close to runway extension and the sea animals surrounding the proposed location. Can we place Pump stations #07 in the Tasi Tolu Protected area? There is no problem if only the pump station is placed there, there was already and Feasibility study conducted by the project company. The most important thing is how the project proponent conducts mitigation and gives solution to the environmental impact. This area is close to the President Nicolao Lobato International Airport Expansion project the Government already planned it, we suggest you to confirm at the Air Navigation Administration Timor-Leste (ANATL).

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> • Communicate with the ANPM, I.P./IGTL, I.P. in case if there is any indication of oil or mineral. Because the temperature and pressure in the ground is different. Wrong drilling will cause something undesirable/unexpected will happen. • There are few areas that categorized as protected area in Dili Municipality including Lagoa Tasi Tolu, Cristo Rei, Manucoco Mount in Atauro, Aquatic Nature Reserve in Atauro, Mangrove Area in Hera and Metinaro. Can you provide us the updated location of the protected area in the Dili Municipality? • The Director said that the updating of protected area still in draft. And the Director will looking for it and will share to project proponent when the map is available. • The sewer line/connection must pay attention during the construction in order to prevent the leaking of the sewage when connecting household this can lead to soil contamination. • In the WWTP area, pay attention to spotlights because they can interfere with navigation if faced with aircraft comes from the east or west of airport during take-off and arrival. And in the evening do not expose spotlights to the sea because the light can damage the marine ecosystem. • Plant more trees in the WWTP area. We are not only focus on the plant itself but we also improve the beauty of the beach because the plant located close to the beach. • Raises the awareness of the community when dispose the solid waste so cannot obstruct or stuck in the pipes. • Fully involvement of the Sucos and Aldeias Chiefs to share the information regarding the project activity. • We need the primary data during preparation of documents, the project proponents use mainly secondary data in elaborating their documents. • The National Directorate for Forestry will be involve in Evaluation Committee to assess and analyse the EIS and EMP documents, that is the reason we stick on primary data.
2024-03-04	Salvador S. Ximenes	Diretor da Unidade de Licenciamento Ambiental/ANLA	Marciano Borges Ximenes (EnviPro) Fedra da Costa (EnviPro)	Consultation on preparation and progress for TOR Submission and Public Consultation.

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
			Moises Gonçalves Soares (EnviPro)	<ul style="list-style-type: none"> • Is it correct that the TORs must be submitted at the same time as the public notice and that all documents must be published on the BTL/MCA–TL website and should be available in hard copy at the Suco offices? • After the TOR submitted, the project proponent in coordination with ANLA can publish the public notice via BTL–MCA–TL websites and the hardcopy can be placed in Sucos office especially Bebonuk Suco because this Suco most affected by the project. • As requested at the last meeting, which social media are recommended? TV, newspapers, Facebook etc.? We would like to select a maximum of two platforms in addition to BTL's website, is that acceptable? • Be'e TL website is already sufficient. From ANLA, we highly requested the talk show through TV so everyone can easily access. We recommended the project proponent can invite the president of BTL and the president of ANLA and also NOD–EnviPro to share the information and knowledge regarding this project so people can understand and aware to this project. • When should we schedule the public consultation, 7 days after submission of the ToR or later? • The public consultations must not take place before 7 days after the documents has been made available to public. Two weeks before the date of public consultation, the project proponent can announce the through the radio or TV and also placed it in the sucos office. • We have planned to invite the stakeholders to participate in the public consultation, such as; ANLA, MCA, MCC, BTL, Chief of Dili Municipality, Health Sector, Cultural Sector, Forest Sector (Protected Area), Infrastructure Sector, and Land Property, Chief of Administrative Post. • We advised your part to send us the soft copy of participants list first, and we will decide whether we approve it or we can suggest adding the stakeholders. • There are 11 sucos with its aldeias that will affected by the project, How can we organize this sucos, aldeia and community to participate in the public consultation?

Date	Persons met	Institution, contact	Met by	Main Topics / Observation
				<ul style="list-style-type: none"> We suggest that the Suco Chief decide it in selecting their own community, as they know well their community life, but for the amount of the community that will participate you can decide it. This would be in total 6 public consultations meeting of 11 sucos, would this be accepted by ANLA? The Director said that it is depend on project proponent. Can we include the ANLA email in the public notice for comments and suggestions by public? Please ask ANLA for an email to be included in the public notice for comments and suggestions Yes, just put the official email of ANLA. And public notice must be signed by the President of BTL because the project proponent.
2024-03-04	Paulino da Cruz	National Director of Mapping, Land and Property	Marciano Borges Ximenes (EnviPro) Fedra da Costa (EnviPro) Moises Gonçalves Soares (EnviPro)	<ul style="list-style-type: none"> Short introduction Confirmation of mapping for Dili Municipality, Sucos and Aldeias as well as the status of the land affected for the Bebonuk Suco. We want to requested for the map of Dili Municipality, Suco and Aldeia boundaries? For Dili and Suco maps can be accessed through the website; https://mj.gov.tl/ However, for Aldeias a map cannot be provide yet. In the future we want to make it complete and available in the website so the community just access in the website and no need to come to the office. Can you provide us with the land status for the development of the WWTP project? Currently, this information is on the preliminary data so we cannot provide it.

ANNEX 3: GRIEVANCE RECORD SHEET TEMPLATE

Nature of Submission	Personal: <input type="checkbox"/>	Letter: <input type="checkbox"/>	Phone: <input type="checkbox"/>	E-mail: <input type="checkbox"/>				
Reference / Complaint number	e.g. 001							
Full Name								
Sex								
Age								
Phone number								
Address								
Type of Grievance	Noise	Dust	Environ	Property damage	Conduct	H&S	Employment	Other (specify)
Grievance Description								
Date of visit with complainant:								
Photograph taken or supporting documents								
Name & Signature of Contractor or consultant								
Nature of response	Personal: <input type="checkbox"/>	Letter: <input type="checkbox"/>	Phone: <input type="checkbox"/>	E-mail: <input type="checkbox"/>				
Response								
Date								
Next steps								
Grievance closure	Date:		Signature:					

ANNEX 4: EXAMPLE FOR A GRIEVANCE REGISTER

#	Suco/Aldea	Name, contact and ID of grieved Individual	Residential Address	Gender		Brief Background and status of Grievance (including picture)	Date grievance occurred	Date grievance received	Actions Required to Resolve	Name of Person responsible for resolving	Status of Grievance and Date of resolution	Date Resolved/Closure of Grievance	If not resolved, Why?
				M	F								
1	XXXXX	XXXX (contact attached on GRS 001)	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX	X		Refer to Grievance Record Sheet 001	XX.XX.XXX X	13.04.2020	Repair of cut power cable		Closed – 13/04/2020	13.04.2020	
2	XXXX	XXXX (contact attached on GRS 002)	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX	X		Refer to Grievance Record Sheet 002	27.04.2020	27.04.2020	Pull stockpiled excavated material within the 36m RoW		Closed – 03/06/2020	03.06.2020	
3	XXX	XXX (contact attached on GRS 003)	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXX	X		Refer to Grievance Record Sheet 003	28.04.2020	28.04.2020	Create temporary water passage on the creek		Closed – 28/04/2020	28.04.2020	

ANNEX 5: PICTURES



Kick-off Meeting
Date :07.11.2023



Short introduction of NOD to Enrico da Costa de Jesus the former Suco Chief of Comoro.
Date 15.11.2023



Meeting with ACbit & Fokupers
Date 15.11.2023



Meeting with AJAR
Date 15.11.2023



Meeting with ANLA
Date 15.11.2023



Meeting with Institute for
Statistics Director of system
and Report
Date 15.11.2023



Meeting with CI-TL
Date 16.11.2023



Meeting with Land and Property
Date: 15.11.2023



**BEE TIMOR-LESTE, EMPRESA PÚBLICA
BTL, E.P.**

Avenida 20 de Maio, Caicoli, Dili Timor-Leste Caixa Postal No: 194, Telp: 3311539

Nú Ofisú : **058** /Gab.P.BTL,E.P./III/2024

Dili, 20 de Março de 2024

Ex^{mo} Presidente ANLA-IP
Sr. Antonio Lelo Taci, M.Sc

CC: S.E. VPM e Ministro Coordenador assunto Económico e Ministro do Turismo e Ambiente, Sr. Francisco Kalbuadi Lay,

S.E. Ministra das Finaças (MdF),
Sra. Santana J.R.F.Viegas Cardoso

S.E. Ministro das Obras Públicas (MOP),
Sr. Samuel Marçal,

Ex^{mo} Director Executivo MCA-TL, Amb. Constancio Pinto

Assuntu : Entrega Dokumentu Notifikasaun ba Públiku ba Projetu Categoria "A"
ba Projetu Bee, Saneamentu no Drenajen iha Programa MCC

Ho respeito,

Hafoin submete Termu Referénsia (ToR) ba Projetu Bee, Saneamentu no Drenajen iha 14 Marsu 2024, BTL-EP mós submete dokumentu Notifikasaun ba Públiku ba Projetu Categoria "A" ba ANLA-IP hodi kompleta rekerementu sira lisensiamentu ambiental nian tuir Dekretu Lei Nú. 5/2011 de 09 de Fevereiro.

Dokumentu Notifikasaun ba Públiku ba Projetu Categoria "A" bele hare iha aneksu.

Laiha tan asuntu seluk, ba Sr. Prezidente-nia atensaun no kooperasaun, ami hato'o obrigadu wa'in.

Loron diak,

Carlos Pélai dos Reis, STP, MS
Prezidente K.E. no K.A. BTL,E.P.



MCA-TL

CBD 3, Level 5, Timor Plaza, Comoro, Dili,
Timor-Leste,

Email: info.mcatl@gmail.com

Facebook page: [MCA-TL. IP](#)

Ref No: 37 /MCA-TL/III/2024

Dili, 20 Marsu 2024

Hato'o ba: **Sr. Carlos Peloi Dos Reis**
Prezidente BTL, EP

Assunto: **Husu Atu Entrega Dokumentus Notifikasaun Publika Ba Projetu Kategoria "A" ba
Autoridade Nasional Licenciamentu Ambiental (ANLA)**

Ho respeito,

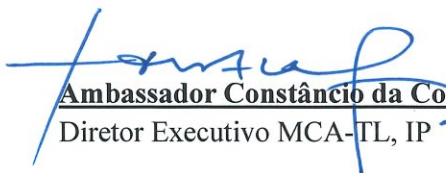
Haktuir dokumentus Termu Refferencia (TOR) ba Projetu Tratamentu Bee, Saneamentu no Drenazem ne'ebe BTL submete ona ba ANLA iha loron 14 fulan Marsu 2024. Iha biban ida ne'e MCA-TL hakarak husu ba Sr. Prezidente atu approva dokumentus Notifikasaun Publika Ba Projetu Kategoria "A" no submete hikas ba ANLA hodi kompleta requerimentu hirak ne'ebe fo sai ona husi ANLA. Dokumentus refere mak hanesan:

- Dekretu Lei Nu. 5/2011, 9 Feveireiru kona ba Lei Licenciamentu Ambiental, Konsultasaun Publika kona ba Propóztu TOR ba Estudo Impaktu Ambiental, Atividade projetu Tratamentu bee, saneamentu no drenajen fase 1 (Estasaun Tratamentu Bee Foer, Jersaun Hipokloritu Sódium iha Fatin (JHSF)
- Dekretu Lei Nu. 5/2011, 9 Feveireiru kona ba Lei Licenciamentu Ambiental, Konsultasaun Publika kona ba Propóztu TOR ba Estudo Impaktu Ambiental, Atividade projetu Tratamentu bee, saneamentu no drenajen fase 2 (Sistema Koleksaun Bee Foer, Estasaun Bomba, Drenajen no Koneksaun Edifisiu iha Suku Bairro Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael no Villa-Verde, no Tasi Klaran iha Mota Ikun, Aldeia Metin I, Suku Bebonuk

Atu facilita prosesu evaluasaun ba dokumentus TOR ne'ebe submete ona ba ANLA, ami aneksu hikas dokumentus informativo "*Briefing Document*" husi TOR nian no husu atu entrega hotu dokumentus refere ba iha ANLA.

Mak ne'e de'it Obrigado barak ba atensaun no servisu hamutuk.

Kumprimentus,


Ambassador Constâncio da Conceição Pinto
Diretor Executivo MCA-TL, IP

498	
	
GABINETE PRESIDENTE BTL, E.P.	
Entrega Husi:	Nelson
Simu Husi :	Terry
Data :	20-03-2024
No Kontaktu :	75896592
Asinatura :	

PUBLIC NOTICE OF PROPOSED CATEGORY A PROJECT
Decree Law No. 5/2011 of 9th February on Environmental Licensing Law

Public Consultation on the Proposed Terms of Reference of Environmental Impact Study

Water, Sanitation and Drainage Project Phase 1: Wastewater Treatment Plant, On-site Sodium Hypochlorite Generation Plant and Ocean Outfall at Mota Ikun, Metin I Aldeia, Bebonuk Suco

1. Bee Timor-Leste Empresa Pública (BTL, E.P.).
2. Mota Ikun, Metin I Aldeia, Bebonuk Suco, Dom Aleixo Administrative Post, Dili Municipality.
3. Construction of a Wastewater Treatment Plant to treat sewerage to an acceptable level prior to discharge to the Banda Sea via an underwater outfall and an On-site Sodium Hypochlorite Generation facility, which will generate disinfectant that can be used to treat potable water sources. The proposed infrastructure will occupy a 6 hectare site and is Phase 1 of the Water, Sanitation and Drainage (WSD) Project. The WSD has the objective of treating sewer water generated by the following Sucos: Bairro Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael and Villa-Verde.
4. The aforementioned project proponent intends to implement a Wastewater Treatment Plant, On-site Sodium Hypochlorite Generation Plant and Ocean Outfall at the location stated above.
5. Pursuant to Decree Law No. 5/2011, the proposed project is classified as Category A and must adhere to an environmental evaluation process, as specified in the law stated.
6. The proposed Terms of Reference for this study must be approved by the Environmental Authority prior to the preparation and submission of the Environmental Impact Statement and Environmental Management Plan for the proposed project.
7. The proposed Terms of Reference have already been submitted to the Environmental Authority and are available for public consultation.
8. The proposed Terms of Reference are available for consultation at the Environmental Authority's office in ACAIT Building, 3rd Floor, Avenida Bispo de Medeiros, Nain Feto Administrative Post, Dili Municipality and at Bee Timor-Leste's office at Jacinto de Cândido Street, Caicoli Suco, Vera Cruz Administrative Post, Dili Municipality, or on BTL's official website at <https://www.btl.tl>
9. The proposed Terms of Reference are available for consultation during normal working hours.
10. Any member of the public has the right to comment on the proposed Terms of Reference.
11. Any comments on the proposed TOR must be submitted to the President ANLA, I.P., attn. Mr. António Lelo Taçi, in writing or by email to infonael2019@gmail.com
12. All comments must be received by the Environmental Authority by 4th April 2024.

Dili, 18th – March – 2024



(Carlos Peloi dos Reis, STP, MS)
President of Bee Timor-Leste, E.P.

NOTIFIKASAUN PUBLIKA BA PROPÓZITU PROJETU KATEGORIA A
Dekretu Lei Nu. 5/2011, 9 Feveiru kona ba Lei Lisensiamentu Ambiental

Konsultasaun Publika kona ba Propózitu Termu Referénsia (TOR) ba Estudu Impaktu Ambiental

Bee, Saneamentu no Drenajen faze 1: Estasaun Tratamentu Bee Foer, Jerasaun Hipokloritu Sódiu iha Fatin (JHSF) no Tasi Klaran iha Mota Ikun, Aldeia Metin I, Suku Bebonuk

1. Bee Timor-Leste Empresa Pública (BTL, E.P.).
2. Mota Ikun, Aldeia Metin I, Suku Bebonuk, Postu Administrativu Dom Aleixo, Munisipiu Dili.
3. Konstrusaun husi Estasaun Tratamentu Bee Foer atu halao tratamentu ezgotu to'ó nível ne'ebe konsidera antes soe ba tasi laran liu husi kanu tasi okos no facilidade ba Jerasaun Hipokloritu Sódiu iha Fatin (JHSF) ne'ebe sei produs no rai dezinfetante ne'ebe sei utiliza atu trata rekursu bee hemu (água potável). Propózitu infraestrutura sei okupa rai hektare 6 no ida ne'e hanesan faze 1 husi projetu Bee, Saneamentu no Drenajen. Objetivu husi projetu ida ne'e atu trata ezgotu ne'ebe produs husi suku sira mak hanesan; Bairro Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael no Villa-Verde.
4. Proponente projetu ne'ebe mensiona iha leten pretende atu implementa Estasaun Tratamentu Bee Foer, Jerasaun Hipokloritu Sódiu iha Fatin no Kanu ba Tasi Laran iha lokalizasaun ne'ebe mensiona iha leten.
5. Haktuir Dekretu Lei Nu. 5/2011, propózitu projetu refere hetan klasifikasaun hanesan projetu ho kategoria A no tenki submete ba prosesu avaliaun ambiental, conforme lei refere haruka.
6. Propózitu Termu Referénsia ba estudu ida ne'e tenki hetan aprovasaun husi Autoridade Ambiental antes halo elaborasaun no submissaun Deklarasaun Impaktu Ambiental (DIA) ba propózitu projetu refere.
7. Propózitu Termu Referénsia submete ona ba Autoridade Ambiental no disponivel ona ba konsultasaun publika.
8. Propózitu Termu Referénsia agora disponivel ona ba konsulta iha Eskritoriu Autoridade Ambiental iha Edifisiu ACAIT (andar 3) Avenida Bispo de Medeiros, Postu Administrativu Nain Feto, Munisipiu Dili no iha Eskritoriu Bee Timor-Leste Empresa Publica (BTL, E.P.) Rua Jacinto de Cândido, Suku Caicoli, Postu Administrativu Vera Cruz, Munisipiu Dili ka liu husi website BTL nian iha <https://www.btl.tl>
9. Propózitu Termu Referénsia agora disponivel ba konsultasaun durante oras servisu nian.
10. Kualker membru husi publiku iha direitu atu fo komentariu ba propózitu Termu Referénsia refere.
11. Kualker komentariu kona ba propózitu Termu Referénsia tenki submete oficialmente ba Autoridade Ambiental no diriji ba Presidente ANLA, I.P. Sr. António Lelo Taçi, ho eskrita ka atraves email ba infonael2019@gmail.com
12. Komentariu hotu tenki submete ba Autoridade Ambiental iha 4 Abril 2024.

Dili, 18 - Marsu - 2024



(Carlos Peló dos Reis, STP, MS)
Presidente Bee Timor-Leste, E.P.

Anúncio de projeto proposto da Categoria A
Decreto-Lei n.º 5/2011, a Lei de Licenciamento Ambiental

Consulta pública sobre a proposta de Termos de Referência para o Estudo de Impacto Ambiental

1ª Fase do Projeto Água, Saneamento e Drenagem: Estação de Tratamento de Águas Residuais, Estação de Produção de Hipoclorito de Sódio e Emissário Submarino em Mota Ikun, Aldeia Metin I, Suco Bebonuk

1. Bee Timor-Leste. E.P.
2. Mota Ikun, Aldeia Metin I, Suco Bebonuk, Posto Administrativo Dom Aleixo, Município de Dili.
3. Construção de uma Estação de Tratamento de Águas Residuais para tratar esgoto de acordo com um nível de tratamento aceitável, antes de ser descarregado no Mar da Banda através de um emissário submarino e uma Estação de Produção de Hipoclorito de Sódio que poderá ser usado como desinfetante nos sistemas de abastecimento de água. A infraestrutura proposta irá ocupar um lote de 6 hectares e é a 1ª fase do projeto Água, Saneamento e Drenagem (WSD) que tem como objetivo tratar a água residual produzida nos Sucos de Bairro Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael e Villa-Verde.
4. O proponente acima mencionado pretende implementar uma Estação de Tratamento de Águas Residuais, Estação de Produção de Hipoclorito de Sódio e Emissário Submarino no local acima.
5. De acordo com o Decreto-Lei n.º 5/2011, o projeto proposto é classificado como um projeto da Categoria A e deve submeter-se a um processo de avaliação ambiental, conforme especificado na referida lei.
6. Os Termos de Referência para esse estudo devem ser aprovados pela Autoridade Ambiental antes da elaboração e submissão da Declaração de Impacto Ambiental para o projeto proposto.
7. A proposta de Termos de Referência já foi submetida à Autoridade Ambiental e está disponível para consulta pública.
8. A proposta de Termos de Referência está disponível para consulta na sede da Autoridade Ambiental na Avenida Bispo de Medeiros, Edifício ACAIT, 3º Andar, Posto Administrativo Nain Feto, Dili, e na sede da Bee Timor-Leste na Rua Jacinto de Cândido, Suco Caicoli, Posto Administrativo Vera Cruz, Dili ou através do website <https://www.btl.tl>
9. A proposta de Termos de Referência está disponível para consulta durante o horário normal de trabalho
10. Qualquer membro do público tem o direito de comentar a proposta de Termos de Referência.
11. Quaisquer comentários sobre a proposta de Termos de Referência devem ser submetidos a Presidente ANLA, I.P., Sr. António Lelo Taçi na Autoridade Ambiental, por escrito ou por email para infonael2019@gmail.com
12. Todos os comentários devem ser recebidos pela Autoridade Ambiental em 4 Abril 2024.

Dili, 18 – Março – 2024



(Carlos Peloi dos Reis, STP, MS)
Presidente da Bee Timor-Leste, E.P.

PUBLIC NOTICE OF PROPOSED CATEGORY A PROJECT
Decree Law No. 5/2011 of 9th February on Environmental Licensing Law

Public Consultation on the Proposed Terms of Reference of Environmental Impact Study

Water, Sanitation and Drainage Project Phase 2: Wastewater Collection System, Pump Stations, Associated Drainage and Building Connections at Sucos of Bairo Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael and Villa-Verde

1. Bee Timor-Leste Empresa Pública (BTL, E.P.).
2. Across Sucos of Bairo Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Mascarenhas, Motael and Villa-Verde.
3. Construction of approximately 300 km of wastewater collection network, consisting of gravity pipelines, appurtenant structures, pump stations, force mains and house connections that will service areas within the eleven sucos mentioned above. Certain sections of the existing rainwater drainage system will also be improved. The wastewater collection network is Phase 2 of the Water, Sanitation and Drainage (WSD) Project and will convey wastewater to the treatment plant proposed as Phase 1.
4. The aforementioned project proponent intends to implement a wastewater collection network, consisting of gravity pipelines, appurtenant structures, pump stations, force mains, house connections and improvements to rainwater drainage at the location stated above.
5. Pursuant to Decree Law No. 5/2011, the proposed project is classified as Category A and must adhere to an environmental evaluation process, as specified in the law stated.
6. The proposed Terms of Reference for this study must be approved by the Environmental Authority prior to the preparation and submission of the Environmental Impact Statement and Environmental Management Plan for the proposed project.
7. The proposed Terms of Reference have already been submitted to the Environmental Authority and are available for public consultation.
8. The proposed Terms of Reference are available for consultation at the Environmental Authority's office in ACAIT Building, 3rd Floor, Avenida Bispo de Medeiros, Nain Feto Administrative Post, Dili Municipality and at Bee Timor-Leste's office at Jacinto de Cândido Street, Caicoli Suco, Vera Cruz Administrative Post, Dili Municipality, or on BTL's official website at <https://www.btl.tl>
9. The proposed Terms of Reference are available for consultation during normal working hours.
10. Any member of the public has the right to comment on the proposed Terms of Reference.
11. Any comments on the proposed TOR must be submitted to President of ANLA, attn. Mr. António Lelo Taçi, in writing or by email to infonael2019@gmail.com
12. All comments must be received by the Environmental Authority by 4th April 2024.

Dili, 18th – March – 2024



(Carlos Peloi dos Reis, STP, MS)
President of Bee Timor-Leste, E.P.

NOTIFIKASAUN PUBLIKA BA PROPÓZITU PROJETU KATEGORIA A
Dekretu Lei Nu. 5/2011, 9 Feveireiru kona ba Lei Lisensiamentu Ambiental

Konsultasaun Publika kona ba Propózitu Termu Referénsia (TOR) ba Estudu Impaktu Ambiental

Bee, Saneamentu no Drenajen faze 2: Sistema Koleksaun Bee Foer, Estasaun Bomba, Drenajen no Koneksaun Edifisiu iha Suku Bairo Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael no Villa-Verde

1. Bee Timor-Leste Empresa Publica (BTL, E.P).
2. Liu husi Suku 11 iha Munisipiu Dili, Timor-Leste mak hanesan; Bairo-Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Mascarenhas, Motael no Vila-Verde.
3. Konstruksaun rede koleksaun bee foer maizu menus 300 km, kompostu husi kanu gravitasaun, ligasaun estrutura, estasaun bomba, rede ne'ebe forsa no koneksaun uma ne'ebe sei atende area sira iha suku 11 ne'ebe mensiona iha leten. Seksaun sira husi sistema drenajen udan ben ne'ebe eziste sei melhora. Rede koleksaun bee foer iha faze 2 husi projetu Bee, Saneamentu no Drenajen sei transmite bee foer ba propózitu estasaun tratamentu iha faze 1.
4. Proponente projetu ne'ebe mensiona iha leten pretende atu implementa Sistema Koleksaun Bee Foer, Estasaun Bomba, Drenajen no Koneksaun Edifisiu iha lokalizasaun ne'ebe mensiona iha leten.
5. Haktuir Dekretu Lei Nu. 5/2011, propózitu projetu refere hetan klasifikasaun hanesan projetu ho kategoria A no tenki submete ba prosesu avaliasaun ambiental, konforme lei refere haruka.
6. Propózitu Termu Referénsia ba estudu ida ne'e tenki hetan aprovasaun husi Autoridade Ambiental antes halo elaborasaun no submissaun Deklarasaun Impaktu Ambiental (DIA) ba propózitu projetu refere.
7. Propózitu Termu Referénsia submete ona ba Autoridade Ambiental no disponivel ona ba konsultasaun publika.
8. Propózitu Termu Referénsia agora disponivel ona ba konsulta iha Eskritoriu Autoridade Ambiental iha Edifisiu ACAIT (andar 3) Avenida Bispo de Medeiros, Postu Administrativu Nain Feto, Munisipiu Dili no iha Eskritoriu Bee Timor-Leste Empresa Publica (BTL, E.P.) Rua Jacinto de Cândido, Suku Caicoli, Postu Administrativu Vera Cruz, Munisipiu Dili ka liu husi website BTL nian iha <https://www.btl.tl>
9. Propózitu Termu Referénsia agora disponivel ba konsultasaun durante oras servisu nian.
10. Kualker membru husi publiku iha direitu atu fo komentariu ba propózitu Termu Referénsia refere.
11. Kualker komentariu kona ba propózitu Termu Referénsia tenki submete ofisialmente ba Autoridade Ambiental no diriji ba Presidente ANLA, I.P. Sr. António Lelo Taçi, ho eskrita ka atraves email ba infonael2019@gmail.com
12. Komentariu hotu tenki submete ba Autoridade Ambiental iha 4 Abril 2024.

Dili, 18 – Marsu – 2024



(Carlos Peloi dos Reis, STP, MS)
Presidente Bee Timor-Leste, E.P.

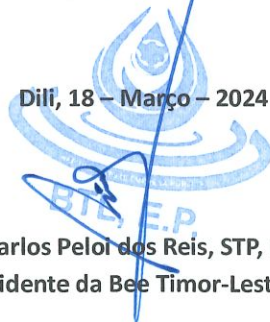
Anúncio de projeto proposto da Categoria A
Decreto-Lei n.º 5/2011, a Lei de Licenciamento Ambiental

Consulta pública sobre a proposta de Termos de Referência para o Estudo de Impacto Ambiental

2ª Fase do Projeto Água, Saneamento e Drenagem: Rede de Esgotos, Estações de Bombagem, Drenagem e ramais domésticos nos Sucos Bairo Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Colmera, Mascarenhas, Motael and Villa-Verde

1. Bee Timor-Leste Empresa Publica (BTL, E.P.).
2. Sucos Bairo Pite, Bebonuk, Colmera, Comoro, Fatuhada, Kampung-Alor, Madohi, Manleuana, Mascarenhas, Motael and Villa-Verde.
3. Construção de aprox. 300 km de rede de esgotos constituída por um sistema misto de gravidade e pressão, estações de bombagem que irá servir os onze Sucos mencionados. Certas secções do atual sistema de drenagem pluvial serão intervencionadas. A rede de esgotos proposta é a 2ª fase do projeto Água, Saneamento e Drenagem (WSD) e irá drenar a água residual para a estação de tratamento de águas residuais proposta na 1ª fase do projeto.
4. O proponente acima mencionado pretende implementar uma rede de esgotos, seis estações de bombagem, drenagem, ramais domésticos nos sucos mencionados e melhorias em secções do atual sistema de drenagem pluvial no local acima.
5. De acordo com o Decreto-Lei n.º 5/2011, o projeto proposto é classificado como um projeto da Categoria A e deve submeter-se a um processo de avaliação ambiental, conforme especificado na referida lei.
6. Os Termos de Referência para esse estudo devem ser aprovados pela Autoridade Ambiental antes da elaboração e submissão da Declaração de Impacto Ambiental para o projeto proposto.
7. A proposta de Termos de Referência já foi submetida à Autoridade Ambiental e está disponível para consulta pública.
8. A proposta de Termos de Referência está disponível para consulta na sede da Autoridade Ambiental na Avenida Bispo de Medeiros, Edifício ACAIT, 3º Andar, Posto Administrativo Nain Feto, Dili, e na sede da Bee Timor-Leste na Rua Jacinto de Cândido, Suco Caicoli, Posto Administrativo Vera Cruz, Dili ou através do website <https://www.btl.tl>
9. A proposta de Termos de Referência está disponível para consulta durante o horário normal de trabalho
10. Qualquer membro do público tem o direito de comentar a proposta de Termos de Referência.
11. Quaisquer comentários sobre a proposta de Termos de Referência devem ser submetidos a Presidente ANLA, I.P., Sr. António Lelo Taçi na Autoridade Ambiental, por escrito ou por email para infonael2019@gmail.com
12. Todos os comentários devem ser recebidos pela Autoridade Ambiental em 4 Abril 2024.

Dili, 18 – Março – 2024



(Carlos Peloi dos Reis, STP, MS)
Presidente da Bee Timor-Leste, E.P.

18th March, 2024

Our Ref: 20960.240318.NOD-ANL.COR.001

RE: BRIEFING DOCUMENT: TIMOR-LESTE WATER, SANITATION, AND DRAINAGE PROJECT

Dear Sir/Madam,

We would like to submit the Terms of Reference for the Timor-Leste Water, Sanitation, and Drainage Project, Phase 1 and Phase 2.

1 BACKGROUND

The **Timor-Leste Water, Sanitation, and Associated Drainage (WSD) Project** is a major portion of the United States of America Millennium Challenge Corporation (MCC) Timor-Leste Compact, which is an agreement between the United States Government (acting through MCC) and the Government of Timor-Leste. The Compact was signed in July 2022.

The Compact defines the objective of the WSD Project as “**reduce fecal pathogens in piped and stored drinking water and groundwater.**” To this end, MCC and the Government of Timor-Leste determined that a wastewater collection and treatment system, serving key areas of Dili would: i) largely eliminate the source of contamination to surface water and groundwater currently caused by on-site sanitation systems and to some extent, other contributing practices, and ii) result in a reduction in water-borne disease and other impacts of poor sanitation.

After the Compact was signed, the Government of Timor-Leste established the Millennium Challenge Account- Timor-Leste (MCA-TL), which is the government agency responsible for administering and managing the Compact. MCA-TL has appointed the Consultant, Nicholas O'Dwyer Consulting Engineers, to undertake the Preparation of Designs, Tender Documents, Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for the WSD Project. The project implementing entity in the Compact is Bee Timor-Leste, E.P. (BTL), who is also the Project proponent for ANLA and who will own and operate the assets funded by the WSD Project.

2 PROJECT COMPONENTS

The WSD Project components include:

- *Wastewater treatment plant (WWTP)* that will receive sewage from the serviced area and separate it into a solids waste stream and a liquids waste stream. Both streams will be further treated at the WWTP so they can be safely disposed of at a landfill (solids) or discharged to the ocean (liquids). The process involves multiple stages including; screening to remove large debris, grit removal, settlement, sludge dewatering, and effluent disinfection.



- *On-site sodium hypochlorite generation (OSHG) facility* that will manufacture bulk disinfectant to ensure appropriate treatment both for ocean disposal of wastewater effluent and for the Dili water distribution system (proposed under a separate project).
- *Ocean outfall* that will discharge the treated liquid effluent to the ocean via a pipeline that will connect the WWTP to a discharge point (“diffuser”) on the bottom of the ocean, approximately 430 meters north of the WWTP site and 60 m below mean sea level.
- *Conventional sewers* that will collect sewage from buildings in a pipe system (“mains”) that will run primarily along existing roads and ultimately to the WWTP for treatment. While the majority of the network will rely on gravity to move the sewage and some sections will be pumped pressure mains.
- *Simplified sewers* that will collect sewage from buildings in densely built, informal areas that have limited access for construction. The simplified systems will be connected to the conventional system.
- *Pump stations (“lift stations”)* that will move the sewage through the pressurized segments of the sewer network.
- *Associated drainage* that will consist mainly of culverts to improve the surface drainage of the area in advance of future improvements.
- *Building connections and facilities* which will consist of pipe connections from residential buildings to the sewer mains, potential decommissioning of existing septic tanks, pit latrines and cesspits, and provision of toilets or toilet blocks if required.

3 STUDY AREAS

The WSD Project includes two primary project study areas (see Figure 1) comprising:

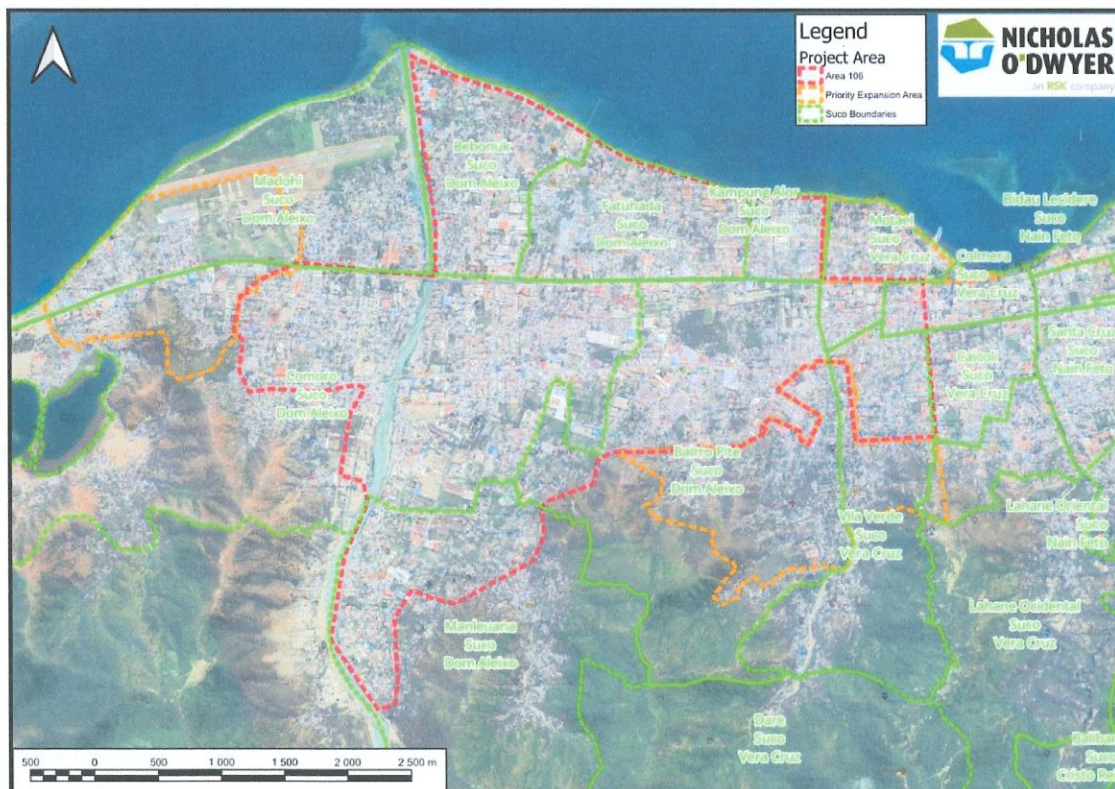


Figure 1. Project areas



Directors NP. Board, J. Brinkenber, AS. Draper, D. O'Hagan, J. Oliver, J. Power, AA. Ryder, D. Taylor, HL. Thomas
Operational Directors M. Davitt, M. Dignam, B. Durkan, G. Monaghan, G. Reilly
Associate Directors C. Duignan, B. Dunphy, T. O'Flanagan, Dr. C. Sheehan

A 6 hectare site on the east side of the mouth of the Comoro River and beach and ocean areas north of the site extending north of the site approximately 500 meters, and

- 1) The sewer serviced area which includes:
 - Area 106, which overlays on the Dom Aleixo Sucos of Fatuhada, Bairro Pite, Manleuana and Comoro and the Vera Cruz Sucos of Motael, Vila Verde, Kampung Alor, and Colmera; and
 - Three priority expansion areas of: Hallibur, Lorio, Moris Ba Dame, Terra Santa, Golgota, and 12 de Outubro (This portion of the project will be constructed only if surplus funds remain in the Compact budget following award of implementation contracts.)

The study area also includes areas that will receive and benefit from the disinfection chemical supplied from the OSHG for water supply treatment including other administrative posts within the Dili municipality and the district areas of Aileu, Liquiça, Ermera, and Manatuto. Also, the study area includes areas around third-party facilities that will be used by the project, such as the Tibar WWTP/landfill, and road network.

4 PROJECT DEVELOPMENT HISTORY

Prior to agreement on the terms of the compact, there was a complex Compact Development process that began in 2019. This process was cooperative between the Government of Timor-Leste and MCC. The process to date has included:

- Constraints analysis to define the most effective approach to meeting the Compact objectives;
- Economic analysis to determine investment levels and define preliminary budget constraints;
- Stakeholder engagement to obtain local information and insight on key concerns and issues so they can be incorporated into the project development and impact analysis processes;
- Field investigations, data collection, and other analyses to define baseline conditions for the physical, biological, and human environments;
- Feasibility study to develop and evaluate alternatives, define engineering criteria, and assess their relative costs and benefits;
- Draft Environmental and Social Impact Assessment (ESIA) to assess the positive and negative impacts of the preferred alternative for construction and operational phases and outline avoidance, minimization, mitigation and management measures to reduce negative impacts to acceptable levels;
- Policy and legal analysis to determine compliance with required standards and identify laws and regulations that affect project design and the development process;
- Resettlement policy framework to outline the process for evaluating temporary and permanent impacts on Project Affected Persons (PAPs) including residents, landowners, businesses and their employees, and community livelihoods and outline methods for determining and supplying compensation for impacts and establishment of a Grievance Mechanism;
- Social and gender analysis to define prevailing social structure, identify potential impacts and benefits to social conditions, identify issues for vulnerable groups, and begin the process of incorporating measures to improve social conditions through the project;
- Other specialized analyses and documentation to address specific issues and process elements.



5 COMPACT PROCESS

At the early stages of Compact Development, the Government of Timor-Leste together with MCC established a Compact Development Team to work through the early stages of the process. After the Compact was signed, MCA-TL, the government agency responsible for administering and managing the Compact, was established.

The Compact is subject to a strict five-year term limit, which begins with Entry into Force (EIF). The EIF date has yet to be determined. Nevertheless, due to the long lead times for studies, engineering and construction contract procurement, much of the project development has been front-loaded ahead of EIF to ensure that the actual construction can begin at EIF and all the works can be completed in time. MCA-TL also manages and implements many of the pre-EIF activities, including the preparatory design, environmental licensing, and construction procurement packages for the WSD Project. Compliance with ANLA regulations and processes is on the critical path of the overall schedule and is part of pre-EIF activities.

Due to overall scheduling constraints, the WSD Project pre-EIF activities must be divided into two Phases, which will run concurrently. Phase 1 includes the WWTP, OSHG, and Ocean Outfall, which require a long procurement lead time, but will be ready to start the ANLA process sooner than Phase 2. Phase 2 includes the two sewer systems, pump stations, drainage, and building connections and facilities. Phase 2 design and environmental and social documentation require additional studies that will take several months. Taken together, this means that Phase 1 must start the ANLA process earlier than Phase 2.

6 PLAN FORWARD

The Consultant, initiated the engagement with ANLA in November 2023 and discussed the project, ANLA's process, and special issues for the EISs. This information, along with the existing project information and plans, were used to develop a Stakeholder Engagement Plan and two Draft Terms of Reference for the Environmental Impact Statements.

Since the environmental licensing process involves two Environmental Impact Assessments, the phasing of the Project must be managed carefully. It is recommended for the public and stakeholder consultation to present the project as a whole to highlight the project's holistic approach.

Several major studies are planned for 2024 including:

- A geotechnical investigation across the project area;
- An acid sulfate soils investigation across the project area;
- An outfall modeling analysis to define the diffuser size and configuration, which may require additional data collection if the layout changes significantly from the current plan;
- 360-degree imaging studies that will inform design and provide data for the EIS; and
- A detailed Census across the communities to collect data that will inform the engineering designs, enumerate building facilities, collect social and community data, collect data for the EIS and Social and Gender Studies, and inform the Resettlement Action Plans (RAPs).

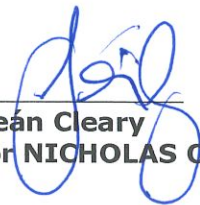
The ToRs outline other special topics and studies including: odor management, grave sites and unanticipated finds, waste management including waste from earthworks, trafficking-in-persons risk and management, social and gender inclusion plans, hydrology and extreme weather, tsunami impact, climate change impact and vulnerability, and tree management.



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We look forward to receiving your comments on these documents.

Yours faithfully,



Sean Cleary
for NICHOLAS O'DWYER LTD.

