

Palestinian Water Authority

Environmental and Social Management Framework (ESMF)

Water Security and Resilience Program (WSRP)-Phase 1 (WSRP-1) P176025

Prepared by
Palestinian Water Authority (PWA)

LIST OF ACRONYMS

| AFD | The Agence Française de Développement | | | | | |
|--------|-----------------------------------------------|--|--|--|--|--|
| CERC | Contingent Emergency Response Component | | | | | |
| CFP | Chance Finds Procedure | | | | | |
| CHS | Community Health and Safety | | | | | |
| CoC | Code of Conduct | | | | | |
| EQA | Environment Quality Authority | | | | | |
| EIA | Environmental Impact Assessment | | | | | |
| E&S | Environmental and Social | | | | | |
| ERP | Emergency Response Plan | | | | | |
| ESCP | Environmental and Social Commitment Plan | | | | | |
| ESF | Environmental and Social Framework | | | | | |
| ESHS | Environmental Social Health and Safety | | | | | |
| ESIA | Environmental and Social Impact Assessment | | | | | |
| ESMF | Environmental and Social Management Framework | | | | | |
| ESMP | Environmental and Social Management Plan | | | | | |
| ESSs | Environmental and Social Standards | | | | | |
| GBV | Gender Based Violence | | | | | |
| GM | Grievance Mechanism | | | | | |
| HRWWTP | Hebron Regional Wastewater Treatment Plant | | | | | |
| IEE | Initial Environmental Examination | | | | | |
| IFC | International Finance Corporation | | | | | |
| KFW | Kreditanstalt für Wiederaufbau | | | | | |
| Lcd | Liter Per Capita Per Day | | | | | |
| LGUs | Local Government Units | | | | | |
| M&E | Monitoring and Evaluation | | | | | |
| MCM | Million Cubic Meters | | | | | |
| MoT | Ministry of Transportation | | | | | |
| MoTA | Ministry of Tourism and Antiquities | | | | | |
| N/A | Not Applicable | | | | | |
| NGOs | Non-Governmental Organizations | | | | | |
| NRW | Non-Revenue Water | | | | | |
| NWC | National Water Company | | | | | |
| O&M | Operation and Maintenance | | | | | |
| OHS | Occupational Health and Safety | | | | | |
| PA | Palestinian Authority | | | | | |
| PAPs | Project Affected Persons | | | | | |

| PCBS | Palestinian Central Bureau of Statistics | | | | | |
|----------|-------------------------------------------------------------------|--|--|--|--|--|
| PCU | Project Coordination Unit | | | | | |
| PEAP | Palestinian Environmental Assessment Policy | | | | | |
| PEL | Palestinian Environmental Law | | | | | |
| PSC | Project Steering Committee | | | | | |
| PWA | Palestinian Water Authority | | | | | |
| RAP | Resettlement Action Plan | | | | | |
| RF | Resettlement Framework | | | | | |
| RoW | Right of Way | | | | | |
| RWUs | Regional Water Utilities | | | | | |
| SDP | Strategic Development Plan | | | | | |
| SEA | Sexual Exploitation and Abuse | | | | | |
| SEP | Stakeholders Engagement Plan | | | | | |
| SH | Sexual Harassment | | | | | |
| PID MDTF | Partnership for Infrastructure Development Multi-Donor Trust Fund | | | | | |
| SoP | Series of Projects | | | | | |
| SPs | Service Providers | | | | | |
| ToR | Terms of Reference | | | | | |
| WB | World Bank | | | | | |
| WB&G | West Bank and Gaza | | | | | |
| WASH | Water and Sanitation Hygiene | | | | | |
| WMP | Waste Management Plan | | | | | |
| WSRP | Water Security and Resilience Program | | | | | |
| WSRC | Water Sector Regulatory Council | | | | | |
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A. EXECUTIVE SUMMARY

Introduction

The Water Security and Resilience Project (WSRP-1) is the first in the planned Series of Projects (SoP) in the proposed Water Security and Resilience Program (WSRP) Program. The overall objective of the proposed Program is to increase equitable access to safe water and sanitation services and to improve service delivery. This objective is expected to be achieved over a 12-year period through a series of Projects (SoP), of which the operation detailed in this document is the first. The programmatic approach will ensure continuity of the sector engagement and also facilitate a sustained contribution to the Bank's ongoing support to the water sector in West Bank and Gaza. The proposed Program will have strong links to the water sector interventions co-financed by the World Bank (WB) and the Partnership for Infrastructure Development Multi-Donor Trust Fund (PID MDTF) that play a crucial role in addressing the challenges in the sector and critical water services in priority areas under the first project, while also laying the basis for rebuilding better in the long-term. The Program is expected to consist of three projects that will overlap in time and vary in geography, with a consistent component-level design to facilitate scaling up. The three projects are expected to commence in 2023, 2025, and 2029. The anticipated duration of the first project is five years while the duration of subsequent projects is expected to be six years each, with overlapping periods. Overall SoP completion is expected by 2035.

The Palestinian Water Authority (PWA) will be responsible for the implementation of the project activities, fiduciary management and safeguard compliance for all the sub-components of the project.

This Environmental and Social Management Framework (ESMF) is needed to screen the environmental and social risks and impacts of the WSRP-1 project activities, provide guidance to PWA in the preparation of specific assessments and plans for the subprojects during implementation, including implementation of any plans.

Project Development Objectives (PDO)

The Project Development Objective (PDO) is to improve the reliability and quality of water supply services in selected areas and to strengthen the operational performance of sector institutions in the Palestinian territories.

Application of Palestinian laws and Regulations and their Classification

The Palestinian policy relevant for environmental assessment for WSRP-1 components are the Palestinian Environmental Assessment Policy (PEAP) as the activities under subcomponents 1.1, 1.2, and 1.3 are likely to fall under either category A (likely to have significant adverse environmental impacts that are sensitive, diverse or unprecedented) or B (whose potential adverse environmental impacts on humans or environmentally important areas are less adverse than those of Category A project) in which the proposed interventions are likely to have negative environmental and social impacts and demand either an Initial Environmental Examination (IEE) or an Environmental Impact Assessment (EIA). The screening process will be based on requirements of relevant land use plans, and on whether the project is likely to:

- Use a natural resource in a way that pre-empts other uses of that resource,
- Displace people or communities,
- Be located in or near environmentally sensitive areas such as natural reserves, wetlands, or registered
 archeological and cultural sites,
- · Generate unacceptable levels of environmental impact,
- Create a state of public concern, or

Require further, related development activities that may cause significant environmental impacts.

Overall, the proposed project will cover a vast area of rural environment, with construction of pipelines, regional reservoir tanks, and main and local booster pump stations. Based on an Application for Environmental Approval, the Environment Quality Authority (EQA) will use screening criteria to determine whether an IEE or

an EIA is required for a project. For projects funded by donors including the World Bank, EQA should be officially informed by PWA. Environmental and social instruments prepared in accordance with the requirements of the donors will be satisfactory for EQA.

Other applicable laws and regulations are the Palestinian Environmental Law, the Palestinian legal and policy framework for land acquisition, and the Palestinian Water Law. Details are provided in chapter 2.

Description of the WSRP-1 Project

The focus of the proposed WSRP-1 (SoP-1) will be on improving water services in line with the PWA's priorities and the water sector's strategic development plan and desire to improve water services in areas with the lowest water per capita and improve service providers operational and financial performance. In order to address the long-term structural challenges of lack of water supply, and contribute to a resilient and sustainable recovery, the project will also undertake strategic sector reform and capacity building activities supporting water sector institutions. A robust reform agenda will be developed through targeted technical support for improved management of Operation and Maintenance (O&M) and financial sustainability of the sector in order to strengthen the water sector's resilience to future disasters such as COVID-19.

Project Components

The Project consists of four components:

Component 1 - Improvement of Water and Wastewater Infrastructure and Service Management

Sub-Component 1.1 – Bulk Water Supply System in Jenin

Sub-component 1.2 – Northeast Villages Water Distribution System in the Jenin area

Sub-Component 1.3 – Hebron Wastewater Operation and maintenance

Component 2 - Improve performance of Water Sector Service Providers

Subcomponent 2.1: Strategic planning and sector reform

Subcomponent 2.2: Improve Financial and Operational Performance of the Service Providers

Subcomponent 2.3: Improve Social Accountability of Service Providers

Component 3 - Project Management and Monitoring

Component 4 - Contingent Emergency Response Component (CERC)

Project Location

The location of the WSRP-1 project would be spread over Jenin Governorate (Subcomponents 1.1 and 1.2) and in Hebron city (Subcomponent 1.3). Project subcomponents 1.1 and 1.2 are located in Jenin, Qabatya, Al Shuhada, Burqin, Deir Abu Daief, Arabuna, Jalboun, Beit Qad (Northern & Southern). The exact project locations for component 1.1 and 1.2 will be determined during the implementation stage only.

A description of the environmental and social situation of the project area is provided in Chapter 4.

Impact Assessment Methodology

The assessment of effects and identification of residual impacts takes account of any incorporated mitigation measures adopted due to any anticipated potential impact of Project activities and will be largely dependent on the extent and duration of change, the number of people or size of the resource affected and their sensitivity to the change. Potential impacts can be both negative and positive (beneficial). The criteria for determining

significance are generally specific for each environmental and social aspect but generally the magnitude of each potential impact is defined along with the sensitivity of the receptor.

Potential Environmental and Social Impacts

The project is expected to have a number of positive impacts (beneficial) including (but not limited to) an increase in the domestic water per capita consumption; a reduction in negative impacts on communities that suffer from water shortages; and capacity building and institutional reform to strengthen the social accountability and responsiveness of service providers. However, the project is expected to have negative environmental and social impacts that have been rated as substantial. Potential impacts and instruments required to manage them are detailed hereafter.

Project activities under components 1.1 and 1.2 are mainly construction-related risks such as potential Occupational Health and Safety (OHS) risks to workers, and environmental risks to communities including health and safety, noise, dust, and waste generation, risk to traffic and road safety, increase in the quantity of wastewater generated due to increase in per capita water consumption. Component 1.3 entails substantial risks to water resources including ground water pollution from infiltration of non-compliant effluent, soil contamination, OHS risks to workers, risks to workers and community associated with handling, transportation, and disposal of generated sludge, in addition to the environmental risks including noise, dust, and spillage of chemical, odor, pest issues in case of malfunction, Risks of migrating snakes to neighboring communities, the poor performance of the WWTP due to dumping slurry (coming from stone-cutting industries) or toxic materials into the sewage stream flowing to the WWTP, continuing of wastewater streams to wadi Al-Samen from the downstream communities and eventually crosses the green line to Israel.

Components 2 and 3 of the project are expected to finance the institutional capacity building (CB) and Technical Assistance (TA) of a wide range of studies which may include feasibility studies, policy reform studies, and possibly detailed designs for the next series of the project (SoP). The environmental and social risks of the TA will be addressed by instruments prepared proportional to the scope of the activities when determined during implementation.

Component 4 of the operation, the Contingent Emergency Response Component (CERC), is expected to finance emerging needs in the sector in the case of emergencies and/or disasters. The Project Operation Manual (POM) will include a positive list of eligible activities of a similar nature to other components, e.g., rehabilitation of networks, and operation of water and wastewater facilities. The risks associated with this component are of a similar nature and magnitude identified for other components of the project and PWA will prepare and adopt any Environmental and Social (E&S) instruments which may be required for activities under the CERC component of the Project, in accordance with the CERC Manual.

The social risks have been identified during implementation including: small scale land acquisition under Component 1.1 and 1.2 for new water reservoirs and pumping stations, restrictions to land use, the Right of Way (RoW) may be encroached on certain segments of the subproject alignments which will be determined once the design is finalized and which may entail livelihood impacts that will need to be assessed and, compensated (if required). Other risks are related to labor management including OHS, working terms and conditions, minimum age, and potential gender-based violence/sexual exploitation and abuse/sexual exploitation (GBV/SEA/SH), community health and safety particularly associated with COVID-19, social exclusion from or inequitable provision of project benefits, and/or lack of meaningful engagement during preparation and implementation (including operation of the Hebron WWTP). Women and marginalized groups (e.g. persons with disabilities, women headed households, youth, the poor, communities in Access Restricted Areas (ARAs) and rural and/or relatively remote locations, communities more vulnerable to impacts of climate change etc.); may all be at risk of being excluded from project benefits. The project may also experience ocial

resistance to measures for better tariff collection and reduction of Non-Revenue Water (NRW), and a continuing lack of/or poor water conservation practices among communities; and contextual risks due to legacy issues associated with the Hebron WWTP. Based on the above, the social risk is substantial.

General Principle for Environmental and Social Management (ESS 1-10)

Due to the nature of some of the proposed project activities under WSRP-1 and their potential environmental and social impacts, the subprojects fall under 'category A or B' according to PEAP and are rated as 'Substantial' as per the World Bank ESS1 risk category. This will require an ESMP and in some cases a detailed ESIA. Therefore, this ESMF is prepared based on the following principles that will guide the planning and implementation of the project activities.

- The Project Coordination Unit (PCU) at PWA is responsible for compliance with national policies, regulations and World Bank ESSs and Guidelines, as mentioned in this ESMF report. The ESMF will serve as the basis for ensuring environmental and social compliance.
- PCU at PWA is responsible for obtaining environmental clearance from EQA, and World Bank.
- Sub-projects with impacts identified in ESIA as high risk (according to ESF), will not be eligible for World Bank financing.
- Planning and design of any additional activities should ensure minimal assessment of cumulative impacts.
- Environmentally sensitive areas, cultural sites, restricted or disputed lands (identified during project implementation) should be taken care of with appropriate mitigation or compensation measures during implementation.
- Participation of stakeholders (especially local communities) should be ensured by PCU in planning, implementation and monitoring of each sub-component.
- PCU at PWA will ensure appropriate institutional set up for implementing environmental and social
 management plan. PCU will also ensure that relevant aspects of the Environmental and Social
 Commitment Plan (ESCP), including, inter alia, the relevant E&S instruments, the LMP, and Code of
 Conduct (CoC), are incorporated into the ESHS specifications of the bidding/procurement documents
 and contracts with contractors and supervising firms.
- Contractors to be engaged for construction and equipment installation under the project will ensure provisions indicated in the site specific ESMPs
- PCU at PWA will undertake public disclosure of project interventions and potential impacts.
- In case of activating the CERC Component (Component 4), the CERC manual and, other instruments, in form and substance acceptable to the World Bank will be prepared by PWA on December 2023 and will be followed. A list of Positive and Negative activities for CERC component is given in Annex 6.
- In case co-financing of WSRP-1 project by other development partners (DPs), the Bank will cooperate with such agencies and the Borrower in order to agree on a common approach for the assessment and management of E&S risks and impacts of the project. This will be acceptable to the Bank, provided that such an approach will enable the project to achieve objectives materially consistent with the ESSs.

Environmental and social management procedures

PWA will adopt a clear approach to environmental and social management procedures consistent with the Legal Agreement, the ESCP, the Operations Manual and the ESMF to allow project development activities to

follow the ESF standards including the mitigation hierarchy of avoidance, minimization, and mitigation and compensation/offset for negative impacts.

Environmental and Social Assessment

The ESMF defined the environmental and social instruments and plans to be prepared for the project components and subcomponents. The requirement of each instrument, timing and responsibility were also identified and presented in section 5.

Required Site Specific Management Plans

Site Specific Management Plans will be prepared by contractors of the sub-projects in the form of Contractors-ESMPs (C-ESMPs). The selection of the sit-specific management plans required by the sub-components will be determined by recommendations of the ESIA/ESMP. These plans will be reviewed and cleared by PWA. A table with procedures for preparation the environmental and social instruments are presented in section 5.2.4.

Institutional Arrangements for ESMF implementation

The WSRP-1 Project will be implemented by a Project Coordination Unit (PCU), which will be established within the Palestinian Water Authority (PWA). The PCU at PWA will be responsible for all technical planning, financial management, procurement, social and environmental risk management, and communications with the World Bank. The PWA will hire and maintain qualified staff and resources to support management of ESHS risks and impacts of the Project including Environmental Specialist and Social Specialist as part of the PCU. ToRs are prepared and annexed to this ESMF. As part of the PCU, there will be dedicated support from field engineers that are based on-site and who will be sharing the offices with the contractor. Field engineers, reporting to the director of the PCU, will be managing each sub-component to ensure day-to-day management. The PCU will be responsible for the E&S implementation monitoring. The PCU will engage an international engineering firm for construction supervision (supervision Engineer), one for each sub-component to supervise the implementation of the sub-component. The MoLG, Municipalities and Local Government Units (LGUs) will also be involved as key stakeholders during implementation of the project. The project will establish a Project Steering Committee (PSC) to be chaired by the Minister of Finance and Chairman of PWA.

Environmental and Social Screening and documentation

The screening process for the key environmental and social risks and impacts of the components and sub-components of the WSRP-1 projects has been identified in section 5.2 and the E&S instruments to be prepared are summarized in section 5.2.4.

Environmental and Social monitoring

The construction management contractor (Engineer), one for each subcomponent, responsible for managing the subproject will organizeweekly monitoring of the environmental aspects of the subprojects to ensure compliance with the mitigation measures. Construction works of the proposed water systems will be supervised by the Engineer via a combination of regular Engineer team visits to the construction site and Engineer construction supervision. The Engineer construction supervisor, as well as the construction firm performing the work (Contractor), will be required to provide verbal and written updates to the Engineer on a regular basis indicating percent achievement of milestones specified in the awarded contracts. The Engineer will include references to construction progress in its monthly updates to PWA. During the operation phase, the PCU at PWA will be responsible for monitoring the E&S mitigation measures for Sub-component 1.1, and 1.2, and 1.3. PWA will prepare and submit to the World Bank quarterly monitoring reports on the Environmental, Social, Health and Safety (ESHS) performance of the Project, including but not limited to the implementation of the ESCP, status of preparation and implementation of E&S instruments required under the ESCP, stakeholder engagement activities, and functioning of the grievance mechanism(s).

Consultations and Stakeholder Engagement

To fulfill the requirements of ESS10, PWA has prepared a stakeholder engagement plan (SEP). Project Affected Parties (PAPs) including vulnerable groups and Other Interested Parties (OIPs) have been identified in the SEP. The SEP will be continuously updated, specifically in accordance with the identified needs. All relevant information needs to be made available to stakeholders in a timely manner, including planned subcomponents of the project, management measures, and monitoring activities. PWA will disclose on their websites, the project information and all key E&S documentation including ESMF, SEP, LMP, RF and the site-specific ESMPs/ESIAs and RPs to allow stakeholders to understand the risks and impacts of the project, and potential opportunities. The information will be disclosed in the Arabic language, taking into account any specific needs of groups that may be differentially or disproportionately affected by the project or groups of the population with specific information needs (such as, disability, literacy, women, mobility, differences in language or accessibility).

Grievance Mechanism

The existing GMs at PWA for the World Bank-financed projects including Water Security Development - Gaza Central Desalination Program, Wastewater Management Sustainability Project, and HRWWTP will be adapted and augmented, as required, and used for the WSRP-1 project and relevant details including managing responsibilities and involvement of stakeholders are included in the project SEP. The GM includes requisite features for handling potential cases of GBV/SEA/SH with special referralpathways based on confidentiality and a survivor-centered approach.

The project's level GM also deals with the issues of land and other assets acquisition (e.g. amount of compensation, suitability of residual land plots, loss of access roads, loss of livelihood, etc.) as well as the losses and damages caused by construction works, and any direct or indirect environmental and social impacts.

The workers' GM for other PWA Bank financed projects are functioning and information regarding these mechanisms continues to be disseminated. These workers' GMs will be adapted and strengethened, as required, and used for the WSRP. The workers' GM shall include special referral pathways for workers' grievances on GBV and SEA/SH with special referral pathways to the project's GM.

Further details on the project's level GM and workers' GM are provided under section 12 of this ESMP.

World Bank Grievance Redress Service (GRS)

Communities and individuals who believe that they are adversely affected by Sub-project interventions may submit complaints to existing project-level GM or the WB Grievance Redress Service (GRS). Project affected communities and individuals may also submit their complaint to the World Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, because of non-compliance with WB ESF requirements. Details of the procedures to submit complaints to the WB's corporate GRS, is available in the GRS website: http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the WB Inspection Panel, please visit www.inspectionpanel.org. Any disclosure instrument on GM will provide addresses of the GRS and the Inspection Panel.

Capacity Building and Training Plan

Based on the assessment of the existing capacity of PWA and the different parties/stakeholders engaged in the project implementation, a capacity development and training plan is prepared.

ESMP Implementation Cost

Cost estimates will need to be prepared for all the mitigation and monitoring measures to be proposed in the specific ESIA/ESMP in accordance with the ESMF and detailed in table 13.1. The cost estimates for some of the mitigation measures to be identified in the ESMPs will be part of the civil works contract. The institutional capacity building and Technical Assistance activities (component 2 and 3) should be reflected in the ESMP activities with budget for successful environmental management of the project. The total estimated costs for the implementation of ESMF including the capacity development and training plan, and the implementation of risk management measures are 1,054,400 USD. The potential resettlement costs cannot be estimated at this stage.

1. INTRODUCTION

1.1 Background

The water sector in the West Bank is suffering from a range of challenges. The lack of control over water resources and water infrastructure is leading to a low access to water resources, forcing the authorities to adopt an emergency response approach instead of developing long term strategies for the development of much-needed infrastructure. As a result, per capita water availability is low, the water services are inadequate, and the region experiences major seasonal shortages – all further exacerbated by the impacts of climate change.

Despite the reform efforts supported by donors over the years, the sector institutions continue to be weak and fragmented, with more than 300 small and local water service providers (SP) established at the level of Local Government Units (LGUs). The Palestinian Water Authority (PWA) has no technical or administrative control over LGUs, creating a governance gap in the sector. Although the Ministry of Local Government (MoLG) exercises administrative supervision of LGUs, the water service delivery is not systematically supervised, resulting in unsustainable service providers unable to deliver reliable services to the population.

The main primary water sources are the Israeli bulk water supply company Mekorot (about 70 million m3/year, MCM) and PWA wells and springs (about 60 MCM/year). The water purchased from Mekorot accounts for more than 50 percent of the total volume of water delivered for drinking purposes. This high dependence of water supply form Mekorot—in addition to the treatment of raw wastewater that flows across the border—increases the arrears that Israel deducts from the taxes it collects on behalf of the PA. In 2021, the Israeli Ministry of Finance deducted US\$140 million from clearance revenues to the PA, severely impacting the economics of the Water sector in Palestine.

Given this background, the proposed Water Security and Resilience Project (WSRP-1) is the first phase of a Series of Projects (SoP) in the proposed Water Security and Resilience (WSRP) Program. The Program is expected to consist of three projects that will overlap in time and vary in geography, with a consistent component-level design to facilitate scaling up. The three projects are expected to commence in 2023, 2025, and 2029. The anticipated duration of the first project is five years while the duration of subsequent projects is expected to be six years each, with overlapping periods. Overall SoP completion is expected by 2035. The overall objective of the proposed WSRP Program is to increase equitable access to safe water and sanitation services and to improve service delivery. This objective is expected to be achieved over a 12-year period through a series of Projects (SoP), of which the operation detailed in this document is the first. The WSRP-1 (the Project) aims at the ambitious agenda for climate-smart water and sanitation infrastructure investments and reforms, building on the World Bank's support to the sector over the past decades.

The WSRP-1 project will provide essential water services and technical support to improve the sector performance in West Bank and Gaza. The Project Development Objective (PDO) is to improve the reliability and quality of water supply services in selected areas and to strengthen the operational performance of sector institutions in the Palestinian territories. The PDOs will be measured by the following outcome level indicators:

- Increase availability of bulk water availability (Cubic meters/year).
- Number of households benefiting from increased hours of water supply (Number).
- Share of planned water samples compliant with the national standards (Percentage).
- Number of Service Providers (SPs) under Local Government Units (LGUs) reduced through clustering in WB&G (Number).
 - Selected KPIs improved for the clustered Service Providers (SPs) (to be defined based on the assessment of the SPs in the target zones).

1.2 Project Location

The location of the WSRP-1 project would be spread over Jenin Governorate (Subcomponents 1.1 and 1.2) and in Hebron city (Subcomponent 1.3). Project subcomponent 1.1 is located in Jenin, Qabatya, Al Shuhada, Burqin. Project subcomponent 1.2 is located in Deir Abu Daief, Arabuna, Jalboun, Beit Qad (Northern & Southern). The exact project locations for components 1.1 and 1.2 will be determined during the implementation stage only. The project will be implemented during the fiscal year 2023 to the 2028 for five years with possible co-financing by other development partners (DPs) such as The Agence Française de Développement (AFD) and the Kreditanstalt für Wiederaufbau (KFW).

1.3 Purpose of the ESMF

The ESMF is intended to be used as a practical instrument during formulation, design, implementation, and monitoring of components and sub-components of the WSRP-1 project to ensure that the environmental and social issues are integrated in project supported activities. The ESMF will provide guidance on pre-investment works/studies (such as feasibility studies, policy reform studies, and possibly detailed designs for the next series of the project (SoP), etc.), provide set of steps, process, procedure, and mechanism for ensuring adequate level of environmental and social consideration and integration in each investment in the project-cycle; and describes the principles, objectives and approach to be followed to avoid or minimize or mitigate impacts. The ESMF will facilitate compliance with Palestinian policies, as well as with the World Bank's environmental and social standards (ESSs) of the Environmental and Social Framework (ESF), and guide to prepare and conduct the detailed ESIAs/ESMPs as appropriate to the project components/sub-components.

This ESMF report is complemented by three additional thematic frameworks/plans prepared as separate documents on Labor Management Procedures (LMP), Resettlement Framework (RF), and Stakeholder Engagement Plan (SEP) prepared by PWA for the WSRP-1 project to meet the requirements of the WB ESF.

1.4 Sectorial and Institutional Context

To address these challenges, the PA has approved policy instruments for a transformational and sustainable shift in the sector by enacting the Water Law in 2014 and approving a Strategic Development Plan (SDP) 2022-2032, which the World Bank supported under different operations and analytical assessments.

The guiding principles of the 2014 Water Law are meant to adjust and reform the current setting of the sector. The Law delineates the responsibilities of each institutional stakeholder, establishes clear and enforceable accountabilities, and fosters financial independence and self-sufficiency of the service providers.

At the National level, according to the Water Law, PWA focuses on managing the water resources in an integrated and sustainable manner, prepares general plans, sector policies and development strategies; the Water Sector Regulatory Council (WSRC), regulates and monitors the operation of water service providers, and the National Water Company (NWC) (to be established), is expected to be responsible for bulk water supply. Meanwhile, at the local level, water supply and wastewater services are expected to be delivered by Regional Water Utilities (RWU); yet to be established). The Water Law supports the aggregation of the approximately 300 existing small service providers (water departments at the LGU level) into the regional utilities to enhance the sustainability of the service delivery level.

In addition, the Cabinet adopted the bylaw that regulates the establishment of RWUs, as a key step to operationalize the 2014 Water Law. The establishment RWUs is a critical element of the reform process, as transferring service provision of water and wastewater from LGUs to RWUs would reduce the number of service providers, allowing to take advantage of economies of scale, while significantly improving the governance in the sector.

1.5 Rationale of the ESMF

As stated before, the project is expected to be implemented over Jenin Governorate (Subcomponents 1.1 and 1.2) but the exact project locations for the sub-project elements such as the main supply and distribution pipelines, local and regional reservoirs, and main and local booster pump stations will be determined during the Design stage only. Therefore, environmental and social risks and impacts could not be identified and specified for mitigation at this preparation stage. Hence, there is a need for procedural guidance for environmental and social appraisal and management. PWA has therefore prepared this Environmental and Social Management Framework (ESMF) as a constituent part for guidance in the implementation stage. The rationale for developing the framework is based on the consideration that all activities under the project components and sub-components will only be identified and prepared during the implementation of WSRP-1 project. Therefore, detailed site investigations will be carried out as part of identifying specific project activities and related designs at the selected locations to ascertain the precise nature of the environmental and social risks and impacts. The ESMF will provide the necessary background for environmental and social considerations, and a checklist of potential issues of the project activities which will be considered and built into the design of the project. This will include environmental and social screening of subprojects and guidance on the preparation of specific assessments and plans. To ensure sustainable implementation, this ESMF will also serve as the guideline for the staff designated by the PCU to oversee and monitor the environmental and social safeguards compliance of the project components. The ESMF will be a living document and will be reviewed and updated periodically as needed.

1.6 Approach and Methodology of the ESMF

The ESMF has been prepared in line with the following steps:

- Review of the project documents including PAD and ESRS
- Review of the policy and regulatory requirements
- Conduct field visits by PWA experts and initial scoping and screening to determine the key environmental and social parameters and aspects that are likely to be impacted by the project activities
- Collect and analyze of baseline environmental and social data with the help of secondary literature review and field data collection
- Consult with the stakeholders including beneficiary/affected communities and developing the consultation process
- Assess the potential and likely impacts of the project activities.
- Learn from previous water and waste water projects about engagement activities with affected communities such as the Regional Hebron Waste Water Treatment Plant project. PWA has established a Project Steering Committee that includes community representatives and has initiated a Citizens Engagement Plan that includes a strong communication component.
- Prepare an outline environmental and social management issues according to the requirements of the WB ESSs of the ESF

2. POLICY LEGAL AND ADMINISTRATIVE FRAMEWORK

The ESMF report has been performed in compliance with the various environmental legislative laws, regulations, and guidelines presented herein.

2.1 National Environmental Policies, Laws and Regulations

2.1.1 Palestinian Environment Law (PAL)

The Palestinian environmental legal and administrative framework has taken major strides towards protecting environmental resources and institutionalizing their sustainable management. The Palestinian Environment Law (PEL) No 7 of 1999, which serves as the main regulatory framework concerning environmental management, comprehensively covers the main issues relevant to environmental protection and law enforcement. The objectives of this law include:

- Protect the environment from all sorts and types of pollution.
- Protect public health and social welfare.
- Incorporate environmental resources protection in all social and economic development plan and promote sustainable development to protect the rights of future generations.
- Conserve ecologically sensitive areas, protect biodiversity, and rehabilitate environmentally damaged areas.
- Promote collection and publication of environmental information to raise public awareness of environmental issues.

In accordance with the Palestine Environment Law, EQA in coordination with the competent agencies prepared the Environmental Assessment Policy.

2.1.2 Palestinian Environmental Assessment Policy

EQA developed the Palestinian Environmental Assessment Policy of 2000 as the leading authority for the approval of environmental assessment studies. This policy aims to achieve the following goals:

- 1. Ensure that development activities improve the standard of life, without negatively affecting the social, cultural and historical values of people.
- 2. Preserve and sustain the natural environment.
- 3. Conserving biodiversity, landscapes and the sustainable use of natural resources.
- 4. Avoid irreversible environmental damage and minimize reversible environmental damage from development activities.

In accordance with the policy, project proponents are required to apply for environmental approval that informs the EQA and relevant approving authorities of the intended project activities. Subsequently, a determination is made whether an initial environmental evaluation (IEE) or a detailed environmental impact assessment (EIA) is required. EQA has defined large scheme water supply systems among projects that require EIA. EQA provides guidance on the content and preparation of the EIA for each project. For the donors including the World Bank funded projects, PWA should officially inform EQA about the project. In addition, EQA will be satisfied with the donor's clearance of environmental and social instruments as discussed in section 1.2 above.

2.1.3 Existing Palestinian legal and policy framework for land acquisition

According to Law No.24 of year 1943 modified by Law No. 2 of year 1953 on "Land Expropriation for Public Projects" and its articles (3) and (21), the Government can expropriate up to 25% of any privately-owned land for public interest reasons - without compensating the owners for the value of the land being expropriated.

Exceptions are made to owners who prove to be largely damaged by this land expropriation. However, owners are entitled to compensation for all crops and trees, buildings and fixed structures on the expropriated 25% area of the land.

In case an entire plot of land is required, the promoter must submit an official request to the Secretariat of the council of ministers with land limits, coordinates and lot numbers. A dedicated inter-ministerial evaluation committee will assess the land value and will submit the evaluation results report to the secretariat of council of ministers for approval. A presidential decree is issued accordingly and the budget for compensation is made available at the Ministry of Finance. No one (owner or user) can financially benefit from the acquired land after the date of the presidential decree (cut out date).

However, in case of pressing time demands to expropriate land to a specific project serving public interest, the Government is entitled to seize the land immediately and then to initiate compensation negotiations with owners/users (Law 2/1953, Article (12)).

2.1.4 Palestinian Water Law

Palestinian Water Law Number 3 of 2002 aimed to develop and manage the water resources in Palestine, increase their capacity, improve their quality, and preserve and protect them from pollution and depletion. The law assigned the management of water and wastewater sectors to PWA and requires that all water and wastewater projects initially obtain a permit from the PWA. (Isaac and Rishmawi 2015). Article 3 of the law states that all water resources in Palestine are considered public property and recognizes water as a human right.

The new water law, Water Law Number 4 of 2014, aims to improve the level of water services, in addition to the objectives of Water Law Number 3. The law established a new institutional framework for the water sector that includes separation of regulatory, planning, and operation functions. The law identifies the roles and relations among various water sector institutions:

- The PWA has the overall responsibility for managing and regulating water resources, setting policies, determining water allocations, protecting water quality, and developing projects.
- The law authorizes the commercialization of water supply through the establishment of a National Water Company through restructuring the West Bank Water Department (WBWD).
- The law also provides for performance monitoring of water service providers by an independent Water Sector Regulatory Council, with legal status and budget independent from the PWA.
- Additionally, the 2014 Water Law requires that the PWA establishes four regional water utilities for the
 provision of water and wastewater services as legally and financially independent entities, which in
 turn requires consolidating existing water and wastewater service providers into regional entities.

2.2 Institutional Framework

The proposed bulk water supply system, northeast villages water distribution systems and Hebron wastewater operation and maintenance sub-projects and its components are being planned and designed, and the system would be constructed and operated under the authority of the institutions described below.

Palestinian Water Authority

The PWA was established under the Presidential Resolution No. 90 of 1995 to act as the main regulatory body for water resources management, development, and infrastructure planning in Palestine, as well as executing water policy (Isaac and Rishmawi 2015). The PWA is responsible for governing water resources in Palestine through applying the principles of integrated and sustainable management and regulating the water and sanitation sector by setting general policies and plans for the sector considering economic and social needs.

The PWA is also responsible for setting design and quality control standards and technical specifications for water projects and monitoring their implementation.

Accordingly, the planning, design, and construction of the proposed sub-projects are being undertaken under the authority of the PWA. The authority also will own the project components and will be the bulk water provider for local municipalities and LGUs in Jenin Governorate.

Water Sector Regulatory Council (WSRC)

According to Water Law Number 4 of 2014, the Water Sector Regulatory Council (WSRC) is responsible for monitoring all matters related to the operation of water service providers, with the aim of ensuring water and wastewater service quality and efficiency to consumers in Palestine at affordable prices. These responsibilities extend to the production, transportation, distribution, and consumption of water, and wastewater management. The council issues licenses to regional water utilities and any operators that establish or manage the operation of facilities for the supply, desalination, or treatment of water, or the collection and treatment of wastewater, and levies license fees.

National Water Company

The 2014 Water Law provides for the establishment of a National Water Company as a state-owned enterprise (on similar lines to the Israeli company Mekorot) that would be the bulk water provider for both the West Bank and Gaza. In March 2016, PWA drafted a road map, the National Water Company Draft Action Plan, for setting up the National Water Company through a phased transformation of the WBWD into the new company. The National Water company was recently established.

Municipalities and Local Governorate Units (LGUs)

Local authorities, such as municipalities and LGUs, are considered the water service providers in a number of communities. Local authorities, as per the local government law number 1 of 1997, are responsible for the provision of drinking water to their communities. In some areas, a coalition of municipalities has formed a joint services council to serve this purpose, while others provide this service directly. WBWD and the LGUs in the four villages at Jenin would be the responsible service providers (SPs) for the proposed bulk water system (subcomponent 1.1) and the water supply systems for the four villages (sub-component 1.2), respectively. Hebron municipality will be responsible for the operation and maintenance of Hebron wastewater treatment plant (sub-component 1.3).

2.3 World Bank Environmental and Social Framework

The World Bank Environmental and Social Framework represents the World Bank's commitment to sustainable development, through a Bank Policy and a set of ESSs that are designed to support Borrowers' projects. There are ten ESSs, these include:

- ESS1: Assessment and Management of Environmental and Social Risks and Impacts.
- ESS2: Labor and Working Conditions.
- ESS3: Resource Efficiency and Pollution Prevention and Management.
- ESS4: Community Health and Safety.
- ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.
- ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.
- ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.
- ESS8: Cultural Heritage.
- ESS9: Financial Intermediaries.
- ESS10: Stakeholder Engagement and Information Disclosure.

For details of World Bank ESSs can be found in the following link:

(http://pubdocs.worldbank.org/en/837721522762050108/Environmental-and-Social-Framework.pdf).

Table 2.1 summarizes the ESS requirements and their relevance to the WSRP-1 components:

Table 2.1. WB ESS requirements and relevance to the WSRP-1 project

| World Bank ESS Policy, Standards, Directive | Relevance & Extent of Relevance to the sub-project/project |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ESS-1 Assessment and Management of Environmental and Social Risks and Impacts | Detailed ESIA/ESMP will be prepared in addition to this ESMF, where required. |
| ESS-2 Labor-and-Working- Conditions | ESS2 is relevant. A separate LMP has been prepared, besides other site-specific management plans (e.g. OHS) will be prepared during construction phase which defines measures to be taken to address this ESS2. |
| ESS-3 Resource-Efficiency-and- Pollution-Prevention-and- Management | ESS3 is relevant. The Project will involve the construction of water systems, and operation and maintenance activities for wastewater treatment plants that would lead to significant increase use of water, generate wastes, sludge, effluent discharges, laboratory wastes that could cause pollution and would require considerable energy use. |
| ESS-4 Community-Health-and-Safety | This standard is relevant. Communities health and safety risks are related to working in areas where civil works will be conducted, e.g. digging of trenches for underground pipelines, foundations for the booster pumping stations, retaining walls and water reservoirs etc. and risks due to pest breeding, noise and bad smells from the Hebron wastewater treatment plant in case of non-compliance with performance standards. |
| ESS-5 Land-Acquisition- Restrictions-on-Land-Use- and-Involuntary- Resettlement | This standard is relevant. No large-scale private land acquisition or resettlement is proposed for the project. However, there may be some small-scale private land taking under Component 1.1 for the construction of the Bulk Water Supply System, including new water reservoirs and pumping stations, in four communities (Jenin, Burqin, Qabatiya and Mothalath Al-Shuhada), and under Component 1.2 for the Northeast Villages Water Distribution Networks in the Beit Qad, Jalboun, Deir Abu Daief and Arabuna community areas. A standalone RF has been prepared for the project including gap-filling measures between the national legislations and the ESF. Site specific Resettlement Plans (RPs) will be prepared once the technical designs of interventions are finalized. RPs will be consulted on, reviewed and cleared by the Bank and publicly disclosed. RPs will be implemented before commencement of construction. |
| ESS-6 Biodiversity-Conservation | This standard is currently not relevant. The project sites are in populated urban and rural areas that do not have high biodiversity conservation value and no ecosystem services are likely to be impacted by the Project. The site-specific ESIAs/ESMPs will assess the impacts on habitats of importance, if any identified, are within the impact area and will propose alternative |

| World Bank ESS Policy, Standards, Directive | Relevance & Extent of Relevance to the sub-project/project |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | routes for the water pipes and/or other requisite mitigation measures in line with the ESS6. |
| ESS-7 Indigenous-Peoples | This standard is not relevant to the proposed project. There are no Indigenous Peoples/Sub-Saharan Historically Underserved Traditional Local Communities in Palestine. |
| ESS-8 Cultural-Heritage | This Standard is currently not relevant. No tangible or non-tangible cultural or physical resources have been identified to be impacted by the operation. The project will involve extensive excavations and given the historic nature of the country there is always a chance to find tangible cultural heritage. Consequently, as a minimum, the chance find approach will be applied, and Chance Find Procedures (Annex 4) are prepared as part of this ESMF and will be incorporated in all works' contracts. |
| ESS-9 Financial-Intermediaries | Not relevant as there is no financial intermediary involved. |
| ESS-10 | A separate SEP has been prepared to address ESS10. |
| Stakeholder-Engagement- and-Information- Disclosure | |

2.4 WBG Environmental, Health, and Safety (EHS) Guidelines and Technical Note

WSRP-1 will further apply the WBG General EHS Guidelines from 2007, which are guidelines that contain the performance levels and measures that are acceptable to the WB. Where the national regulations differ from the levels and measures presented in these guidelines, the WSRP-1 will aim for whichever is more stringent.

2.5 WB Technical Notes

The following Good Practice Notes will also be consulted to ensure that mitigation measures developed are aligned with best industry practices: Addressing sexual exploitation and abuse and sexual harassment (SEA/SH) in investment; Projects financing involving in major civil works, 2020; Addressing Gender based violence in Investment Project Financing involving major civil works, 2018; Gender, 2019; Road safety, 2019; and Managing the risks of adverse impacts on communities from temporary project induced labor influx, 2016.

The WB Technical Note "Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints of conducting public meetings" (2020), will also be applied. This Technical Note makes due reference to the WHO technical guidance in dealing with COVID-19 and other diseases, including: Risk Communication and Community Engagement Action Plan Guidance Preparedness and Response; Risk Communication and Community Engagement readiness and response; COVID-19 risk communication package for healthcare facilities; Getting your workplace ready for COVID-19; and a guide to preventing and addressing social stigma associated with COVID-19.

3. PROJECT DESCRIPTION

3.1 Project Components

Project interventions cover the entire area of the West Bank and Gaza which is characterized by a great variation in topography and altitude. Some sub-project locations under the Water Security Resilience Program (WSRP) have already been identified such as (i) Construction of the Northeast Jenin Water Supply System (Component 1.1), (ii) the construction of the water supply system in the four villages in the Jenin area (Deir Abu Deef, Araboneh, Northern Beit Qad, and Southern Beit Qad (Component 1.2) and (ii) operation and maintenance (O&M) support to Hebron wastewater facilities for five years (Component 1.3). Components 2 and 3 of the operation cover the institutional capacity building and TA, while Component 4 is a contingency component (CERC) to allow for channeling funds in case needed in emergencies. Therefore, Components 2, 3 and 4 cover areas of the West Bank and Gaza.

The topography in the West Bank varies significantly in different governorates. More importantly, the areas in the West Bank are classified to Area (A) and Area (C) according to Oslo Accords between the Palestinian Authority (PA) and Israel. Area (A) is administered by the PA, while Area (C) is under the security control of Israel and any development in Area (C) has to be approved by the Israeli Civil Administration (ICA). These divisions, albeit political, impact the implementation of development projects in all sectors, including water and wastewater. The area of influence of this operation cover the 2 types (A, C). Some of the water pressure lines routes are aligned to roads located in Area (C) as well as the location of the Hebron Wastewater Treatment Plan (WWTP) located in Masafer Yatta south of Hebron. A number of Israeli settlements are located in the heart of Hebron city and around it, posing restrictions to Palestinians' daily life, city planning and administration, and daily functioning of government bodies and civil society actors.

Hebron, where Component 1.3 will be implemented, is the largest city in the West Bank, with a total area of approximately 74,100 dunums, including 30,000 dunums covered by housing units. It includes a large industrial estate with several industries including the stone cutting industry and tanning industry. These industries discharge their waste to the sewage network with high loads of slurry. The village of Al Heila, the nearest community to the Hebron wastewater facilities comprises around 6,000 dunums, including 2,500 dunums occupied by houses. Al Heila is a rural community located a distance of 6 km southeast of Hebron city.

The Hebron WWTP is currently under construction which is expected to be completed by June 2023. Without financial support and enforcement of separation of industrial waste (particularly the large amounts of slurry), the commissioning and operation of the Hebron wastewater facilities maybe delayed. As of now, the industrial waste is dumped randomly into the network and the influent stream is a mix of domestic wastewater and slurry. The project will finance the O&M activities in the WWTP facility to enhance the sustainability of the Hebron WWTP. Project interventions for water supply and distribution systems will be constructed along the right of way (ROW) of existing roads in Jenin governorate, mostly in rural areas of low population density.

3.2 Project Beneficiaries and Stakeholders

The direct beneficiaries of the Project (SoP-1) are the customers obtaining higher quality services through a better and more reliable water supply and associated gains in health and economic welfare. The estimated

beneficiaries are more than 100,000 residents of villages, and urban areas within Jenin Governorate. Communities to be covered by the project are prioritized based on the population density, poverty profile, and Water and Sanitation Hygiene (WASH) conditions, as well as their exposure to climate change risks. The average quantity delivered by West Bank service providers is 80 lcd, but this varies by the service provider from as little as 26¹ lcd in in Jenin governorate – barely more than the survival minimum for drinking, cooking, and personal hygiene. People in the Palestinian territory, especially women and children (girls) will benefit from project interventions in the form of reduced illnesses reduced discomfort, stress associated with the lack of access to safely managed water supplies and sanitation, and thus improved economic situation and well-being of the people in the project areas. Targeted households will also benefit from improved interaction with the water utilities and reduced response time in addressing their complaints.

The second group includes institutional beneficiaries profiting from improved infrastructure and capacity. The primary institutional beneficiary will be PWA which will profit from enhanced distribution capacity, service quality, as well as training to translate these infrastructure improvements into improved financial sustainability and greater accountability to customers. This will be achieved through investments in water metering, management training, energy efficiency, monitoring and investment planning capacity of PWA and improvement of the regulatory framework for operational and financial sustainability. Other relevant government institutions including WSRC, local governments, Municipalities, Village councils in the target project areas will also benefit from the strengthened institutional capacity for managing the water sector and providing higher-quality public services.

The third group includes the domestic private sector companies that will be able to benefit from the project by serving as suppliers of materials, equipment, and services, which will be procured by the project to implement the water supply investments and other commercial consumers.

3.3 Project Locations

The project area is located north of Jenin Governorate (sub-components 1.1 and 1.2) and Hebron Governorate (sub-component 1.3) which are located north and south of West Bank, respectively. The environmental situation for sub-component 1.3 is available in the Environmental, Social, Cultural Heritage Impact Assessment (ESCHIA) for Hebron wastewater treatment plant, which was prepared in 2018, provided in the following link:

http://pwa.ps/userfiles/file/%D8%AA%D9%82%D8%A7%D8%B1%D9%8A%D8%B1/ESCHIA%20Hebron%20Report-Final%202.pdf

And which was further amended in 2021, provided in the following link:

https://drive.google.com/file/d/17P3AmCDP3N4hxZRyt-Gn91pYtwqUaN43/view

The project area for sub-components 1.1 and 1.2 encompasses the villages where project facilities would be constructed, as well as the communities that would be served by the proposed action, as described in Section 2. The existing physical and natural environment was investigated through both desktop studies and field investigation.

¹ Toward Water Security for Palestinians, West Bank and Gaza Water Supply, Sanitation, and Hygiene Poverty Diagnostic, 2018

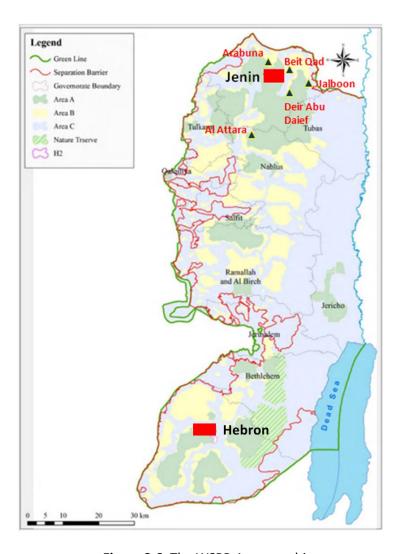


Figure 3.6: The WSRP-1 geographic area

4. Environmental and Social Situation

4.1 Topography

The topography of Jenin Governorate generally slopes from south to north and from east to west. The topography of the project area is dominated by a series of hills separated from each other by narrow valleys. The high point in the project area has an elevation of approximately 465 meters above mean sea level at Qabatya's existing water tank and a low elevation of approximately 86 meters above mean sea level near Jalameh.

Hebron city is located within the Hebron Mountains which extend from south of Jerusalem to the Negeb. The Hebron Mountains form the southern rim of the West Bank Mountains. On average, they are 850 meters high with the highest point at 1,020 meters above mean sea level near Kherbit Khellan, to the north of Hebron city. The proposed location of the HRWWTP is crossing Wadi As-Samen with an elevation ranging between 740 to 760 meter above sea level while the elevation is rising up in all sides of the site and reaches up to 840 meters.

4.2 Climate

The project area is highly influenced by its Mediterranean climate, which is characterized by long, hot, dry summers and short, cool, rainy winters. The project area has more moderate temperatures than other places

in the West Bank, with a mean annual temperature of 21.5 °C. The maximum mean monthly temperature is 28.4 °C during August whereas the minimum mean monthly temperature is 13.5 °C during January.

The average annual relative humidity in the project area was 66%. The maximum mean monthly relative humidity is 73.4% during December whereas the minimum mean monthly relative humidity is 56.8 during April.

In Palestine, typically the wind blows from the west and southwest most of the year, with an average annual wind speed of 9.7 kilometers per hour. In 2014 in Jenin Governorate, the average wind speed was 6.1 km/hour. The maximum mean monthly wind speed is 9.1 km/hour during July whereas the minimum mean monthly wind speed is 3.2 km/hour during December.

The average annual rainfall in the project area varies from 350 to 500 mm (Palestinian Central Bureau of Statistics (PCBS), 2016).

4.3 Geology and Soils

The Jenin Governorate is composed of the following geological formations:

- Alluvial deposits: Alluvial sediments are mainly derived from adjacent rock formations, and mostly composed of unconsolidated and laminated marl with some siliceous sand.
- Eocene Formation (Jenin formation): This formation is mainly composed of limestone, chalk, marl, marlly limestone, and chert.
- Senonian chalk (Abu Dies, Khan Al Ahmar, and Al Qilt formations): These formations mainly consist of chalk, marl, and bituminous marl with chert bands or nodules.
- Turonian-Upper Cenomanian (Jerusalem, Bethlehem, and Hebron formations): These three formations are composed of massive limestone, dolomitic limestone, dolomite, chalk, and marl.

4.4 Surface Water and Groundwater

The project area lies within Al Moqatta' and Al Khodera-Abu Nar catchment areas, which are parts of the thirty-three catchment areas in the West Bank. The Al Moqatta' and Al Khodera-Abu Nar catchments drains to the west, crossing the Israeli border (Green Line) before reaching the Mediterranean Sea. The streams in the catchment are seasonal, running only during the winter rainy season.

The ground water aquifers in the Jenin Governorate are the shallow aquifer (Eocene aquifer) and the deep aquifer (Turonian-Upper Cenomanian aquifer).

The Eocene aquifer is a local aquifer and is tapped by 10 operational agricultural private wells distributed in the region. The total discharge capacity from these wells is approximately 9.0 million cubic meters annually according to PWA. The depth of the water level in this aquifer ranges from 10 to 180 meters below the ground surface. In general, wells drilled in the Eocene aquifer are shallow with depths range between 100-250 meters. The extensive use of fertilizers in agricultural activities, lack of sewerage systems and uncontrolled sewage disposal in the project area are considered potential sources of pollution to groundwater.

The Turonian-Upper Cenomanian aquifer consists of three formations, Jerusalem, Bethlehem, and Hebron which hydraulically act as one aquifer characterized by its high groundwater potential. Wells in the Turonian-Upper Cenomanian aquifer are characterized by great depth (400-950 meters), high discharge capacity, and good water quality. Wells drilled in the Turonian-Upper Cenomanian aquifer system are mainly used for domestic purposes. Saadeh Well and Jenin Municipal well, which discharge approximately 1.58 MCM annually are using this aquifer.

The shallow and deep aquifers are separated by Senonian Chalks that form a strong aquiclude, forming natural protection for the deep aquifer from surface pollutants and mixing with the Eocene aquifer water.

4.5 Ecological Resources

The ecosystems in the West Bank support a diverse range of habitats and species, comprising a composite of African, European, and Asian flora and fauna. The Ministry of Planning studied ecologically significant and sensitive areas to identify and evaluate their "value, importance, sensitivity, and vulnerability." Using these studies, they have designated 50 areas for protection from development. None of the project components would occur within any of the 50 areas identified.

4.5.1 Flora and plants

The land parcels for construction of the regional reservoir tank were investigated and the following plants and common species indigenous to the area in specific and the Mediterranean in general were identified:

- summer pheasant's eye (Adonis aestivalis)
- smooth barley (Hordeum murinum subsp. glaucum)
- lilies-of-the-field (Anemone coronaria)
- high mallow (Malva sylvestris)
- blood flower (Scadoxus multiflorus subsp. multiflorus)
- Olive trees

In the main booster pump station near Jalameh, only smooth barley was found.

In the proposed Birqin booster pump station site near Al Jabriyat water tank, no flora or trees were found. The site is rocky with few red clay soil.

In the booster pump station in Qabatya, only smooth barley was found.

4.5.2 Fauna

Animals, including birds, are distributed in Palestine in 16 agro-zoological areas. The project area is within the Mediterranean agro-zoological area. The most common bird in the project area is the chukar or chukar partridge (Alectoris chukar). The species is not limited to the project area and, being widely distributed throughout all Palestinian mountain areas and relatively unaffected by hunting or habitat loss, is not threatened. Hunting of chukar is allowed.

Reptiles, including the Balkan emerald lizard (Lacerta trilineata) and Middle Eastern short-fingered gecko (Stenodactylus doriae), are commonly found in Palestine.

4.5.3 Protected Species and Areas

Under the National Spatial Plan, in 2014, the Ministry of Planning prepared the Protection Plan for Natural Resources and Archaeologic Sites – Northern Governorates. The plan classifies the project area predominantly as agricultural land of high and medium value, landscape of medium value, built-up area and forest area. Near, but not within, the project area, there is an area classified as forest (Al-Suweitat forest), which was planted with Cupressus trees. However, no project components would be constructed in or adjacent to the forest. The forest is a few hundred meters from the proposed site for the regional reservoir tank in Al Jenan neighborhood east of Jenin City. No known protected species or protected habitats were observed during field visits.

4.6 Seismology

In terms of seismicity, the West Bank is considered relatively active. Several earthquakes were recorded during the twentieth century. The region is located in what is described as a moderately active seismic zone, with a peak ground acceleration of 0.15 to 0.2 g, the acceleration of gravity (9.8 meters per square second on the surface of the earth at sea level).

According to the International Building Code, Uniform Building Code, Jordanian code, and Arab uniform code, the project area can be considered a moderate seismic area.

4.7 Air Quality

Compared to other environmental issues within the West Bank, air quality is not considered to be a priority. With the exception of fugitive particulate emissions, the ambient air quality appears to be acceptable. Winds are either from the Mediterranean or from the Negev Desert, neither of which is a source of anthropogenic emissions. Particulate matter appears to be principally in the form of dust from disturbed surfaces and streets (paved and unpaved) that is entrained into the air by motor vehicle tires and the wind. There is widespread agricultural groundcover and street drainage is good, resulting in only minor occurrence of airborne dust.

4.8 Land Use and Socioeconomics

As shown in Table 4.1, cultivated land represents less than 15 percent of the total land area of the West Bank, and 31 percent of the land area of Jenin Governorate. However, predominantly, the project area is cultivated, mainly with olive and almond trees. The plain of Marj Ibn Amer northeast of Jenin Governorate is heavily utilized for agricultural purposes including cereals (wheat, barley, lentils, chick pea) and vegetables. Scattered poultry farms, limited housing outside of the villages, and few commercial or industrial activities are present.

Table 4.1. Cultivated Land Area in the West Bank

| Geography | Total Land Area | Cultivated Land Area | | |
|-------------------|--------------------|----------------------|------|--|
| Cooglapiny | (km²) | (km²) | (%) | |
| West Bank | 5,655 | 843.5 | 14.9 | |
| Jenin Governorate | 583 | 180.9 | 31.0 | |

Note: km² indicates square kilometers. Reference: Series of Projects (PCBS) 2017.

In 2021 in the West Bank, the population density was 557 persons per square kilometer (PCBS 2021, Summary of Demographic Indicators in Palestine by Region). The estimated total population of Jenin governorate in 2021 was approximately 342,396. Over half of the populations of Jenin Governorate was urban, with more than one-third of the population rural. The 2021 unemployment rate in the West Bank was 16% and 19% for Jenin Governorate.

4.9 Archaeological Resources, Recreation, and Tourism

A purported Sufi worship structure was found near Al Jabriyyat water tank in Burqin which is located a few meters from the proposed Birqin booster pump station. No other archaeological, cultural or historical sites were found in the project areas.

4.10 Infrastructure

4.10.1 Water Supply and Wastewater

According to the PCBS (2017), in 2020 in the West Bank, 90.3 million cubic meters of water were purchased from Mekorot, representing 34.0 percent of the 187.8 million cubic meters total available water. The remaining available water for the year comprised 40.7 million cubic meters (21.7 percent) from the discharge of springs and 83.3 million cubic meters (44.3 percent) of water pumped from Palestinian wells (PCBS 2017). The existing water supply situation in the project area is described in Section 1.1.

In the project area, only Jenin City has both a sewage network and treatment plant. However, the collection system is old and poorly constructed and requires a full replacement. The WWTP is an aerated-lagoons system constructed in the 1980's and was rehabilitated in 2013. The treatment plant is not working properly and needs substantial upgrading to meet the PWA effluent criteria.

Reference: Water and sewerage master plan for the north and north-west region of the West Bank (2016).

In the targeted communities, onsite sewage disposal cesspits and septic tanks are normally used for disposal of the generated wastewater. In 2015, an estimated 61.9 percent of rural households in the West Bank used porous cesspits for wastewater disposal and 29.3 percent used tight cesspits; whereas only 7.6 percent of households disposed of their wastewater in the wastewater network and 1.2 percent used other disposal methods (PCBS 2015, Percentage Distribution of Households in Palestine by Wastewater Disposal Method, Region, and Locality Type, 2015).

In the absence of proper collection and treatment facilities, safe disposal is not accomplished. The vacuum tankers that remove sewage from the septic tanks and cesspits typically discharge into nearby wadis—valleys, ravines, or channels that are dry except in the rainy season—or open areas. This practice results in foul smells and potentially causes environmental pollution and health hazards, as it contaminates surface water and potentially groundwater resources, and can create breeding and other habitat for insects, rodents, and other organisms that transmit infectious diseases.

4.10.2 Roads

The road network in the West Bank and the project area, especially the main routes, comprises a well-developed road system. The regional transportation system, which connects the project area to the principal, regional urban centers of Ramallah, Jerusalem, Nablus, is in excellent condition.

The project area is accessed via an existing road network comprising regional and local roads. The roads network is mainly paved and in good condition. All installations and construction work under the scope of Jenin Water Supply System Projects would be implemented within or along these roads. Small segments of these local roads are dirt roads such as the access road to the regional reservoir tank and a few junctions still need to be constructed such as the access road to the main booster station in Jalameh.

4.10.3 Electricity

Electricity is supplied for all communities within the project area by Northern Electricity Distribution Company (NEDCO), providing 24-hour access to electricity. The existing electrical service between villages within the project area typically comprises 33 kilovolt medium voltage overhead transmission lines. Electricity to the booster pump stations and regional reservoir tanks would be provided by the existing electricity transmission lines through 33/0.4 KV step down transformers. Electricity lines were observed nearby and along proposed transmission pipeline alignments, booster pump stations and water tank sites.

4.10.4 Public Health and Safety

The people who reside in the project area suffer from an undersized, inadequate water distribution network. The World Health Organization (Howard and Bartram 2003, World Health Organization 2003) recommends a minimum of 100 liters per capita per day, supplied through multiple water taps within the house, as a standard for individual water use to assure consumption, hygiene, and other household needs. The threat to public health is worsened by the provision of water at a level of only 66 liters per capita per day for those villages currently served by the water supply for the Jenin Villages.

Given limited resources, the government typically has chosen to provide drinking water at the expense of good sanitation, potentially increasing the spread of infectious disease. In the project area, mainly cesspits and septic tanks are used for wastewater disposal as mentioned above.

5. ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

The WSRP-1 is expected to have a number of positive impacts (beneficial) including (but not limited to) an increase in the domestic water per capita consumption; a reduction in negative impacts on communities that suffer from water shortages; and capacity building and institutional reform to strengthen the social accountability and responsiveness of service providers.

5.1 Impact Assessment and Prediction

This section discusses the guideline to predict the potential and most typical impacts on the key environmental and social parameters of the project influence area based on the overall baseline, assessment of project components/sub-components and the primary assessment of the project activities.

5.1.1 Risk and Impacts Assessment Methodology

The assessment of impacts is an iterative process underpinned by four key questions:

Prediction: what change to the physical, chemical or social environment will occur if the project is implemented?

Evaluation: what are the consequences of this change? How significant will its impact be on human and biological receptors

Mitigation: if it is significant can anything be done about it?

Residual Impact: is it still significant after mitigation?

Where significant residual impacts remain, further options for mitigation will be considered and where necessary impacts are reassessed until they are reduced. The figure below shows the methodology that will be used to assess impacts.

| | | | | Effects | | |
|------------------|----------------------|------------|-------|---------|-------------|------|
| | | Negligible | Small | Medium | Substantial | high |
| Probability | Very likely | | | | | |
| of occurrence | Likely | | | | | |
| | May occur (50% of | | | | | |



Figure 5.1 Risk assessment methodology

5.1.2 Guidelines on Environmental and Social Risk Classifications

By assessing the applicability of ESSs to each of the project's subcomponents, and its environmental risk rating, this ESMF will be able to recommend the appropriate environmental and social management instruments, namely ESIA, ESMP, SEP, and RF, to comply with the World Bank ESF and ESSs. The identified needed instruments for WSRP-1 are clarified in section 5 of this ESMF.

The World Bank Environmental classifications on which the projects subcomponents will be classified are presented below:

- (a) High Risk classification: A Project is classified as *High Risk* after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable.
- a. The Project is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the Project, the scale (large to very large) or the sensitivity of the location(s) of the Project. This would take into account the following characteristics: (i) long term, permanent and/or irreversible, and impossible to avoid entirely due to the nature of the Project; (ii) high in magnitude and/or in spatial extent; (iii) significant adverse cumulative impacts; (iv) significant adverse transboundary impacts; and (v) a high probability of serious adverse effects to human health and/or the environment;
- b. The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas.
- c. Some of the significant adverse E&S risk and impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.
- d. There are significant concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security.
- e. There is a history of unrest in the area of the Project or the sector, and there may be significant concerns regarding the activities of security forces.
- f. The Project is being developed in a legal or regulatory environment where there is significant uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex Projects, or changes to applicable legislation are being made, or enforcement is weak.
- g. The past experience of the Borrower and the implementing agencies in developing complex Projects is limited, their track record regarding E&S issues would present significant challenges or concerns given the nature of the Project's potential risks and impacts.
- h. There are significant concerns related to the capacity and commitment for, and track record of relevant Project parties, in relation to stakeholder engagement.

- i. There are a number of factors outside the control of the Project that could have a significant impact on the E&S performance and outcomes of the Project.
- **(b) Substantial Risk classification**: A proposed project is classified as **Substantial Risk** taking into account the following, as applicable.
- a. The Project may not be as complex as High Risk Projects, its ES scale and impact may be smaller (large to medium) and the location may not be in such a highly sensitive area, and some risks and impacts may be significant. This would take into account whether the potential risks and impacts have the majority or all of the following characteristics: (i) they are mostly temporary, predictable and/or reversible, and the nature of the Project does not preclude the possibility of avoiding or reversing them (although substantial investment and time may be required); (ii) there are concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to a limited degree of social conflict, harm or risks to human security; (iii) they are medium in magnitude and/or in spatial extent (the geographical area and size of the population likely to be affected are medium to large); (iv) the potential for cumulative and/or transboundary impacts may exist, but they are less severe and more readily avoided or mitigated than for High Risk Projects; and (v) there is medium to low probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.), and there are known and reliable mechanisms available to prevent or minimize such incidents;
- b. The effects of the Project on areas of high value or sensitivity are expected to be lower than High Risk Projects.
- c. Mitigation and/or compensatory measures may be designed more readily and be more reliable than those of *High Risk* Projects.
- d. The Project is being developed in a legal or regulatory environment where there is uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex Projects, or changes to applicable legislation are being made, or enforcement is weak.
- e. The past experience of the Borrower and the implementing agencies in developing complex Projects is limited in some respects, and their track record regarding ES issues suggests some concerns which can be readily addressed through implementation support.

There are some concerns over capacity and experience in managing stakeholder engagement, but these could be readily addressed through implementation support.

- **(c) Moderate risk classification:** A project is classified *as Moderate Risk* after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable:
- a. The potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. This is because the Project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential risks and impacts and issues are likely to have the following characteristics: (i) predictable and expected to be temporary and/or reversible; (ii) low in magnitude; (iii) site-specific, without likelihood of impacts beyond the actual footprint of the Project; and (iv) low probability of serious adverse effects to human health and/or the environment (e.g., do not involve use or disposal of toxic materials, routine safety precautions are expected to be sufficient to prevent accidents, etc.).
- b. The Project's risks and impacts can be easily mitigated in a predictable manner.
- (d) Low Risk: A project is classified as *Low Risk* if its potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. These Projects, with few or no adverse risks and impacts and issues, do not require further ES assessment following the initial screening.

5.2 Potential Key Environmental and Social Impacts of the sub-projects (ESS1-10)

The overall impact assessment of the proposed WSRP-1 project activities to be implemented reveals that most of the likely negative impacts could be minimized or eliminated by adopting standard mitigation measures.

The potential impacts of the WSRP-1 project on the key environmental and social parameters that have been identified as part of the ESMF are listed in Table 5.1, which has also been analyzed according to the ESS1 risk categories based on the significance of each impacts following the criteria defined in Sub-section 5.2.1 and 5.2.2 and Tables 6.1 to 6.3. In the subsequent sections, these impacts and guidelines for mitigation are discussed.

Environmental and Social Risk Classification (ESRC) of the WSRP-1 project has been rated as 'Substantial', as most of the impacts are medium to low probability of serious adverse effects to human health and/or the environment, short term, site specific and mitigatable. Further environmental assessment studies i.e., ESIA and ESMP should modify and further detail out this analysis as applicable, based on professional judgment and public consultations. A preliminary categorization of the project components/sub-components based on their environmental assessment requirement is given in Table 5.1 following the WB ESF and ESSs.

Table 5.1: Categorization of WSRP-1 project activities based on ESS requirements and Risk Classification

| Component | Sub-component | Activities | Potential Impacts | Risk category | ESSs Requirement |
|-----------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component 1 - Improvement of Water and Wastewater Infrastructure and Service Management | Sub-Component 1.1 – Bulk Water Supply System in Jenin | Construction of bulk main supply and distribution pipelines, regional reservoir tanks, and main and local booster pump stations | Air pollution. (ESS4) Noise and dust emissions from civil works (ESS4) Soils, ground water and surface water Wastewater generation Risks of traffic and road safety (ESS4) Impact on biodiversity, loss of trees and damage to other vegetation (ESS6) Occupational Health and Safety risks from construction equipment (ESS2) Community health and safety risks (ESS4) Generation and dumping of debris (excavated soils, (ESS3) Increase in the quantity of wastewater generated due to increase in per capita water consumption (ESS1/ESS3) Socio-economic impacts of the private water vendors (ESS1) labor management risks (ESS2) GBV/SEA/SH (ESS4) Social exclusion from or inequitable provision of project benefits and or lack of meaningful engagement (ESS1/ESS10) Social resistance to measures for better tariff collection and reduction of Non-Revenue Water (NRW) (ESS1/ESS10) Small-scale private land taking (ESS5) Water quality during operation | Substantial | ESIA including SEP and LMP sections according to project SEP and LMP, incorporate measures to manage traffic and road safety risks, ERP, OHS plan, WMP, Community Health and Safety (CHS) measures (guidelines are provided in annex 1) as required in the ESIA/ESMP, preparing a Resettlement Plan (RP) in line with the project RF , if necessary. |
| | Sub-component 1.2 – Northeast Villages | Construction of a water supply | · | Moderate | ESMP including SEP and LMP sections according |

| Component | Sub-component | Activities | Potential Impacts | Risk category | ESSs Requirement |
|-----------|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Water Distribution System in the Jenin area | system in northeast Jenin villages in northeast area (Deir Abu Daief, Arabuna, Northern Beit Qad, and Southern Beit Qad) | scope. No private land taking but Right of Way (RoW) may be encroached in certain parts by users who have either extended or built structures, farms etc. in the RoW | | to project SEP and LMP, incorporate measures to manage traffic and road safety risks, ERP, OHS plan, WMP, CHS measures as required in the ESMP; a separate assessment study covering the environmental, social and economic aspects for impacts on private water vendors (subcomponent 1.1 and 1.2) |
| | Sub-Component 1.3 – Hebron Wastewater Operation and maintenance | | Impacts on Water Resources Impacts on Groundwater Quantity Impact on Soil Risks Associated with Sludge Handling Risks Associated with Risk of recontamination of effluent Odor, pest, and Noise Impacts due to spillage and handling and disposal of hazardous substances and hazardous wastes Risks of migrating snakes to neighboring communities continuing of wastewater streams to wadi Al-Samen from the downstream communities and eventually crosses the green line to Israel contextual risks due to legacy issues associated with the Hebron WWTP | Risks and impacts and mitigation measures were covered under the ESCHIA for Hebron Wastewater Treatment Plant, January 2021. | - Prepare, adopt, and implement an Environmental and Social Report for the performance of the Hebron WWTP facility before project funds are used for subcomponent 1.3to ensure compliance with all provisions of the ESCHIA 2021 of the WWTP Review, update, and maintain the ESMP for the operation phase of the Hebron Wastewater treatment plant |

| Component | Sub-component | Activities | Potential Impacts | Risk category | ESSs Requirement |
|---------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | prepared under the ESCHIA 2021, including all management plans such as Pest Management Plan, Occupational Health and Safety (OHS) plan, and Emergency Response Plan (ERP). Review and update the Waste Management Plan (WMP) prepared under the ESCHIA Hebron wastewater treatment plant, to manage hazardous and non-hazardous wastes, consistent with ESS3. |
| Component 2 - Improve performance of Water Sector Service Providers | Subcomponent 2.1: Strategic planning and sector reform | Type 2 Supporting the formulation of policies, programs, plans, strategies or legal frameworks | The environmental and social risks of the TA will be addressed by instruments prepared proportional to the scope of the activities when determined during implementation. Type 2 TA activities would results to potential direct or indirect adverse downstream environmental and social impacts. | To be determined during implementation | Terms of References (ToR) for the respective TA initiatives and capacity building shall ensure compliance with the ESF requirement in cases where the envisaged activities have direct or indirect relationship with the respective ESS standard (ESS 1) |

| Component | Sub-component | Activities | Potential Impacts | Risk category | ESSs Requirement |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Subcomponent 2.2: Improve Financial and Operational Performance of the Service Providers | Type 3 Strengthening borrower capacity. | Type 3, activities to be supported under this sub- component would not result in significant environmental and social implications. However, if there are E&S implications, risk mitigation measures will be devised in line with the ESF/relevant ESSs | | Any relevant E&S risks will be assessed and mitigation measures included in line with the ESF/relevant ESSs |
| | Subcomponent 2.3: Improve Social Accountability of Service Providers | Type 3 Strengthening borrower capacity. | Type 3, activities to be supported under this sub-component would not result in significant environmental implications. However, there may be social exclusion risks, and these will be assessed during relevant preparatory studies, assessments etc. and addressed in the detailed design of the sub-component activities. | To be determined during implementation | Assess social exclusion risks in relevant studies and include mitigation measures in the detailed design of the subcomponent activities. |
| Component 3 - Project Management and Monitoring | | N/A | N/A | N/A | PWA government staff (civil servant) shall be Excluded from E&S Assessment. Provisions in the LMP will be applicable to direct workers, contracted workers and primary supply workers. |
| Component 4 - Contingent Emergency Response Component (CERC) | - | Emerging needs in the sector in the case of emergencies and/or disasters. The Project Operation Manual | Risks associated with this component are of a similar nature and magnitude identified for other components of the project | To be determined during implementation | - PWA will prepare a CERC Manual and ensure that it includes a description of the ESHS assessment and management arrangements including, |

| Component Sub-component | Activities | Potential Impacts | Risk category | ESSs Requirement |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | (POM) will include a positive list of eligible activities of a similar nature to other components, e.g., rehabilitation of networks, and operation of water and wastewater facilities. | | | implementation of the CERC component in accordance with the ESSs. - PWA will prepare and adopt any environmental and social (E&S) instruments which may be required for activities under the CERC component, in accordance with the CERC Manual and the ESSs, and thereafter implement the measures and actions required under said E&S instruments, within the timeframes specified in said E&S instruments. A list of Positive and Negative List for CERC is given in Annex 6. |

5.2.1 Potential Environmental and Social Impacts for Sub-component 1.1 and 1.2 during Project Implementation

Working activities will have substantial environmental impacts during construction on the following parameters:

Noise emissions: Construction and installation phase could generate increased noise and disturbance to the surrounding properties and neighbors. Allowed level in dB of the used equipment on operations will be according to vicinity to residential area.

Soils and ground water and surface water: OPERATION AND MAINTENANCE PHASE ISSUE – In association with the expanded availability and improved reliability of water supply, more wastewater would be generated. If not appropriately addressed, the generation of more wastewater likely would pose risks associated with contaminated soils, ground water, and water quality of springs and streams.

Wastewater: OPERATION AND MAINTENANCE PHASE ISSUE – In association with the expanded availability and improved reliability of water supply, more wastewater would be generated.

Traffic and road safety: CONSTRUCTION PHASE ISSUE – Areas in the direct vicinity of the project sites would experience an increase in traffic volume due to the deployment of construction vehicles, transport vehicles, and equipment. Roads adjacent to the installed pipelines would be subject to partial or total periodic closure during the construction sequence, which may increase trip times for vehicles traveling through the project area and may impair access for emergency and public service vehicles. Moreover, road pavement conditions may be impacted due to the construction activities.

Impacts on biodiversity: Generally, the construction of the supply systems is classified to have no adverse impacts on biodiversity as construction will happen in the RoW of existing roads. However, the exact route of the pipelines and the locations for pumping stations and water tanks will be determined upon finalization of the sub-project design. The impact on biodiversity will be assessed when preparing the environmental and social site-specific documents. Where significant risk and adverse impacts on biodiversity are expected, adopt and implement a Biodiversity Management Plan (BMP) as part of the ESIA/ESMP to be prepared for sub-component consistent with ESS6. If required, an expert consulting firm will be hired to carry out the studies and to conduct biodiversity monitoring during construction and post-construction periods.

Cultural Heritage: CONSTRUCTION PHASE ISSUE – Construction of the proposed project components would potentially disturb historical and cultural resources located adjacent to or near the project construction sites, as well as old town areas within most villages in the project area that are heritage areas.

Solid Waste Management: CONSTRUCTION, AND OPERATION AND MAINTENANCE PHASES ISSUE – Uncontrolled disposal of sub-component construction waste disposal, if not appropriately addressed, would negatively impact the surrounding environment.

Land Acquisition: No large-scale private land acquisition or resettlement is proposed for sub-components 1.1 and 1.2. However, there may be some small-scale private land taking under sub-component 1.1 for the construction of the Bulk Water Supply System, including new water reservoirs and pumping stations, in four communities (Jenin, Burqin, Qabatiya and Mothalath Al-Shuhada), and under Component 1.2 for the Northeast Villages Water Distribution Networks in the Beit Qad, Jalboun, Deir Abu Daief and Arabuna community areas. Also, the RoW may be encroached on certain segments of the sub-project alignments which may entail livelihood impacts that will need to be assessed and, compensated (if required).

Similarly, there is a potential risk of temporary negative livelihood impacts during construction (e.g. due to restrictions on access and land use) on businesses (e.g. shops, kiosks etc.) in commercial areas. Some portions of the proposed pipeline routes of the Northeast Jenin water system are passing through "Area C which is under the Israeli control according to Oslo agreement between the Palestinian Authority and Israel" and will require permission from the Israeli Authorities. In such cases, verification of status and proof of land ownership may be complicated due to contextual factors and increase the time required for sub-project preparation and implementation.

Labor and working conditions: The project activities will involve direct workers (PCU and the field Engineers staff); contracted workers engaged in construction (hired by contractors and subcontractors) and consultancy services (e.g. for preparation of E&S documents); and primary supply workers (i.e workers of suppliers who, on an ongoing basis, provide directly goods or materials essential for the core functions of the project). An assessment of project workers will be completed before project effectiveness and included in the project LMP.

These sub-projects are associated with considerable risks to occupational health and safety during construction and maintenance. Each contractor should present an OSH plan including risk assessment and mitigation measures. Labor camps will not be required and risks associated with labor influx are considered low. The project involves a range of construction activities such as pipeline trench excavation, new pipe and connection laying and joining, connection with existing pipes, trench backfilling, roadway reinstatement along the pipeline route, formworks for the building, foundations and retaining walls, mechanical work and fittings for the pump buildings and pipe yard, electrical work for lighting and instrumentation, and well borehole excavation, etc. to be implemented in Jenin and Hebron Governorates in the West Bank. Therefore, there will be labor management issues such as (but not limited to) OHS, working terms and conditions, equal opportunity, and SEA/SH. Risks of child and forced labor are anticipated under the project. There might be some small-scale labor influx due to employment of workers from other governorates; however, this risk is currently assessed as low.

Socio-economic impacts of the private water vendors: Currently, households in the villages to be served under sub-component 1.2 do not have public supplied water as a drinking water source. The only source of drinking water is the fresh water provided by private water vendors. The price of this water varies from place to place and from distributor to another. The current cost per 1 m3 of purchased drinking water from private vendors is between 12 to 20 NIS. The new water supply systems in the four villages will negatively impact the socio-economic conditions of these vendors.

Social Exclusion: Lack of inclusion leads to grievances over subproject selection and benefits. There is a risk that some groups are not included in decision making fora and that they do not end up benefitting from the subprojects. This can lead to grievances over the decision-making fora, those in decision-making powers and the sub projects. The project's SEP includes a comprehensive identification of various categories of stakeholders and a methodology for information sharing and disclosure and for ongoing consultation with all stakeholders, including marginalized groups, to ensure that all stakeholders are engaged throughout the project.

Affordability and Willingness to Pay for Water Services: The project will have an impact on water tariff and the affordability of water prices for local communities. Limited willingness to pay for water by local communities, may lead to lack of opportunity for investment in the project facilities and funding for maintenance in the future.

GBV/SEA/SH: Based on past experience of the PWA projects, WSRP-1 is assessed as low on GBV/SEA/SH risk. The Project will not require establishing labor camps or experience any labor influx or issues related to the presence of migrant workers. Most sub-project activities will be implemented employing small numbers of workers who will be employed locally. The GBV/SEA/SH risks will continue to be monitored during project implementation. Special features to address any GBV/SEA/SH related complaints will also be included in the grievance mechanism. In addition, all labor and staff will need to sign the Code of Conduct as a preventive measure for GBV/SEA/SH risk. Code of Conducts is presented in Annex 7 as an example and can be edited to be appropriate with the nature of the sub-project activities and location.

5.2.2 Likely Environmental and Social Impacts of Subcomponent 1.3

Project **sub-component 1.3 Hebron Wastewater Operation and maintenance** which shall include financing the operation and maintenance of the Hebron Regional Wastewater Treatment Plant (HRWWTP) that is expected to be commissioned and put into operation by June 2023 for five years (project duration). This subcomponent will finance all staffing, materials, and management costs for operating the Hebron wastewater treatment plant. Therefore, the environmental and social risks are the ones associated with the plant's operation.

The risks and impacts and mitigation measures were covered under the ESCHIA for Hebron Wastewater Treatment Plant, January 2021² summarized here for easy reference:

The environmental and social risks are "Substantial". The risks are as follows: Potential ground water pollution from infiltration of non-compliant effluent, Soil contamination, OHS risks, risks to workers and community associated with handling, transportation, and disposal of generated sludge, Environmental risks including noise, dust, and spillage of chemical, odor, pest issues in case of malfunction, Risks of migrating snakes to neighboring communities, Risk of poor performance of the WWTP due to dumping slurry (coming from stone-cutting industries) or toxic materials into the sewage stream flowing to the WWTP, and Risk continuing the discharge of wastewater streams to wadi Al-Samen from the downstream communities and eventually crosses the green line to Israel, in addition to the contextual risks due to legacy issues associated with the Hebron WWTP.

5.2.3 Environmental and Social Impacts of Components 2 and 4

The environmental and social impacts for Component 2- Improve performance of Water Sector Service Providers; (ii) Component 3 - Project Management and Monitoring; and (iii) Component 4 - CERC are illustrated in Table 5.1 above. Each subproject will be subject for screening as described in section 5.2.5 and appropriated instrument will be prepared accordingly.

And which was further amended in 2021, provided in the following link:

https://drive.google.com/file/d/17P3AmCDP3N4hxZRyt-Gn91pYtwqUaN43/view

² http://pwa.ps/userfiles/file/%D8%AA%D9%82%D8%A7%D8%B1%D9%8A%D8%B1/ESCHIA%20Hebron%20Report-Final%202.pdf

5.2.4 ENVIRONMENTAL AND SOCIAL INSTRUMENTS

The ESMF has identified the applicability of different ESSs to the Project activities as clarified above and identified that the following instruments will be used for different project interventions:

- For sub-componet 1.1: Prepare site-specific ESIA including a Stakeholder Engagement sections
 description of the project's GM according to project SEP and a Labor Management section
 including the GM for workers according to project LMP, and updating the project RF to RAP if
 necessary.
- For sub-component 1.2: Prepare site-specific ESMP including a Stakeholder Engagement sections
 description of the project's GM according to project SEP and a Labor Management section
 including the GM for workers according to project LMP; preparing a RP in line with the RF if
 required.
- 3. For sub-component 1.3: Prepare Environmental and Social Report for the performance of the Hebron WWTP facility after commissioning and operation to ensure compliance with all provisions of the ESCHIA 2021 of the WWTP. Review, update, and implement the ESMP for the operation phase of the Hebron Wastewater treatment plant prepared under the ESCHIA 2021, including all management plans such as Pest Management Plan, Occupational Health and Safety Plan (OHS) plan, and Emergency Response Plan (ERP). Review and update the Waste Management Plan (WMP) prepared under the ESCHIA Hebron wastewater treatment plant, to manage hazardous and non-hazardous wastes, as described under 1.2 above, consistent with ESS3.
- 4. ToR for the respective TA initiatives and capacity building shall ensure compliance with the ESF requirement in cases where the envisaged activities have direct or indirect relationship with the respective ESS standard (ESS 1).
- 5. PWA will prepare a CERC Manual and ensure that it includes a description of the ESHS assessment and management arrangements including implementation of the CERC component in accordance with the ESSs.
- 6. PWA will prepare and adopt any environmental and social (E&S) instruments which may be required for activities under the CERC component, in accordance with the CERC Manual and the ESSs, and thereafter implement the measures and actions required under said E&S instruments, within the timeframes specified in said E&S instruments.
- 7. The E&S instruments and plans for the project components, how who and when are summarized in the table 5.2.
- 8. Table 5.2: Summary of the E&S instruments for the WSRP-1 components, how who and when

| Project sub- component | E&S instruments | How | When | responsibility |
|---------------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------|
| sub-componet 1.1 | ESIA | Prepare ToR (template ToR is presented in annex 10) in line with ESS1-Annex 1. Environmental and social section E in page 26 of the WB ESF. The ToR and prepared | The ESIAs will be reviewed and cleared by the Bank and disclosed by June 2023 and prior to the commencement of the bidding process. | PWA |

| | | instruments will be shared with the World Bank for review and clearance | | |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| sub-componet 1.2 | ESMP | Prepare ToR in line with ESS1-Annex 1. Environmental and social section D in page 25 of the WB ESF. The ToR and prepared instruments will be shared with the World Bank for review and clearance | The ESMPs will be reviewed and cleared by the Bank and disclosed by June 2023 and prior to the commencement of the bidding process. | PWA |
| sub-componet 1.3 | E&S report for the performance of the Hebron WWTP facility before project funds are used for subcomponent 1.3. Review, update, and implement the ESMP for the operation phase prepared under the ESCHIA 2021 | with the quality standards to be achieved and the | The E&S Report should be furnished, and the report reviewed and cleared by the World Bank once the E&S Measures are implemented and the WWTP is operational as per the standards. | PWA |
| Component 2 | E&S instrument required for the TA/capacity building subproject as per the recommendation of the E&S screening process to be conducted | Conduct E&S screening of the subproject as described in this ESMF | When preparing the TA/capacity building subprojects | PWA |
| Component 4 | Prepare a CERC Manual | Prepare and adopt any environmental | December 2023 | PWA |

| and social (E&S) | |
|----------------------|--|
| instruments which | |
| may be required for | |
| activities under the | |
| CERC component of | |
| the Project, in | |
| accordance with the | |
| CERC Manual and | |
| the ESSs | |
| | |

Labor management procedure (LMP): LMP has been prepared to fulfill the requirements of ESS2 and the national requirements. LMP addresses the risk and mitigation measures associated with labor and working conditions including establishing and implementing the GM. The LMP will be disclosed no later than one month after project effectiveness.

Stakeholder Engagement Plan (SEP): a standalone SEP has been prepared in compliance with ESS10 for the WSRP-1 project to define a program for stakeholder engagement including public information disclosure and consultation, through the entire project cycle as follows: (i) it provide guidance for stakeholder engagement and information disclosure, (ii) identify the main stakeholders of the project components and activities, (iii) provide the opportunity for identified stakeholders to participate in the process of identifying any potential impacts and/or concerns, (iv) identify those environmental and social impacts/concerns, which are considered to be of key relevance and importance through a process of information disclosure and meaningful consultation, (v) ensure appropriate approach and adequate focus is adopted during the project implementation, (vi) identify the most effective methods, timing and structures through which to share project information, and to ensure regular, accessible, transparent and appropriate consultation, (vii) ensure that the identified stakeholders are appropriately engaged on issues that potentially affect them in addition to managing the Grievance Mechanism (GM) that will be operationalized by PWA during the project life, especially during implementation, (viii) define clear roles and responsibilities for the implementation of the stakeholder engagement, and (ix) guide the building of a mutually respectful, beneficial and lasting relationships with stakeholders; and ensure that the GM is accessible. Further details are included in the SEP disclosed at Further details are included in the SEP disclosed on PWA website http://www.pwa.ps/

Resettlement Framework (RF): RF has been prepared as separate document for the WSRP-1 project in accordance with ESS5 to minimize requirements for acquisition of private land and maximize the use of governmental unoccupied lands,. The RF establishes a process that will be used if and when land acquisition, voluntary land donation and/or restriction on land use is unavoidable for the project subcomponents. Potential lands required for project activities and an estimated number of affected people have been identified. However, these will be finalized once the detailed design and exact locations/alignments of interventions are finalized. The RF covers Sub-Component 1.1 where land acquisition will be required for the construction of water reservoirs and pumping stations and subcomponent 1.2 where the Right of Way (RoW) may be encroached in certain parts by users who have either extended or built structures, farms etc. in the RoW. In such cases, there may be some small-scale livelihood and/or economic displacement impacts. No resettlement activities are needed under subcomponent 1.2 as the required lands are part of the Local Government Units (LGUs) properties. As

required by the RF, consultation with local authorities and Project Affected Persons (PAPs) at various site locations were conducted by PWA. The participants were informed about the project's features and possible impacts on the local population. The feedback and areas of concern provided by the participants were carefully recorded for further action.

Resettlement Plan (RP): PWA will prepare RPs for the infrastructure components during project implementation, if required, based on the RF. Site specific Resettlement Plans (RPs) will be prepared once the technical designs of interventions are finalized. RPs will be consulted on, reviewed and cleared by the Bank and publicly disclosed. RPs will be implemented before commencement of construction. A commitment to prepare and implement RPs during project implementation will be included in the project ESCP.

5.2.5 Environmental and Social Screening Process

The PCU will be responsible for the screening the WSRP-1 project activities. The screening will be based on a site- or project-specific Environmental and Social and Screening Form (see Annex 9). All proposed subprojects under component 1, 2 and 4 will be subjected to a screening process by the Environmental Specialist and the Social Specialists at PCU to determine and assign them an environmental and social risk rating and further identify any potentially sensitive environmental and social receptors likely to be negatively impacted. The outcome of the screening will determine whether a) the activity is high or substantial risk and will be screened out, b) site-specific ESMPs or other E&S instruments (e.g. RAPs) are required, c) or whether a full ESIA is required. The types of ESMPs to be prepared will depend on the complexity of the subproject, it can either be a simplified ESMP, a detailed ESMP done internally, or an ESMP that is prepared by a consultant. Internally prepared ESMPs will be prepared by PCU.

The screening report will further help to determine which ESF standards are applicable and which steps need to be taken and which provisions or procedures apply, as laid out in the ESMF.

6. Project Mitigation Measures and Management of Risks and Impacts

In line with ESS 1, for the elaboration and implementation of the environmental and social mitigation measures, the project is adopting the following mitigation hierarchy approach:

- Anticipate and avoid risks and impacts;
- Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
- Once risks and impacts have been minimized or reduced, mitigate;
- Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.

6.1 Guidelines for Environmental and Social Management

The below matrix (Table 6.1 for subcomponent 1.1 and 1.2) lists the guidelines for prevention, minimization, mitigation and compensation activities for each activity's risks and impacts identified in the previous section. It disaggregates them by ESS. The table should serve as a reference on risks and impacts during construction and operational phases and in regard to the associated international industry best practices and mitigation measures that can be planned and implemented throughout the project life cycle. The costs of mitigation measures will be calculated for each activity in the sub-component specific ESMPs. The ESMP for sub-component 1.3 was prepared under the ESCHIA for Hebron Wastewater Treatment Plant, January 2021 and presented here in Table 6.2 for easy reference.

Table 6.1. Guidelines for the environmental and social management and monitoring of sub-components 1.1 and 1.2

| | | Pha | ise | 1 | Indicators for monitoring | Frequency of monitoring | | | Responsibility |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------|---------|-------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| ESS 1: Assessment and Managem | ent of Environmental and Social of Risks and Impacts | I | | | | | | | 1 |
| Prepare the environmental and social | instruments for the project components and sub-components | s des | cribed | l in se | ection 5.2.4 | | | | |
| ESS2: Labor and Working Condition | | | | | | | | | |
| Occupational Health and Safety risks for workers | Incorporate OHS measures and ERP in the subcomponent ESIA/ESMP to be prepared by PWA The construction workers will be appropriately trained on OHS risks, hazards and safe working procedures, based on EHS Guidelines on OHS³ Provide appropriate PPE, continuous reminders to use PPE, use of signage and continuous supervision, based on EHS Guidelines on OHS Communicate and implement GM/workers' GM Contractors to develop and implement C-ESMP (guidelines for C-ESCP is provided in section 7.3) including OHS measures (guidelines for OHS measures is provided in annex 1) Implement LMP Reference OHS requirements in bidding documents and contracts | x | x | | - OHS measures, ERP incorporated in ESIA/ESMP - # of safety incidents - # of grievances filed - # of grievances accepted and solved - # type, and timeliness in response in relation to worker | | x | | PWA Contractor |
| Risk of Child labor Risk of Forced Labor | - Comply with the LMP of the project namely: | | х | | - # of worker's violations (child, forced labor) | | | х | Contractor |

³ IFC, Environmental, Health and Safety Guidelines, accessed at: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at ifc/policies-standards/ehs-guidelines

| | | Pha | ise | ı | Indicators for monitoring | | uency o | of | Responsibility |
|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| | Set a minimum age for all types of work (in compliance with national laws and ESS2) and document age of workers upon hiring Conduct a track record search of the contractors at the bidding process (record of health and safety violations, fines, consult public documents related to workers' rights violations etc.) Raise awareness of contractors/suppliers to not engage in child labor | | | | | | | | |
| Discriminatory hiring practices | Ensure Project GM are accessible. Additional information on the complaints' mechanism including mechanisms to manage GBV/SH related grievances is detailed in the SEP Provide workers' GM. Additional information on workers' GM shall be included in the LMP | | х | | # of grievances filed # of grievances accepted and solved Percentage of cases solved and the time required to find a solution | | | х | Contractor/ PWA |
| Lack of adherence to requisite working terms and conditions | Provide contracts or other documentation as required to workers detailing terms and conditions Signing the Code of Conduct for Workers Ensure workers are aware of working terms and conditions Provide workers' GM | | | | # of contracts signed Workers' register with information Awareness raising sessions for workers # of grievances filed # of grievances accepted and solved | | | | Contractor/ PWA |
| Lack of understanding of EHS risks and impacts and of mitigation measures leads to accidents and health impacts | - Ensure training on EHS to all workers Ilution Prevention and Management | | х | | - # Number of trainings provided to workers | | | x | Contractor/ PWA |

| ENVIRONMENTAL AND SOCIAL IV | | Pha | se | 1 | Indicators for monitoring | | uency o | of | Responsibility |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| By generating more wastewater: - Exceeding the capacity of the existing wastewater infrastructure - Contaminating soils, springs and surface water streams, and groundwater - Posing public health risks | Conduct public awareness campaign through flyers, mass media, public meetings or workshops, or the local council to: Encourage diverting greywater directly to open channels, storing greywater on site prior to diversion or reuse, and reusing greywater Encourage more frequent hiring of vacuum tankers to remove sewage from cesspits Encourage replacing cesspits with reinforced concrete septic tanks that provide for primary anaerobic treatment of wastewater and discharge into subsurface leach fields, or are evacuated and the effluent discharged to designated safe wastewater disposal locations (Jenin wastewater treatment plant) Encourage constructing septic tanks for new construction Encourage implementation of small-scale, on-site wastewater systems for black and/or greywater, based on technology currently established at some locations within the West Bank. Increase awareness of environmental and health risks associated with sewage disposal to cesspits Encourage water conservation and protection The campaign will be administered by the West Bank Water Department (WBWD), Palestinian Water Authority (PWA), or a regional nongovernmental organization or other entity selected by PWA. | | | x | # Number of Conduct pre-campaign inception survey and periodic surveys of project area households to assess: Greywater facilities and disposal and reuse practices Wastewater disposal facilities and practices Water conservation and protection practices # Number of survey parameters, and timing and frequency will be determined during campaign formulation. Document the above info Survey findings Public awareness campaign achievements and expenditures | | | X | PWA, |
| Generation and dumping of debris (excavated soils) | Incorporate waste management plan in ESIA/ESMPsContractor to prepare C-ESMP | | х | | # of waste management plans available | | | Х | Contractor/ PWA |

| | | Pha | ise | 1 | Indicators for monitoring | - | uency o | of | Responsibility |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|----------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| Possible soil pollution due to spillage from machinery and construction materials | Provide well-maintained construction vehicles and machinery, in order to minimize pollutant spillages. Control the movement of machinery within the project boundaries. Protect and clean soil from spills and/or disposal of sanitary, oil, hazardous materials, and any other possible contaminants. | | x | | - # of C-ESMPs available - # of complaints on spillage from machinery by workers - # of trucks' spillage | | | x | Contractor |
| Potential pollution of water during storage, transmission, and/or distribution | Produce and implement Operation and Maintenance plans and manuals for all project components and assign the parties responsible for maintenance activities. Train operators of the reservoirs and the pumping stations constructed under this project to comply with operation and maintenance procedures Supply water to consumers fairly and uniformly so that the water service will be available to projected population; at the same tariff; at all times and seasons beyond the projected service year in 2035. Inspect storage facilities regularly and rehabilitate or replace storage facilities when needed. This may include draining and removing sediments, applying rust proofing, and repairing structures Test water quality and implement best practices to prevent corrosion, Prevent cross-connections with sewerage systems | | | x | Operation and Maintenance plans are prepared and implemented # of training for operators Program of water distribution and tariff system is in place Inspection and testing program are prepared and implemented | | | | PWA |
| Increased demand on energy to operate the pumping stations. | Maximize the use of PV solar system (if available) to contribute to power production. Use of energy efficient equipment. | | | х | # of PV systems installed Record of equipment | | | | PWA |

| | ANAGEWET FRANTWORK - WSRF-1. | Pha | ise | , | Indicators for monitoring | | uency o | of | Responsibility |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|-------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| Shortage of electricity supplies if the additional demand of the new pumping stations is solved at the expense of the local communities. Failure to provide sufficient power supply to ensure the operation of the proposed facilities Interruptions in power supply could cause damage to the project infrastructure due to surges or loadings | Comply with the operational manual and design recommendations for controlled mechanisms to allow safe shut down of facilities in the case of interruptions to the power supply. Follow lessons learnt and procedures that have been experienced previously by PWA with other water supply facilities regarding diesel availability | | | | - Operation system is in place | | | | |
| ESS 4: Community Health and Safe | ty | | | | | ı | ı | | • |
| Dust Emission (Air quality) | Suppress dust during construction by water spraying and dampening where necessary Restore original site characteristics after the project activities are completed as much as practical. Reinstate the damaged infrastructures due to the installation of the pipelines in the main paved roads reinstate any accidental damage to existing structures and private property caused by construction activities. Provide fit to work PPEs (dust masks) for all workers involved in the construction Implement speed limit for the heavy machinery Cover trucks carrying soil, sand and stone with tarpaulin sheets to dust spreading | | x | | # of complaints on dust emissions % of use of dust masks by workers # of trucks covered | | | х | Contractor/ PWA |

| | IANAGEIVIET FRAIVIWORK – WSRF-1. | Pha | ise | | Indicators for monitoring | | uency o | of | Responsibility |
|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|---------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| Impact on air quality due to the emissions from the standby diesel generators in the pumping stations and reservoirs sites | Using emissions filter for all the diesel generators in the project. This type of filters is available in the market and has high efficiency of CO, NOx, and PM 2.5. Using natural gas generators instead of diesel generators if possible. This will considerably reduce the gas emissions (may reach to more than 80% emissions reduction). Reducing the operating hours of the standby generators by supplying the pumping stations and the reservoirs distribution pumps with electricity connections that enable more supply hours in the Gaza electricity distribution schedule. Comply with relevant local emission standards from heavy equipment where available and applicable | | | х | # of generators using emissions filter # of operation hours of generators # of complaints | | | | PWA |
| Noise emissions from civil works | Community consultations will be carried out before commencing the construction activities, informing the nearby population regarding the construction activities and possible impacts such as noise and additional vehicular traffic. | | x | | # of consultationsImplemented# of complaints filedand solved | | | х | Contractor/ PWA |
| Noise from pumping stations | Replace and maintain noise muffling equipped or other used acoustic reduction technologies as needed. Confirmation of expected noise levels from installed equipment against safe working levels, and provision of warning signs and protective equipment for workers by the operator | | | х | Use of replaced noise muffling equipment Measures are in place | | | | |
| Vehicular traffic during construction and operation may potentially cause congestion on the local routes, generate noise, | Depending upon the traffic volume and the condition/nature of local routes, a traffic management plan may need to be prepared as part of ESIA/ESMP, | | х | | #. of traffic safety incidents | | | х | Contractor/ PWA |

| | | Pha | ise | | Indicators for monitoring | | uency o | | Responsibility |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| and pose safety hazards for the local population, particularly for children and elderly people | Safety signage will be erected at appropriate places Safe driving practices will be promoted among the drivers GM will be put in place Incorporate ERP, OHS plan, WMP, CHS measures as required in the ESIA/ESMP | | | | | | | | |
| Risks of GBV/SEA/SH | Implementation of LMP (including CoC, annex 7 workers' GM including features for handling potential cases of GBV/SEA/SH and special referral pathways baes on confidentiality and a survivor-centered approach .) Implementation of Community Health and Safety Measures | | х | | % of workers that signed CoCs # of relevant grievances (if any) # of grievances accepted and solved | | | х | Contractor/ PWA |
| Risks associated with hiring security personnel | Adopt and enforce standards, protocols and codes of conduct for the selection and use of security personnel, and screen such personnel to verify that they have not engaged in past unlawful or abusive behavior, including sexual exploitation and abuse (SEA), sexual harassment (SH) or excessive use of force; Ensure that such personnel are adequately instructed and trained, prior to deployment and on a regular basis, on the use of force and appropriate conduct (including in relation to civilian engagement, SEA and SH, and other relevant areas), as set out in the Project Operation Manual, and LMP. | | х | | Security risks are assessed in the ESIA/ESMP to be prepared by PWA and management measures are prepared and implemented by contractor. | | | x | PWA/Contra ctor |
| Increased levels of vibration from moving of construction vehicles and machinery | Select equipment with lower sound power levels Install suitable mufflers on engine exhausts and compressor components in cases where the service provider uses generators | | х | | # of complaints filed by the project workers and community # of grievances accepted and solved | | | х | Contractor |

| | | Pha | ise | 1 | Indicators for monitoring | | uency o | of | Responsibility |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| | Provide fit to work PPEs (ear plug/earmuffs) for all workers involved in the areas with elevated noise levels The contractor should use equipment that is/are in good working condition and are periodically maintained | | | | | | | | |
| Lack of inclusion leads to grievances over subproject selection and benefits. | Disadvantaged/vulnerable groups in the communities are identified and involved in the project activities Transparency and communication of beneficiary selection criteria (SEP) Communicate and implement GM | | х | х | # of context analysis developed prior to implementation Communication as per SEP implemented # of GM cases filed | | | х | Contractor/ PWA |
| Impacts of the project on water Tariff, impact on the affordability of water prices for local communities. Limited willingness to pay for supplied (non-drinking) water by local communities, leading to lack of opportunity for investment in the project facilities and funding for maintenance in the future. | Plan for awareness campaigns that give people more understanding and awareness of their responsibilities towards sustainability of water resources. Ensure financial sustainability by commitment of citizens to pay their water bill fees; primarily by awareness campaigns and secondly by rule-of-law. Categorize the community according to affordability to pay Arrange for government subsidies for non-affordable categories | | | х | # of awareness campaign conducted Bill collection rate Communities categorized Amount of governmental subsides | x | | | PWA |
| Community safety risks in the vicinity of project works | - Follow up community health and safety measures (annex 1) - Set up appropriate signage - Fence construction site where applicable | | х | | - # of signs available at construction site - # of fences available at site | | | х | Contractor |
| Temporary damage during excavation to existing utilities such as wastewater drainage, water pipes, communications, electrical cables and accesses roads. | Repair the damage services in a timely manner for residents in coordination with the respective service provider Coordinate with community regarding the work plans that may lead to services interruptions. | | х | | # of services damaged# of GRM cases filed | | | | |

| | IANAGEMET FRAMWORK – WSRP-1. | Pha | ase | 1 | Indicators for monitoring | Frequency of monitoring | | | Responsibility |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------|---------|--------------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| ESS 5: Land Acquisition, Restriction | ns on Land Use and Involuntary Resettlement | | | | | | | | 1 |
| Small-scale private land taking (ESS5) Encroachment of Right of Way (RoW) in certain parts by users who have either extended or built structures, farms etc. in the RoW | Avoid impacts through identification of alternatives Prepare and implement RP, based on RF Ensure access to GM Implement SEP | x | | | RP prepared and implemented # of Consultations undertaken # of GM cases filed # of grievances accepted and solved | | | | PWA |
| Loss of accessibility to individual land/asset (temporary). | Avoid impacts through identification of alternatives Prepare and implement RP, based on RF Ensure access to GM Implement SEP | | x | | RAP prepared and implemented # of Consultations undertaken # of GRM cases filed # of grievances accepted and solved | | | | PWA |
| ESS 6: Biodiversity Conservation at | nd Sustainable Management of Living Resources | | | | • | | | 1 | 1 |
| Direct habitat loss or disturbance during excavation and construction sites preparation. Disturbance to or displacement of faunistic species during site excavation and construction. | Limit working to daytime hours only because most mammalian species have nocturnal lifestyles. Install fencing or other suitable protection during project construction to prevent exposure of wild and domestic animals to construction hazards. Prohibit hunting by workers and protect all migratory birds in the project sites Protect trees and plants (including root systems). However, if it is necessary to uproot any plant or tree, then it should be replanted in a location that is agreed upon by the appropriate authorities and landowners. | | х | | - Fencing is installed where required - # of trees are replanted | | | | Contractor/ PWA |
| ESS 8: Cultural Heritage | | | | | | | | | |
| Chance Finds | Implement Chance Find Procedures (Annex 4) | | х | | # of Chance find procedures | х | | | Contractor |

| | | | Phase | | Indicators for monitoring | Frequency of monitoring | | | Responsibility |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------|---------|----------------|
| Potential Risks and Impacts | Proposed Mitigation Measures | Planning | Construction | Operation | | Continuous | Weekly | Monthly | |
| | | | | | implemented | | | | |
| ESS 10: Stakeholder Engagement o | and Information Disclosure | | | | | | | | |
| Risk of lack of participation, essential livelihood issues, or exclusivity in decision making can inhibit meaningful participation in project decisions | Implement SEP | | х | | # of Marginalized communities engaged | | | x | PWA |
| Exclusion of vulnerable groups in project activities and consultations | Implement SEP Identify minority, marginalized and disadvantaged communities in the sub-project area. Use innovative communication and engagement means to reach the communities with information on the project and receive their feedback. Disseminate info about the different GMs in the communities. Use local languages (Arabic) in Communication | | x | | # of Marginalized communities assessed Local language (Arabic)used in communication | | | X | PWA |

Table 6.2: ESMP of E&S risks and impacts of the operational phase of subcomponent 1.3

| | Impact significa nce before mitigati on | Proposed Mitigation Measures | Impact significance after mitigation (Residual Impacts) | Project Phase | Institutional Responsibility for Implementatio n | Responsibil ity of direct supervision | Means of supervision | Estimated Cost of implementatio n / supervision |
|-----------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------|--------------------------------------------------------------|------------------------------------------------|------------------------------------------|------------------------------------------------------------------|
| Soil and groundwa ter Impacts | Modera te significa nce | | Low significance | | | | | |
| Risks of | Modera te significa nce | Awarded Contractor's Design includes all stages that ensures stabilization of sludge including: - Sludge treatment - Dewatering technology (filter press) - Continuous effluent monitoring | Low significance | Operation | Operator | PCU-PWA | Occasional field inspections | to be financed by the operation and maintenance cost |
| improper handling of sludge | | Provide workers with protective gear and hygiene instructions | | Operation | Operator | PCU-PWA | Occasional field inspections | to be financed by the operation and maintenance cost |
| | | Analyze sludge and decide accordingly whether the sludge could | | Operation | Operator | PCU-PWA, EQA and | Review of procedures in progress reports | to be financed by the operation and |

| | | be used in agriculture and how is it going to be applied | | | | Ministry of Agriculture | | maintenance cost |
|-----------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| | | Dispose unused sludge in controlled Al Minya landfill | | Operation | Operator or Waste contractor assigned by the operator | Hebron municipalit y | - Hebron municipality through regular inspections - PWA | to be financed by the operation and maintenance cost |
| Risks associated with disposal of final effluent | Modera te significa nce | Risk of decontamination of effluent is expected if water is returned to Wadi As-Samen. To avoid such a happening, it is necessary that the work on water and wastewater master plan of the area is expedited and the implementation of the most propriety projects to prevent contamination of treated effluent | significance | Operation | PWA | PWA | Cannot be determined until discharge options are known. | The master plan is under preparation which is financed by AFD. |
| | Modera te significa nce | Risk of leaking will be addressed by applying preventive maintenance of structures and equipment to avoid leakage | | operation | Operator | -PWA | PWA to review inspection schedule | to be financed by the operation and maintenance cost |
| Unaccept able odors | Modera te significa nce | High efficiency of biological treatment (including the use of anaerobic digesters to reduce odors.) Odor abatement technologies have been incorporated in design. Sludge will be completely stabilized through the following stages: - Gravity pre-thickener, Mechanical sludge thickening, Anaerobic | Low significance | Operation | Operator | PWA | Review of monthly reports and occasional field inspections Monitoring the maximum allowable H2S concentrations on the site boundary. avoid exceeding | - to be financed by the operation and maintenance cost |

| digester, Gas handling and | | | | these | |
|---------------------------------------------------------|-----------|---------------|----------|----------------------|-----------|
| storage, Digested sludge storage | | | | concentrations. | |
| tanks, Sludge dewatering and | | | | concentrations. | |
| Odor treatment unit. | | | | | |
| Odorous air will be collected from | | | | | |
| all odor sources such as; the Inlet | | | | | |
| Channels, Coarse and Fine | | | | | |
| Screens, Containers, Inlet Pump | | | | | |
| well, Grit/Grease Chamber, | | | | | |
| Gravity Thickeners, Sludge | | | | | |
| Storage Tank, Mechanical Sludge | | | | | |
| Thickeners and Sludge | | | | | |
| | | | | | |
| Dewatering Equipment Odorous air will be collected from | | | | | |
| all odor sources such as; the Inlet | | | | | |
| Channels, Coarse and Fine | | | | | |
| Screens, Containers, Inlet Pump | | | | | |
| well, Grit/Grease Chamber, | | | | | |
| Gravity Thickeners, Sludge | | | | | |
| Storage Tank, Mechanical Sludge | | | | | |
| Thickeners and Sludge | | | | | |
| Dewatering Equipment. | | | | | |
| The odorous air will be treated in | | | | | |
| the Odor Removal Unit and the | | | | | |
| limits of odor will be achieved on | | | | | |
| all places which confirms the | | | | | |
| Contract Specifications. | | | | | |
| Therefore, the guarantee to | | | | | |
| achieve the odor limits will be | | | | | |
| provided from the Supplier of the | | | | | |
| Odor Treatment System which | | | | | |
| confirms the Contract Conditions | | | | | |
| and will be back-to-back. | | | | | |
| | | | | | - PWA |
| Establish communication with | Operation | OPerator, PWA | PWA, | - Review of means of | managemen |
| neighboring areas | | | Hebron | communications | t costs |
| | | | <u> </u> | | 1 00313 |

| | | Cultivate wind barrier trees around aeration tanks | | Operation | Operator | Municipalit y PWA | - | - to be financed by the operation and maintenance cost |
|-----------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------|----------|-------------------------|-----------------------------------------|------------------------------------------------------------------|
| Risks of vectors | Low significa nce | Ensure proper aeration tanks have been sized such that they continuously contain deep water. Routine maintenance including the regular control, regular removal of floatables and other flotsam from accumulation points, and the repair of cracks and other failures Disinfection of effluent | Insignificant | operation | Operator | PWA/EQA | Regular inspections for mosquito larvae | to be financed by the operation and maintenance cost |
| Risks of handling hazardous substance s | Modera te significa nce | Design precautions of chlorine building Should be included in contractor's HSE management system | Low significance | Operation | Operator | PWA | - Regular inspection | - to be financed by the operation and maintenance cost |
| | | Empty chlorine bottles/containers, oil containers and lab chemicals containers to be returned to vendors | | Operation | Operator | PWA | - Review of cylinders manifests | - to be financed by the operation and maintenance cost |

| Risks of improper managem ent of solid wastes | Modera te significa nce | Daily removal of screens waste to Al Minya landfill | Low significance | Operation | Operator | PWA, Hebron municipalit y | - Documents review and occasional site supervision | waste contractor charges- PWA management costs |
|------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------|------------------------|------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Air Emissions and Noise | Modera te significa nce | Fine bubble diffusers have been included in the activated sludge tanks Air blowers will be in separate blower house close to the aeration tanks. These will be centrifugal type. standby generators with emission standards by including certificates of emissions standards provided by the generator supplier The noise residual impacts mentioned in are aligned with ESCIA recommendations Acoustic enclosures will be provided for specific equipment such as Blowers and CHP. Equipment selection will take into account the noise and air emission standards into consideration | Low significance | Operation | Operator | PWA | Review of procedures reports Review certificate for emission standards from an air quality lab | - to be financed by the operation and maintenance cost |
| Affordabili ty of poor people to participat | | Categorize the community according to affordability to pay | | Preconstr uction and operation | Hebron municipality | PWA, Hebron municipalit Y | - Review categorization reports | No cost |
| e in | | Arrange for government subsidies for non-affordable categories | | Preconstr uction | Hebron municipality | PWA, Hebron | - Follow-up subsidy arrangements | No cost |

| project | | and | municipalit | | |
|---------|-------------------------------------------------------|---------------------|-------------|--------------------------------------------|---------|
| costs | | operation | У | | |
| | Arrange for installment payments for other categories | Preconstr uction | | - Follow-up installment arrangements | No cost |

7. Environmental and social management procedures

PWA will adopt a clear approach to environmental and social management procedures to allow project development activities to follow the ESF standards including the mitigation hierarchy of avoidance, minimization, and mitigation and compensation/offset for negative impacts. The following sections describe what needs to be done at each stage of the implementation of sub-projects.

7.1 General Principles

The WSRP-1 project rated as 'Substantial' as per the World Bank ESS1 risk category. Which requires preparation of ESIA and ESMP as described in the previous chapter. Therefore, the ESMF is prepared based on the following principles that can guide planning and implementation of project activities.

- The PCU is responsible for the compliance with Palestinian laws and regulations, and World Bank ESSs and Guidelines, as mentioned in Chapter 2.
- PCU is responsible for obtaining environmental clearance from EQA and World Bank as required.
- ESIAs and ESMPs need to be prepared for activities as determined by EQA and WB.
- Planning and design of any activities under component 2 (Improve performance of Water Sector Service Providers) and 4 (CERC component) should follow the guidelines in this ESMF.
- Participation of stakeholders (especially local communities) should be ensured by PCU/PWA in planning, implementation and monitoring of each sub-component.
- PWA shall ensure appropriate institutional set up for implementing environmental and social management plan. PCU will also ensure that bidding documents for construction contractors have specific clauses to ensure implementation of ESMP, as required.
- Contractors to be engaged for construction and operation and maintenance of equipment under component 1.3 will ensure provision of First Aid Kit at the construction site with proper drinking water and sanitation facilities. The Workers health and safety measures shall be ensured and use of personal protective equipment shall be at place.
- PWA will undertake public disclosure about the project interventions and potential impacts.
- In case of activating the CERC, the CERC manual and, other instruments, in form and substance acceptable to the World Bank will be prepared by PWA on December 2023 and will be followed. A list of Positive and Negative activities for CERC component is given in Annex 6.
- In case co-financing of WSRP-1 project by other development partners (DPs), the Bank will
 cooperate with such agencies and the Borrower in order to agree on a common approach for the
 assessment and management of E&S risks and impacts of the project. This will be acceptable to
 the Bank, provided that such an approach will enable the project to achieve objectives materially
 consistent with the ESSs..

7.2 Environmental and Social Assessment and Management Process

 PCU/PWA will prepare the relevant instruments for the project activities as described in the ESMF (see table 5.2). An independent E&S consulting firm will be involved if required. The ToR for preparing the instruments will be shared by the World Bank for Clearance.

- PCU/PWA will review and clear E&S instruments made by Environmental consultant and shared by the World Bank for clearance.
- Bid documents will be prepared by the PCU/PWA. The environmental and social specialists and
 consultants (engaged with PWA in planning the sub-projects) will make sure necessary
 environmental and social clauses are included in the bidding documents and ESMP
 implementation should be done by Contractors. The supervision Engineer will be the main entity
 responsible for supervising the ESMP implementation and safeguards compliance and then
 reporting to PWA.
- If any additional impacts are identified during the construction and operation phases of the subprojects, the ESMP should be reviewed and updated.

7.3 Environmental and Social Assessment

The purpose of ESIA is to give the environment and people its due importance in the decision-making process by clearly evaluating the environmental and social consequences of the proposed subprojects before action is taken. Early identification and characterization of critical environmental and social impacts allows the public and the government to form a view about the environmental viability and social acceptability of a proposed development project and what conditions should apply to mitigate or minimize those risks and impacts. ESIA and ESMP will be prepared in line with Indicative outline of ESIA and ESMP under ESS1-Annex 1, WB ESF Section D and E on page 25 and 26, respectively. The ToR and prepared instruments will be shared with the World Bank for review and clearance as mentioned above.

7.4 Required Site Specific Management Plans

Site Specific Management Plans such as WMP, OHS plan, Traffic management plan, etc. will be prepared by contractors of the sub-projects. The selection of the site-specific management plans required by the sub-components will be determined by recommendations of the ESIA/ESMP. These plans will be reviewed and cleared by PWA.

Pollution Prevention Plan: will be prepared and implemented by the contractors on the basis of WBG EHS Guidelines (1997) that will be part of the bidding documents. The Plan will be submitted to PWA for review and approval before contractor mobilization.

Waste Disposal and Effluent Management Plan: For sub-components 1.1 and 1.2, WMPs will be prepared and implemented by the Contractor on the basis of the ESIA/ESMP, and WBG EHS Guidelines (1997), which will be part of the bidding documents. The WMPs plans will be submitted for review and approval before contractor mobilization. For sub-component 1.3, PWA will review and update and warranty the WB approval of the Waste Management Plan (WMP) prepared under the ESCHIA for Hebron wastewater treatment plant, to manage the hazardous and non-hazardous wastes, as described in section 5.2.

Occupational Health and Safety (OHS) Plan: will be prepared and implemented by each contractor on the basis of the WBG EHS Guidelines (1997), and OSHA standards. The Plan will be submitted for review and approval before contractor mobilization. For sub-component 1.3, PWA will review and update and warranty the WB approval of the OHS Plan prepared under the ESCHIA for Hebron wastewater treatment plant, as described in section 5.2.

Traffic Management Plan (TMP): TMP will be prepared and implemented by the contractors on the basis of the ESIA/ESMP recommendations. The Plan will be submitted to PWA for review and approval before contractor mobilization.

Emergency Preparedness Plan (ERP): ERP will be prepared by each contractor after assessing potential risks and hazards that could be encountered during construction and by operator during operation phase. The Plan will be submitted for review and approval before contractor mobilization. For sub-component 1.3, PWA will review and update and warranty the WB approval of the ERP prepared under the ESCHIA for Hebron wastewater treatment plant, to ensure emergency responses, as described in section 5.2.

Health, Safety and Environment Plan: will be prepared by PCU/PWA as part of ESIA/ESMP to address solid waste and emergencies associated with workers and community health and safety and to properly manage waste effluents generated from the operation and maintenance works.

RF, LMP, SEP, and RAP Plans: as described in section 5.2.4.

Biodiversity conservation and monitoring: Where significant risk and adverse impacts on biodiversity, adopt and implement a Biodiversity Management Plan (BMP) as part of the ESIA/ESMP, in accordance with the guidelines in section 5.2.1, and consistent with ESS6.

Pest Management Plan (PMP): PWA will review and update and warranty the WB approval of the PMP prepared under the ESCHIA for Hebron wastewater treatment plant, to manage the chemical used for pest control, as described in section 5.2.4.

7.5 Environmental and Social Clauses for Contractors

PWA will reflect the ESIA/ESMP requirements in the bidding documents and the bids evaluation will include the ESHS requirements. PWA will incorporate the following standardized environmental and social clauses in tender documentation, so that potential bidders are aware of environmental and social performance requirements expected from them. In this case, the bidders will reflect that in their bids, and ensure the implementation of the clauses during the contract. PWA will enforce compliance by contractors with these clauses which cover four issues:

- 1. Environment, Health and Safety (EHS),
- 2. Environmental and social monitoring by contractor,
- 3. Environmental and social liabilities, and
- 4. Grievance mechanism for workers.

7.6 Contractor Environmental and Social Management Plan (C-ESMP)

Prior to the start of implementation of the specific sub-component, each contractor must prepare and submit a Contractor Environmental and Social Management Plan (C-ESMP) to PWA for acceptance. The C-ESMP will provide a detailed explanation of how the contractor will comply with the EHS clauses for contractors and demonstrate that sufficient funds are budgeted for that purpose and sufficient capacity is in place to oversee, monitor and report on C-ESMP performance. The C-ESMP must include specific mitigation measures based on the project's ESIA/ESMP prepared by PWA, the final design, the proposed work method statements, and the nature of the project site. The contractors will be required to include OHS specialists as part of their key personnel.

7.7 Environmental and Social Management Guidelines for Contractors

Environmental and social management guidelines for contractors defining minimum acceptable standards of construction practice to PWA are provided in Annex 2.

8. Institutional and Implementation Arrangements

The PWA will be the Implementing Agency for the WSRP-1 project. PWA will create a dedicated Project Coordination Unit (PCU) hosted within PWA which will be supported by field Engineers in Jenin and Hebron. The PCU will be staffed with experts and specialists on a competitive basis to support management of ESHS risks and impacts of the WSRP-1 Project including one Environmental Specialist, one Social Specialist, and two field Engineers one in Hebron and one in Jenin. ToRs for the Environmental and Social specialists are provided in annex 8.

The PCU will be responsible for reviewing project designs and the preparation of bidding documents, monitoring of physical implementation and reporting. The PCU will be also responsible for the implementation of the project activities, including contract management, supervision and quality control, and the administration of the works contracts.

The PCU will have overall responsibility for the project financial management functions, including preparation and submission of separate interim financial reports (IFRs); project progress reporting and monitoring; and compliance with environmental, social, and fiduciary requirements in line with the ESF instruments and the POM. The PCU will maintain the core team and support staff as needed during the project period. The PCU will engage an international engineering firm for construction supervision (supervision Engineer). The main task of the environmental and social specialists at PCU is to oversee the implementation and monitoring of the ESMF and the associated ESIA/ESMP, Resettlement Action Plans or similar instruments, SEP, etc. and the implementation of the GM.

The MoLG, Municipalities and Local Government Units (LGUs) will also be involved as key stakeholders during implementation of the project. The project counts on a Project Steering Committee (PSC) to be chaired by the Minister of Finance and Chairman of PWA and will include representatives of the Ministry of Finance, Ministry of Agriculture, Environmental Quality Authority, MoLG, and local district-level stakeholders, key water utilities, and representatives of Non-Governmental Organizations (NGOs) and academia. Committee meetings will be conducted to report on the project progress and seek support on the multisectoral aspects of project implementation.

The project implementation arrangements chart is presented in Figure 7.1 below.

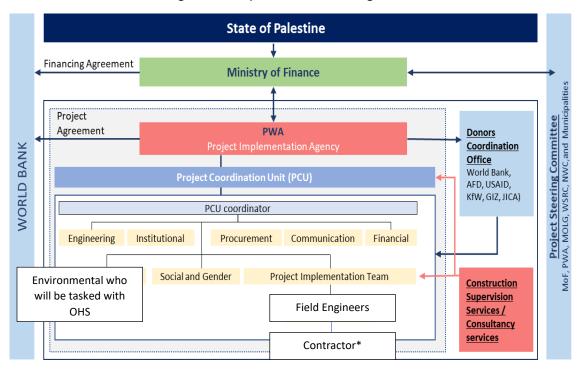


Figure 7.1. Implementation Arrangements

Note: The contractors and supervision Engineer will be required to include OHS specialists as part of their key personnel.

Contractors and their workers will be implementing E&S mitigation measures and plans as laid out in the ESMF and subsequent ESIAs/ESMPs. Mitigation measures required will be included and costed in agreements with the contractors. The contractors will be obliged to ensure that staff with EHS experience and capacity is involved in construction works and can fulfill the reporting requirements on E&S (see Annex 3 Procedures for Management of Contractors).

In the operational phase, PWA/WBWD for sub-component 1.1 and 1.2, Hebron municipality for sub-component 1.3, and LGUs for the four water supply systems in Jenin will need to ensure E&S measures are taken to avoid adverse impacts of the respective sub-components. The focus of the project on O&M will largely prepare and train the respective operator to perform the respective tasks.

9. Environmental and Social Screening and Documentation

9.1 Screening Process

The screening process for the key environmental and social risks and impacts of the components and sub-components of the WSRP-1 projects has been identified in section 5.2 and the E&S instruments to be prepared are summarized in section 5.2.4.

9.2 E&S Documentation

The main responsibility for the preparation of subproject-specific E&S instruments will rest with the PCU at PWA. ESIA and ESMP will be prepared in line with the indicative outline of ESIA and ESMP under ESS1-Annex 1. Environmental and social Section D and E on page 25 and 26, respectively. The ToR will be shared with the Bank for review.

The World Bank disclosure standards require that the ESMF report for the project is made available to project affected groups, local NGOs, and the public at large. The executive summary will be translated into the Arabic language. Public disclosure of ESIA/ESMP documents is also required. The PWA will make available copies of the ESMF and ESIAs/ESMPs at the PWA website.

The ESMPs/ESIAs reports shall be included in the procurement and contracting process including bidding documents, for potential civil works, as well as other WB standard EHS terms and conditions for procurement and any subproject-specific requirements. Compliance with LMP and the Codes of conduct shall be required for contractors, subcontractors, primary suppliers, and their workers.

9.3 Review and Approval

PWA will prepare the ESIA and ESMP for sub-component 1.1 and 1.2. by local consultants. The ESIA and ESMP, and other instruments will be reviewed and cleared by the PCU prior to submission to the Bank for clearance. The PMU will further disclose the instruments. PWA will ensure that contractors are bound to implement all mitigation measures set out in the instruments. The supervision Engineer will conduct monitoring and supervision of the implementation of E&S instruments through review of documentation and site visits. The supervision Engineer will further report against the mitigation measures and indicators set out in the E&S instruments monthly to PCU, and the PCU will absorb the supervision Engineer's reports and integrate them into its quarterly progress reports to the World Bank (see Section on Monitoring and Reporting).

10. Monitoring and Reporting

10.1 Regular Monitoring and Inspection for Compliance

Adequate institutional arrangements, systems and resources will be put in place to monitor the ESMF. The goal of monitoring will be to measure the success rate of the activities, determine whether interventions have handled negative impacts and to determine whether further interventions are required or monitoring is to be extended in some areas. The goal of inspection activities is to ensure that sub-component activities comply with the plans and procedures laid out in the ESMF.

The main monitoring responsibilities and inspection activities will sit with the PCU, which will administer the overall project-related E&S monitoring and implementation as laid out in this ESMF. The PCU Project Manager will be overall responsible for the implementation of the E&S mitigation measures, as well as for monitoring and inspecting for compliance. The Social Specialist and Environmental Specialist in the PCU will handle all reporting aspects.

The PCU Environmental Specialist and Social Specialist will assess the compliance of the project activities against the ESMF, the RF, the SEP, the ESCP and subsequent ESIA, ESMP, RAPs or other instruments, and will report any non-compliance to the PCU Project Manager. Indicators are identified in the monitoring table below and used as a baseline for assessing progress on the ESMF implementation.

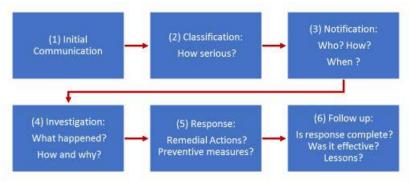
Furthermore, contractors will be obliged to provide EHS monitoring reports to Supervision Engineer on a monthly basis. PCU will absorb the supervision Engineer's reports and integrate them into its quarterly progress reports to the World Bank.

The World Bank will equally supervise and assess the environmental and social performance through the review of the quarterly monitoring reports and through regular implementation supervision missions. Reporting format is provided in Annex 5.

The GM will further help track complaints and effectiveness of interventions, including those with environmental and social impacts and the quarterly monitoring reports will provide summaries and statistics on the GM.

10.2 Incident and Accident Reporting

PWA will notify the World Bank no later than 48 hours of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, including, inter alia, cases of sexual exploitation and abuse (SEA), sexual harassment (SH), and accidents that result in serious or multiple injuries (e.g. road and traffic accidents, cases of Covid-19 and other communicable diseases) during project related civil works, operation and maintenance of infrastructure, technical assistance (e.g. training) and other relevant project activities. Fatalities will be reported within 24 hours after occurrence. A detailed report of the incident shall be provided within 15 days of notifying the World Bank of the incident or accident, unless a different timeline is agreed on with the World Bank. This ESIRT is comprised of the following six steps under the incident management and reporting process (see figure below). Each step includes a sub-set of activities. Tools and templates have been designed to support specific activities in the process.



The PWA should ensure that incidents are investigated to determine what happened and why, so that processes and measures can be put in place to avoid reoccurrences and so that appropriate remedies are applied. The Bank may support the PWA in ensuring an appropriate RCA is conducted by the Contractor or the PWA, for example by identifying experts and providing sample ToRs. The extent of the investigation (RCA) carried out by the PWA's Contractor should be proportionate to the severity of the incident. Suggested ToRs for engaging consultants for carrying out an RCA are provided at Annex 11. The RCA findings would be used by the Contractor and/or PWA to develop a Safeguards Corrective Action Plan (SCAP) as a complement to existing project safeguards instruments.

11. CONSULTATIONS AND STAKEHOLDER ENGAGEMENT

A Stakeholder Engagement Plan (SEP) has been developed for the project that seeks to define a technically and culturally appropriate approach to consultation and disclosure. It is not possible to identify the owners of lands who will be affected at this stage, but PWA will be responsible for preparing a communication plan to discuss potential impacts and agree timing for the clearance of activities when the exact owners of the lands are identified. Stakeholders include locally affected community groups or individuals and their formal and informal representatives, national or local public authorities, civil society and community-based organizations and groups with special interests, or private businesses.

A provisional list of affected communities has already been compiled based on the proposed sites and area of impact. Consultations and engagement, including on this ESMF, were conducted with Jenin City, Qabatya, Al Shuhada, Burqin, Deir Abu Daief, Beit Qad, Jalboun, Arabuna and reported in the SEP document. The different stakeholder engagement activities that have taken place to date and detailed description of the stakeholder engagement activities for each component are also available in the SEP. During consultation, the communities were informed during the meetings that a GM system will be available to them prior to the implementation phase to file complaints and concerns related to the project activities. Consultations on the site-specific ESF instruments, including ESMPs and any Resettlement Plans, will be done during the design of the subprojects and preparation of corresponding instruments. The consultation process will be led by PWA, and details of the stakeholder consultation and engagement process are included in the project SEP.

11.1 Analysis of Communities' Requests and Concerns

Several public consultations and individual meetings were conducted on July 20, August 8, October 23, November 14, November 16 and November 27, 2022. Consultations and engagement were conducted with in the project's proposed areas including Jenin City, Qabatya, Al Shuhada, Burqin, Deir Abu Daief, Beit Qad, Jalboun, Arabuna. The meetings aimed at providing the local councils and the communities with the project information and obtaining feedback including expectations, and concerns to be considered in developing proposed mitigation strategies and improving methods for stakeholder engagement and information disclosure. The meetings included heads and members of the local councils, landowners, community members and representatives of schools in the targeted communities including the Dair Abu Daief School, Faquo'a High School, Beit Qad High School and Beit Qad Agriculture Station/School. Several women volunteers from communities of Marj Ben Amir, female Council member of Beit Qad, a representative of the Beit Qad Women Association also joined the meetings in addition to representatives of the Civil Defense and the EQA.

Details on location, date and participants in each of the meetings, as well as the key issues that were raised are provided in the SEP.

Table 9.1 illustrates the needs and the concerns raised by the communities' people during the consultation activities conducted over different timescales. PWA was keen to address these raised concerns.

Table 9.1. Summary of consultations: concerns and mitigation measures

| # | Communities Concerns / Recommendation | Mitigation Measures |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1 | The Civil defense request to install special filling points at certain locations in the new water networks. | To be considered in the design of the water networks |
| 2 | Recommendation to interconnect all the localities networks in the area (e.g. Aba Village) and not only the 4 new communities. | Recommendation |
| | Inquiry about the method of project bidding and the | -Consider the unserved communities as a priority; |
| 3 | time frame | -Accelerate the tendering process; |
| | | -Expedite of project implementation phase |
| 4 | A concern that the project scope of work does not include the reinstatement works | Ensure that the project scope of work includes the reinstatement works |
| 5 | To implement a wastewater network project as a second phase of the project in order to minimize any wastewater impacts in the future | Recommendation |
| 6 | To expedite project implementation to continue the remaining part of Jalboun water network around 40% and to avoid any possible delays in the implementation phase (e.g. during the bidding, implementation and financing of the project). | Expedite implementation of project implementation phase |
| 7 | The current filling points are not safe as some of the water tanks are not licensed and threaten children lives; as an example, one of the children passed away due to an accident by one of the tankers. The implementation of this project is to minimize threats to people and children | Safety considerations and requirements will be addressed in the design of activities. |
| 8 | The importance of having safety plan and measures during implementation period, especially in winter season to minimize negative construction environmental impacts. | ESHS Plan |
| 9 | Proper selection of qualified contractors | Recommendation |
| 10 | The importance of having an institutional development for the sustainability of the project | The institutional component to be considered in parallel to the projects implementation |
| 11 | Concerns about having possible accidents that may occur during the construction phase without having an insurance policy | Contractors must be responsible to provide suitable insurance policies Commitment with an ESHS plan |

| 12 | Inquiries about the water meters and plans for billing | The institutional component to be considered in parallel to the project implementation; |
|----|--------------------------------------------------------|-----------------------------------------------------------------------------------------|
| | system. | Considering the development of a billing system as part of the institutional component. |

Information Disclosure

The PWA will disclose on its website (http://www.pwa.ps/), project information and all key documentation, including this ESMF, to allow stakeholders to understand the risks and impacts of the project, and potential opportunities. The information will be disclosed in relevant local languages and in a manner that is accessible and culturally appropriate, taking into account any specific needs of groups that may be differentially or disproportionately affected by the project or groups of the population with specific information needs (such as, disability, literacy, gender, mobility, differences in language or accessibility). The SEP will be continuously updated, specifically in accordance with the identified needs. All relevant information needs to be made available to stakeholders in a timely manner, including information about planned subcomponents of the project, management measures and monitoring activities.

12. GRIEVANCE MECHANISM (GM)

The Grievance Mechanism (GM) addresses grievances in an efficient, timely and cost-effective manner, that arise in the Project, either due to actions by PWA or the contractor/sub-contractors employed by PWA, from affected communities and external stakeholders. A separate mechanism is developed to address worker grievances. PWA is responsible for managing the GM, but many of the grievances on the Project will likely relate to the actions of the Contractor and so will need to be resolved by the Contractor. PWA with the support of the Implementation Consultant will administer the GM process deciding whether they or the Contractor is responsible and determining the best course of action to resolve the grievance. The Implementation Consultant will support PWA to monitor grievance resolution being undertaken by the contractor.

For Hebron Wastewater Operation and maintenance sub-component, a GM was established for the Hebron Regional Wastewater Treatment Plant (HRWWTP) project and is functional. The existing GM shall be adapted and strengthened, as required, and used for the Water Security Resilience project.

The project GM deals with the issues of land and other assets acquisition (e.g. amount of compensation, suitability of residual land plots, loss of access roads, loss of livelihood, etc.) as well as the losses and damages caused by construction works, and any direct or indirect environmental and social impacts. Therefore, the grievance mechanism has to be in place as soon as possibleand shall function until the completion of all construction activities and beyond till the defect liability period ends. PAPs and other potential complainants should be fully informed of the GM, its functions, procedures, timeline, and contact persons both verbally and through booklets and information brochures during consultations meetings and other stakeholder engagement activities. PWA will keep a log of the complaints at hand.

The GM includes different channels to ensure that all of the PAPs and the potential complainants could be able to file their grievances any time, taking into consideration the differences of the PAPs socio-

economic background. Uptake channels will be accessible 24/7 during the project period especially during emergencies.

The GM system shall include special referral pathways for the GBV complaints and grievances, including grievances on sexual harassment and sexual exploitation and abuse. The mechanism of accepting and responding to GBV grievances will be communicated to project affected parties during the consultation meetings. Channels to accept and respond to GBV grievances, while ensuring high confidentiality, will be communicated to the project's affected parties during the consultation meetings and throughout project implementation. The referral pathways will include referring the case, with the survivor's authorization, to the national committee at the Ministry of Health to receive appropriate services according to the case needs. The Social Specialist shall be responsible to refer the case if it was shown that the case had any social, psychosocial or physical damages and to communicate with the representative of the national committee at the MoH to follow up the case with the case manager at the MoH. Training will also be provided by a GBV expert for the PWA on detection of cases of gender- based violence and handling of inquiries, complaints and grievances related to GBV.

Complainants can seek redress from the judicial system at any time. The step-by-step process does not deter them from approaching the courts. All grievances related correspondence will be documented, and the grievance resolution process will be systematically tracked.

A detailed grievance resolution process is described in the project's SEP.

The Social Specialist at PCU will be responsible for receiving and handling grievances and assure that all grievances received are addressed and documented. The Social Specialist will address all grievances raised by affected community members or other stakeholders.

Grievance cycle Discussion with the Case solved without project manager and corrective procedure refer the complaint Corrective procedure to be applied Response in 15 working days Discuss Corrective procedure with the complaint person Short-term Long-term procedures procedures Case solved

Figure 11.1 illustrates the grievances process.

Figure 11.1: Grievance Cycle

12.1 World Bank Grievance Mechanism

Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may also complaint directly to the Bank through the Bank's Grievance Mechanism (GM) (http://projects-beta.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service).

A complaint can be submitted to the Bank GM through the following channels:

By email: grievances@worldbank.org

• By fax: +1.202.614.7313

• By mail: The World Bank, Grievance Redress Service, MSN MC10-1018, 1818 H Street Northwest, Washington, DC 20433, USA

12.2 Workers Grievance Mechanism

PWA will require contractors to develop and implement a grievance mechanism for their workforce prior to the start of civil works. The construction contractors will prepare their labor management procedure before the start of civil works, which will also include detailed description of the workers grievance mechanism.

The workers grievance mechanism will include:

- A procedure to receive grievances such as comment/complaint form, suggestion boxes, email, a telephone hotline.
- Stipulated timeframes to respond to grievances.
- A register to record and track the timely resolution of grievances.
- An assigned staff to receive, record and track resolution of grievances.

The workers' grievance mechanism will be described in staff induction training, which will be provided to all project workers. Information about the existence of the grievance mechanism will be readily available to all project workers (direct and contracted) through notice boards, the presence of "suggestion/complaint boxes", and other means as needed. The Social Specialist will monitor the contractors' recording and resolution of grievances, and report these to PWA in their monthly and progress reports.

13. CAPACITY BUILDING AND TRAINING PLAN

PWA E&S staff has benefitted from World Bank ESF training held in May and June 2022, and the Bank's E&S team will continue to provide further capacity-building support, as required, during project implementation.

Based on the assessment of the existing capacity of PWA and the different parties/stakeholders engaged in the project implementation, the following capacity development and training plan is prepared.

Table 12.1 Capacity development and training plan

| Objectives | Issues for engagement | Method of engagement | Stakeholders/target staff | Responsible person | Time frame | Budget in USD |
|-----------------------------------------------------------------------------------|-------------------------|------------------------------------------|-----------------------------------------------------------------------------|--------------------|------------------------------------------------------------------------|------------------------------------------------|
| Institutional Strengthening | Capacity Development | Training | Project staff/Municipalities/LGUs | PWA | Biannually | Incl. in staff costs |
| 1) Implementation of E&S instruments | | | Contractors, subcontractors, operators, primary suppliers, workers | PWA | Throughout project implementation | 20,000 |
| 2) Implementation, monitoring and reporting of ES instruments | E&S risk mitigation | meetings field visits | Contractors, subcontractors, operators, primary suppliers, workers | PWA | Prior to commencement of subprojects Throughout project implementation | Included with other training costs |
| Training for Project workers on OHS including emergency response and preparedness | OHS risk management | Focus Groups, site visits and interviews | Contractors/E&S staff | PWA | prior to construction works | |
| 3) Capacity Building for beneficiaries | | Meetings/workshops On job training | Municipalities | PWA | Throughout project implementation | 20,000 |

ENVIRONMENTAL AND SOCIAL MANAGEMET FRAMWORK – WSRP-1.

| Objectives | Issues for engagement | Method of engagement | Stakeholders/target staff | Responsible person | Time frame | Budget in USD |
|-------------------------------------|-------------------------|-----------------------------|----------------------------------------------------------------------|--------------------|--------------------------------------------|----------------------|
| Institutional Strengthening | Capacity Development | Training | Project staff/Municipalities/LGUs | PWA | Biannually | Incl. in staff costs |
| (Municipalities, LGUs) | | | | | | |
| 4) LMP | Labor risks | Meetings Field visits | Contractors, subcontractors, primary suppliers, workers | Municipality | Throughout project implementation | 30,000 |
| 5) GBV/SEA/SH | GBV/SEA/SH risks | Meetings | Communities, contractors, subcontractors, primary suppliers, workers | PWA | | |
| 6) Stakeholder engagement | SEP | Meetings | Municipalities/LGUs/Contractors/commuunity members | PWA | Prior to Commencement of subprojects | 40,000 |
| 7) Enhance awareness about GM | GM | Plenary discussion with Q&A | Municipality/Contractors/ community members | PWA | Monthly | |

14. ESMF COST IMPLICATION

Cost estimates will need to be prepared for all the mitigation and monitoring measures to be proposed in the specific ESIA and ESMPs in accordance with the ESMF. The cost estimates for some of the mitigation measures to be identified in the ESMP will be part of civil works contract.

The cost implication for component 2 and 3 (institutional capacity building and technical assisstance) for WSRP-1 can not be estimated at this stage. The cost estimates should reflect the ESMP activities with budget for successful environmental management activities of the sub-projects. The potential resettlement costs cannot be estimated at this stage.

Total US\$ 1,054,400 is estimated for implementation of ESMF which should be embedded in the proposed total project budget from the World Bank.

Table 13.1: Cost Estimates for ESMF implementation of the WSRP-1 project

| SN | Description | Amount US\$ | Source of funding |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------|
| | Required Resources | | |
| | Risk Management Team at PCU – Monitoring of ESMF | | |
| 1 | Human Resources: | | |
| | Environmental Specialist | Incl. in PCU staff costs | |
| | Social Specialist | Incl. in PCU staff costs | |
| | Field Engineer in Jenin | Incl. in PCU staff costs | |
| | Field Engineer in Hebron | Incl. in PCU staff costs | |
| | Implementation of Risk Mitigation Measures | | |
| 2 | Independent Consultants to prepare ESIA and ESMPs | 50,000 | Component 3 |
| 3 | Risk Management by Supervision Engineer including development of safety operation plans and monitoring during construction and operation (5 years), training to workers, monitoring of sites (estimates based on previous project implementation) | 850,000 | Component 1 |
| 4 | SEP implementation | 44,400 | Component 3 |
| 5 | Trainings and Capacity Building | 110,000 | Component 3 |
| | Total | 1,054,400 | |

11. ANNEXES

Annex 1: Guidelines for Occupational Health and Safety

For the aim of this project, PWA is requested to follow the World Bank environmental health and safety guidelines. A copy of this can be found in the following link:

https://documents1.worldbank.org/curated/en/157871484635724258/pdf/112110-WP-Final-General-EHS-Guidelines.pdf

A summary of essential safety mitigation measures that should be applied during the implementation of the project include:

Workers Occupational Health and Safety

The following guidelines must be followed:

- 1. Staff Training and regular equipment service and testing.
- 2. Only trained & certified workers are permitted to install, maintain or repair electrical equipment.
- 3. Use of signs and barriers to prevent public contact with potentially dangerous equipment.
- 4. Ensure provision and proper use of Personal Protective Equipment (e.g. helmet, dust masks, boots, etc.);
- 5. Follow safe work procedures.

Community Occupational Health and Safety

The following guidelines must be followed by contractors:

- 1. Ensure that construction work is undertaken in a manner that is not likely to pose risks to community health and safety.
- 2. Use barricading tape to prevent members of the public from accessing the work sites during construction.
- 3. Put in place adequate hazard communication to the public by using appropriate signage as prescribed by national law and international best practices.
- 4. Adequate security where necessary for the public and staff should be provided.
- 5. Public awareness of public health issues should be identified and implemented.
- 6. Measures to minimize community exposure to COVID-19
- 7. Provisions (e.g. workers' codes of conduct, effective monitoring, regular training and awareness raising for workers and communities) to prevent and respond to SEA/SH or GBV proportionate to the level of risk.
- 8. The project GM will include special tools for handling and addressing GBV/SEA/SH cases, including strengthening referral pathways within the GM. The referral pathways will include referring the case, with the survivor's authorization, to the national committee at the Ministry of Health to receive multisectoral services according to the case needs. The Social Specialist shall be responsible to refer the case and to communicate with the representative of the national committee at the MoH to follow up the case with the case manager at the MoH.

Annex 2: Environmental and Social Management Guidelines for Contractors

Purpose

The purpose of these environmental management guidelines for contractors is to define minimum acceptable standards of construction practice acceptable to PWA.

Roads

In order to carry out the rehabilitation works, it may be necessary to close or divert certain specified roads, either permanently or temporarily during the construction period. The contractor should arrange diversions for providing alternative route for transport and/or pedestrians.

After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary so as to cause as little interference with the traffic in that street or footpath during construction of the rehabilitation works as shall be reasonably practicable.

Movement of Trucks and Construction Machinery

The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris.

Traffic Safety Measures

The Contractor shall provide, erect and maintain such traffic signs, road markings, barriers and traffic control signals and such other measures as may be necessary for ensuring traffic safety around the rehabilitation site. The Contractor shall not commence any work that affects the public motor roads and highways until all traffic safety measures necessitated by the work are fully operational.

Access to the Construction Site

The Contractor shall take all reasonable precautions to prevent or reduce any disturbance or in convenience to the owners, tenants or occupiers of adjacent properties, and to the public in general. The Contractor shall maintain any existing right of way across the whole or part of the construction site and public and private access to adjoining frontages in a safe condition and to a standard not less than that pertaining at the commencement of the contract. If required, the Contractor shall provide acceptable alternative means of passage or access to the satisfaction of the people affected.

Protection of the Existing Installations

The Contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the concession period. The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers and other apparatus during the concession period, and to repair any damage occurs in coordination with Municipality and concerned authorities.

Noise and Dust Control

The Contractor shall take all practicable measures to minimize nuisance from dust and noise from the rehabilitation sites. This includes:

- Respecting normal working hours in or close to residential areas.
- Maintaining equipment in a good working order to minimize extraneous noises from equipment movement, as well as emissions or fumes from the equipment.
- Shutting down equipment when it is not directly in use.
- Using operational noise mufflers (if needed).
- Providing spray water when required to minimize the impact of dust.
- Limiting the speed of equipment used for waste collection.

Waste Disposal

The Contractor must agree with the municipality about arrangements for construction waste disposal. The municipality shall designate a dumping site or landfill for the disposal of solid waste.

Protection of Trees and Other Vegetation

The Contractor shall avoid loss of trees and damage to other vegetation wherever possible. Adverse effects on green cover within or in the vicinity of the rehabilitation site shall be minimized. The contractor will restore vegetative cover, where feasible.

Cultural Resources

The contractor will train the construction crews and supervisors to respond to chance find in accordance with Chance Find Procedures (Annex 4).

Clearance of Construction Site on Completion

The Contractor shall clear up all working areas both within and outside the construction site and accesses as work proceeds and when no longer required for the carrying out of the construction works. All surplus soil and materials shall be removed to authorized landfill sites (Zahrit Al Finjan in Jenin and Al Minia in Hebron).

GBV/SEA/SH

Contractors must address the risk of gender-based violence, through:

- 1. Provide awareness raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women.
- 2. Workers shall sign the Code of Conduct.

Child Labor

Contractors must follow LMP and should not employ workers below the age of 18 in all project components.

Labor Influx

Where contractors and labor come from outside the local area, contractors will need to maintain labor relations with local communities through labor codes of conduct.

Protections of existing Infrastructure

The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers and other apparatus during the construction period, and to repair any damage occurs in coordination with concerned authorities or service providers.

Environmental and Social Monitoring by Contractors

PWA will require that contractors monitor, keep records and report on the following environmental and social issues for the project. The application of this requirement will be proportionate to the activities and to the size of the contract, in a manner acceptable to the World Bank including:

- 1. **Safety.** Hours of work, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
- 2. **Environmental incidents and near misses.** Environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
- 3. **Major works.** Those undertaken and completed, progress against project schedule, and key work fronts (work areas).
- 4. **E&S requirements.** Noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other E&S requirements.
- 5. **E&S inspections and audits.** By contractor, engineer, to include date, inspector or auditor name, sites visited, and records reviewed, major findings, and actions taken.
- 6. **Workers.** Number of workers, gender, age with evidence that no child labor will be involved in all project components.
- 7. **Training on E&S issues**. Including dates, number of trainees, and topics.
- 8. **Stakeholder engagement**. Formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and the memos coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
- 9. **Details of any security risks**: Details of risks that the contractor may be exposed to while performing its work—the threats may come from third parties external to the project.
- Worker grievances. Details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken— grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
- 11. External stakeholder grievances/. Grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken— grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender disaggregated.

Major Changes to Contractor's Environmental and Social Practices

Deficiency and performance management: actions taken in response to previous notices of deficiency or observations regarding E&S performance and/or plans for actions to be taken—these should continue to be reported until PWA determines the issue is resolved satisfactorily.

Environmental and Social Liabilities of the Contractors

Contractors will be legally and financially accountable for any environmental or social damage or prejudice caused by their staff, and thus, they are expected to put in place controls and procedures to manage their environmental and social performance. A breakdown for the cost of noncompliance for each mitigation measure will be enclosed in the bidding documents. These will include:

- 1. Mitigation measures to be included in the contract will be specified in the project ESIA/ESMP.
- 2. Deductions for environmental noncompliance will be added as a clause in the Bill of Quantities

- (BOQ) section.
- 3. Environmental penalties shall be calculated and deducted in each submitted invoice.
- 4. Any impact that is not properly mitigated will be the object of an environmental/social notice by PWA.
- 5. For minor infringements and social complaints, an incident which causes temporary but reversible damage, the contractor will be given a notice to remedy the problem and restore the environment. No further actions will be taken if the project supervision Engineer confirms that restoration is done satisfactorily.
- 6. For social notices, the project supervision Engineer will alert the contractor to remedy the social impact and to follow the issue until solved. If the contractor does not comply with the remediation request, work will be stopped and considered under no excused delay
- 7. If the contractor hasn't remedied the environmental impact during the allotted time, the Project supervision Engineer will stop the work and give the contractor a notification indicating a financial penalty according to the non-complied mitigation measure that was specified in the bidding document.
- 8. No further actions will be required if the project supervision Engineer sees that restoration is done satisfactorily. Otherwise, if Contractor hasn't remedied the situation within one day any additional days of stopping work will be considered no excused delay.
- 9. Environmental notifications issued by the Project supervision Engineer might include one or more environmental penalty
- 10. In the event of repeated noncompliance totaling 5% of the contract value, the project supervision Engineer will bring the environmental and social notices and the deduction history to PWA procurement in order to take legal action.

Workers' Grievance Mechanism

Contractors will put in place a Grievance Mechanism for their workers that are proportionate to their workforce, as described in the LMP and the SEP. The workers grievance mechanism will include:

- A procedure to receive grievances such as comment/complaint form, suggestion boxes, email, a telephone hotline;
- Stipulated timeframes to respond to grievances;
- A register to record and track the timely resolution of grievances;
- An assigned staff to receive, record and track resolution of grievances.

The workers' grievance mechanism will be described in staff induction training, which will be provided to all project workers.

Annex 3: Procedures for Managing Contractors

This procedure was developed consistent with the World Bank's 2018 Standard Procurement Documents, World Bank Group ESHS Guideline which incorporates the IFC ESHS Guidelines, under the "Good Practice Note: Managing Contractors' Environmental and Social Performance". PWA will manage contractors to ensure that E&S requirements are met by contractors. PWA needs to include into the contracts the requirement to comply with all the ESS and all E&S requirements that are applicable for the works.

PWA (PCU E&S staff) should ensure that contractors employ qualified E&S personnel to oversee E&S performance, and that contractor staffing and resources are commensurate with the magnitude and timing of work and potential E&S risks.

PCU and supervision Engineer will be responsible to review and approve C-ESMP prepared by the contractor. Where an ESMP has not been approved, no works will commence in the area.

PCU and supervision Engineer should hold a kickoff meeting with each of the contractors prior to arriving at the site. The purpose is to review E&S requirements (among others), review the roles of the various parties in implementing and monitoring mitigation measures, and agree on project-specific induction and training content. These meetings should include a discussion about control of access to the site, use of security personnel, the implementation of GBV/SEA/SH requirements and the LMP, as well as the requirements for the implementation of a Project GRM and a worker GRM.

The monitoring of contractor E&S performance by Supervision Engineer and PCU must be practiced throughout construction, from mobilization through demobilization. This should involve both visits to work locations and reviews of records kept by the contractor and of reports submitted by the contractor. The frequency of site visits should be commensurate with the magnitude of the E&S risks of the activities being carried out and permanence of potential impacts that could result from ongoing activities.

The supervision Engineer and then the E&S staff at PCU will review contractor reports and follow up as needed to ensure timely resolution of issues of noncompliance with E&S requirements. This may include additional visits to the contractor's site or offices, further communications with contractor E&S personnel, issuance of notices of deficiency or warnings to the contractor, and other actions as needed.

At any stage of construction or other work, if the contractor has not taken appropriate action to achieve compliance with E&S requirements after repeated notices of violation and warnings of noncompliance, and significant E&S impacts are occurring or imminent, the PCU should order the contractor to stop work until E&S performance is brought under control and up to acceptable standards.

PCU at PWA should require contractors to monitor and keep records on E&S performance in accordance with the E&S management plans. This may include monitoring of E&S matters, scheduled and unscheduled inspections to work locations, observations made during routine activities, training, and any other monitoring protocols implemented by the contractor to ensure E&S compliance.

PWA should require contractors to report on E&S performance on a monthly basis throughout the construction phase, including mobilization, construction, and demobilization.

Annex 4: Chance Find Procedures

Purpose

A Chance Finds Procedure (CFP) is a project-specific procedure which will be followed if previously unknown cultural heritage is encountered during project activities. It will be included in all contracts relating to construction of the project, including excavations, movement of earth or other changes in the physical environment. The chance finds procedure will set out how chance finds associated with the project will be managed. The procedure will include a requirement to notify relevant authorities of found objects or sites by cultural heritage experts; to fence-off the area of finds or sites to avoid further disturbance; to conduct an assessment of found objects or sites by cultural heritage experts; to identify and implement actions consistent with the requirements of ESS8 and national law; and to train project personnel and project workers on chance find procedures.

Where necessary due to the potential risks and impacts of a project, the environmental and social assessment will involve the participation of cultural heritage experts. If the environmental and social assessment determines that the project may, at any time during the project life cycle, have significant potential risks and impacts on cultural heritage, PWA will engage cultural heritage experts to assist in the identification, valuation assessment and protection of cultural heritage.

Objectives

The objectives of the CFP are to:

- Define the steps that must be followed to manage the discovery of previously unknown cultural heritage, including the preservation and appropriate treatment of these finds, while also minimizing the potential disruption to the sub-project schedule.
- Enable compliance with relevant national laws and regulations along with other requirements that relate to the discovery of heritage items.

Scope

This procedure is applicable to all activities conducted by sub-project personnel that have the potential to uncover surface or subsurface items of cultural significance that were previously unknown. The procedure does not include already known and documented items.

Steps

If a chance find is discovered the following steps should be undertaken:

- 1. Issue a STOP WORK order in the vicinity of the find.
- 2. Inform the Project Manager.
- 3. Inform PWA who will inform the Ministry of Tourism and Antiquities (MoTA).
- 4. Install temporary site protection measures, such as warning tape of avoidance signs, to establish restricted area around the Chance Find.
- 5. Inform sub-project personnel about the Chance Find and restricted area.
- 6. Artefacts should be left in place if possible; if materials are collected, they will be placed in bag sand labelled by an archaeologist and transported to the relevant agency. Artefacts are not allowed to be taken by any sub-project personnel as personal possessions.

- 7. The find should be documented via the use of photography, notes, GPS coordinates and maps, as appropriate.
- 8. If the Chance Find proves to be an isolated find or not of cultural heritage, the archeologist at MoTA will authorize the removal of the site protection measures and the resumption of activity in the area.
- 9. If MoTA confirms the Chance Find as a cultural heritage of significance, MoTA will prepare and retain archaeological monitoring records, including initial reports. The record shall include coordinates of all observations to be retained by the sub-project.
- 10. MoTA will develop and implement treatment plans for confirmed finds.
- 11. Details of all Chance Finds should be included in the reports submitted to the WB.

Annex 5: Reporting format

Summary of key E&S aspects during the reporting period including:

Project Status

- Provide a brief description of any new interventions over the reporting period.

E&S Incidents

- Provide a summary of all the notifiable E&S incidents.

E&S Changes

Please provide a summary of all the notifiable E&S changes.

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

- Have any environmental, social, health and safety impact/risk studies been conducted during the reporting period?

Management of PCU

- Illustrate the organizational structure to manage environment, health and safety, labor and social aspects during the reporting period. Name the individuals in PCU who hold responsibility for environmental, social, health and safety.

Compliance with Environmental and Social Management Plans

Describe the status of the ESMP implementation and any issues that remain outstanding.

ESS2. Labor and Working Conditions

Human Resources Management

- Have PCU and contractors changed/updated their Human Resources (HR)?

Occupational Health and Safety

- Describe the main implemented OHS terms during the reporting period

ESS3. Resource Efficiency and Pollution Prevention

Environmental Monitoring

- Provide copy of environmental monitoring data reports for this reporting period, collected consistent with the ESMPs for the subprojects.
- Briefly describe environmental mitigation measures implemented during the reporting period to comply with E&S requirements.

Resources Efficiency: Energy and Water

- Provide data on energy and water consumption during the reporting period.
- Describe the resources efficiency measures/efforts being implemented to minimize fuel, energy and water consumption.

Hazardous and non-Hazardous Waste

Provide data on waste types and actions implemented to manage: chemical containers, chemical
for sludge dewatering, dewatered sludge, domestic waste, waste lubricating hydrocarbons, waste
solvents, contaminated soil, etc.

ESS4 Community Health, Safety and Security

- List and describe any initiatives and list of actions implemented in relation to community health and safety during the reporting period.-
- Provide details for accidents during this reporting period.

- Provide details for fatal accidents during this reporting period (and provide copies of accident investigation and respective corrective plan).

GBV/SEA/SH

- Provide details for the GBV/SEA/SH incidents and actions implemented.
- An update on any security incidents

ESS5 Land Acquisition and Involuntary Resettlement

- Report any activities guided by the Resettlement Framework (RF)
- Have any specific instruments in regards to land and resettlement been prepared in the reporting period
- Report on the implementation of specific land-related instrument (e.g. RAP)
- Report on Project's Affected Parties (PAPs) who suffer a complete or partial loss of lands, crops, trees and assets or access to them, assistance and livelihood restoration, type of loss incurred and eligible compensation.
- Provide summary of voluntary land donations

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

- Report on the mitigation measures included in the ESMF and ESIA/ESMP

ESS8 Cultural Heritage

- Report if chance find procedures have been applied if not, please indicate Not Relevant.

ESS 10 Stakeholder Engagement and Information Disclosure

- List any stakeholder engagement events, including E&S consultation and disclosure, liaison with non-governmental organizations, civil society, local communities, etc.

Grievance Mechanism Cases

- Report the number and type of requests and/or grievances received from project affected people / local communities / local organizations.
- How many have been resolved and how many are pending? (Attach a log of the grievance redress registry.

Annex 6: CERC Positive and Negative List

A. CERC Positive List

The positive list of works, services, non-consulting services and goods eligible for CERC component is shown in the list below. The works that will be financed under CERC will be those which do not trigger new ESS under the WSRP-1 project.

Goods

- Medical equipment and supplies
- Non-perishable foods, bottled water and containers
- Tents for advanced medical posts, temporary housing, and classroom/day-care substitution
- Equipment and supplies for temporary housing/living (gas stoves, utensils, tents, beds, sleeping bags, mattresses, blankets, hammocks, mosquito nets, kit of personal and family hygiene, etc.) and school
- Gasoline and diesel (for air, land and sea transport) and engine lubricants
- Spare parts, equipment and supplies for engines, transport, construction vehicles
- Lease of vehicles (Vans, trucks and SUVs)
- Equipment, tools, materials and supplies for search and rescue (including light motor boats and engines for transport and rescue)
- Tools and construction supplies (roofing, cement, iron, stone, blocks, etc.)
- Equipment and supplies for communications and broadcasting (radios, antennas, batteries, and cell phones)
- Water pumps and tanks for water storage
- Equipment, materials and supplies for disinfection of drinking water and repair/rehabilitate of black water collection systems
- Construction materials, equipment and industrial machinery
- Water, air, and land transport equipment, including spare parts
- Temporary toilets
- Groundwater boreholes, cargos, equipment to allow access to affected site, storage units
- Any other item agreed on between the World Bank and the Burrowers (as documented in an Aide-Memoire or other appropriate formal Project document)

Services and non-consulting services

 Consulting services related to emergency response including, but not limited to urgent studies and surveys necessary to determine the impact of the disaster and to serve as a baseline for the recovery and reconstruction process, and support to the implementation of emergency response activities

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- Feasibility study and technical design
- Works supervision
- Technical Assistance in developing ToRs, preparing Technical Specifications and drafting tendering documents (Bidding Documents, Request for proposals)
- Non-consultant services including, but not limited to: drilling, aerial photographs, satellite images, maps and other similar operations, information and awareness campaigns
- Non-consultant services to deliver any of the activities described in the "Goods" section of this table (e.g., debris removal, dump trucks, drones survey)

Works

- Repair of damaged infrastructure including, but not limited to: water supply and sanitation systems, water tanks, roads, and transportation systems, energy and power supply, telecommunication, and other infrastructure damaged by the event
- Re-establish of the urban and rural solid waste system, water supply and sanitation (including urban drainage)
- · Repair of damaged public buildings, including schools, hospitals and administrative buildings
- Repair, restoration, rehabilitation of schools, clinics, hospitals
- · Removal and disposal of debris associated with any eligible activity

Training

- Conduct necessary training related to emergency response including, but not limited to the implementation of emergency action plans
- Training on rapid needs assessment and other related assessments

B. CERC Negative List

In no case shall the activities for financing under the CERC exceed the environmental and social standards presented in the WSRP-1 PAD, ESMF and RF prepared prior to project approval. CERC activities will not trigger any new ESS. The following uses of WSRP-1 resources by the CERC are prohibited:

- Activities that would lead to conversion or degradation of critical forest areas, critical natural habitats, and clearing of forests or forest ecosystems
- Activities affecting protected areas (or buffer zones thereof)
- Land reclamation (i.e., drainage of wetlands or filling of water bodies to create land)
- Land clearance and levelling in areas that are not affected by debris resulting from the eligible crisis
 or emergency
- Activities that will result in the involuntary taking of land, relocation of households, loss of assets or
 access to assets that leads to loss of income sources or other means of livelihoods, and interference
 with households' use of land and livelihoods

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- Construction of new roads, realignment of roads, or expansion of roads, or rehabilitation of roads that are currently located on communal lands but will be registered as government assets after rehabilitation
- Use of goods and equipment on lands abandoned due to social tension / conflict, or the ownership of the land is disputed or cannot be ascertained
- Use of goods and equipment to demolish or remove assets, Unless the ownership of the assets can be ascertained, owners consulted, assets valued, and losses compensated for in line with the project's RF
- Uses of goods and equipment involving forced labor, child labor, or other harmful or exploitative forms of labor
- Uses of goods and equipment for military or paramilitary purposes
- Uses of goods and equipment in response to conflict, in any area with active military or armed group operations
- · Activities related to returning refugees and internally displaced populations

Annex 7: Code of Conduct for Workers

Code of Conduct to be signed by each worker مدونة قواعد السلوك واخلاقيات العمل (نسخة خاصة بالعاملين)

| رقم الهوية | الاسم |
|-------------|-------------|
| العمر | الجنس |
| مدة المشروع | اسم المشروع |

مقدمة

يأتي الاهتمام بمواثيق سلوك وأخلاقيات العمل والتشغيل كأحد مداخل تطوير الاداء للعاملين واصحاب العمل. إن إعداد مدونة قواعد السلوك وأخلاقيات العمل من شأنه تعزيز قيم والممارسات الايجابية في العمل، وتعد مدونة السلوك إطاراً عاماً يجب على العاملين في المشروع التقيد به والعمل بمقتضاه، فهي مدونة تلقي الضوء على المعايير والاخلاق والقيم التي يجب أن يتحلى بها العامل أثناء أداء واجباته، ومن ثم فهي قواعد ستسهم على نحو فاعل في الارتقاء بمستوى جودة الاداء والارتقاء بحد بن هذه المدونة تشكل جزءاً من مقتضيات العمل في المشروع بالتركيز على اجراءات الوقاية والسلامة والصحة العامة المتعلقة بكوفيد 19وغيرها من الأمراض، ويجب تطبيقها في كل أوقات العمل وطوال فترة التشغيل، وسوف يتم تزويد كل علمل بنسخة منها، ليقرأها ويعمل بموجبها.

أولا: المبادىء الاساسية لمدونة السلوك واخلاقيات العمل

إن جودة الاداء ونجاح العمل تتوقف على الالتزام بقواعد السوك العامة واخلاقيات العمل، والتصرف بطريقة عادلة وصادقة كأفراد مسئولين اجتماعيا انطلاقا من ايماننا الراسخ بمسؤوليتنا الاجتماعية التي لها أثرا إيجابيا كبيرا على المشاريع التي نعمل بها ولتحقيق هذا، يجب علينا احترام هذه المبادئ الاساسية:

النزاهة والامانة: إلايمان بتعزيز التصرف بأمانة في جميع العلاقات مع التقيد الصارم بجميع القوانين المعمول بها ، احترام كرامة كل شخص والحفاظ على سلامتهم.

الشفافية: الاحترام المتبادل والحوار والشفافية هي أساس العلاقة مع اصحاب العمل والسلطات ذات العلاقة ، والتي تتوافق مع مبادئ التعاون والصدق واالانفتاح.

الموضوعية واالاستقلالية: العمل بموضوعية واستقلالية وتجنب أي نوع من أنواع الفساد أو تضارب المصالح الذي قد يؤثر على اتخاذ القرارات المتعلقة بالعمل.

المسؤولية: توفير بيئة عمل آمنة وصحية للعمال ، واحترام الحقوق والتقيد بالواجبات من مقتضى المسؤولية ، واحترام المجتمعات التي نعمل فيها.

ثانيا: قواعد السلوك واخلاقيات العمل

القسم الاول: الحقوق العامة

- يلتزم العامل بتأدية عمله بإخلاص وأمانة وبالمحافظة علي أسرار العمل وأدواته، ويعتبر مسؤولا عن الادوات التي في عهدته وعليه الحفاظ عليها، وفي حالة وجود ظرف خارج عن ارادته او قوة قاهرة، فان العامل لا يعتبر مسؤولاً عن خلل الأدوات أو ضياعها.
- على العامل أن يلتزم بأخلاقيات العمل والحفاظ على خصوصية السكان والعمال في منطقة العمل، دون الإشتباك معهم أو التسبب بأي أذى لهم بأي شكل كان. ويجب الإمتناع عن المشاركة في أي عنف بدني او لفظي لأي من العاملين أو السكان.
 - على العامل التقيد بساعات العمل المطلوبة، وكذلك التقيد والإمتثال بالمهام المكلف بها.

- على العامل الإلتزام بإجراءات السلامة المتبعة في الموقع، خاصة عند إستخدام الألات الخطرة، وأي إجراءات إضافية يتم طلبها من قبل البلدية.
- يجب على العامل الإبلاغ فورا عن أي أمراض مزمنة يعاني منها أو عند الشعور بالإعياء، وعن أي عقاقير يتلقاها العامل.
- الإمتناع عن التسبب بأي نوع من المضايقات سواء اللفظية المباشرة او غير المباشرة لأي شخص أثناء فترة العمل، وخاصة من فئة النساء والأطفال وذوي الإحتياجات الخاصة.
- من حق العامل أن يوقع عقد عمل مع صاحب العمل علي أن يكون باللغة العربية، وذلك لحفظ حقوق العامل ، علماً بأن عقد العمل يجب أن يتضمن: الأجر، نوع العمل، مكانه ومدته، ساعات وأوقات العمل، كما ويجب ان يتضمن العقد الاجراءات الصحية وشروط الوقاية المتعلقة بكوفيد وغيرها من الامراض المنقولة 19، والتي اقرتها وزارة الصحة الفلسطينية، ويجب أن يوقع العقد من قبل صاحب العمل والعامل بحيث يحتفظ العامل بنسخة أصلية من العقد.
 - علي صاحب العمل أن يلتزم بالتامين على جميع عماله عن إصابات العمل لدي الجهات المرخصة في فلسطين.
- يجب أن تتخلل ساعات العمل اليومي فترة أو أكثر لراحة العامل لا تزيد في مجموعها عن ساعة مع مراعاة ألا يعمل العامل أكثر من خمس ساعات متصلة دون تخصيص وقت للراحة.
 - التقيد باوقات العمل وتكريس اوقات العمل للقيام بالمهام والواجبات المتعلقة بطبيعة العقد ، كما نص عليها عقد العمل.
 - ضمان حق العامل في التظلم او الشكوي من اي انتهاك لحقه او من اتخاذ قرار خاطيء بحقه.

القسم الثاني: حماية حقوق النساء

- معاملة النساء باحترام بغض النظر عن العرق أو اللون أو اللغة أو الدين أو الرأي السياسي أو غير السياسي أو الأصل او الإعاقة او أي وضع آخر.
- عندما يكون لدى المراة العاملة مخاوف أو شكوك فيما يتعلق بأعمال العنف القائم على النوع الاجتماعي من قبل اصحاب العمل او اي طرف ذو علاقة بالعمل، يجب عليها الإبلاغ عن هذه المخاوف وفقًا لإجراءات الشكاوي المعتمدة في المشروع.
 على ان يتم التعامل مع هذه الشكاوي بخصوصية كبيرة للحفاظ على كرامة المشتكية.
- يجب توفير الحماية للنساء وتهيئة أماكن امنة في العمل للنساء وخاصة الحوامل والتاكد من عدم نقل أي امرأة حامل بشكل غير صحيح ، والعمل على ازالة او منع تعرض النساء الحوامل للمخاطر.
- يجب توفير أماكن للنظافة الشخصية لإستخدامها من قبل النساء العاملات بعد الإنتهاء من العمل. وايضا توفير مرافق صحية (دورات مياه) خاصة بالنساء في اماكن العمل، ويجب أن يتم تعقيم هذه الأماكن بشكل يومي.
- يجب تنفيذ لقاءات توجيهية قبل بدء العمل في الموقع للتأكد من أن الجميع على دراية بقواعد السلوك الخاصة بالعنف القائم على النوع الاجتماعي.

القسم الثالث: حماية حقوق ذوى الاعاقات

- يلتزم اصحاب العمل بتهيئة البيئة الملائمة لاحتياجات ذوي الإحتياجات الخاصة وتوفير تسهيلات الحركة والتنقل في اماكن العمل.
- عدم التمبيز بحق المعاقين والمعاقات في العمل، واحترام حقهم / هن في اختيار نوعية الاعمال التي تناسب قدراتهم /تهن، واهتمامتهم/هن واحتياجاتهم/هن.
 - الالتزام بتوفير خدمات ومرافق صحية مواءمة لاستخدامات ذوي الاعاقة الحركية في مواقع العمل.

القسم الرابع: الصحة والسلامة المهنية

- على العامل التقيد بتطبيق شروط واجراءات الصحة والسلامة العامة الصادرة عن وزارة الصحة الفلسطينية ، والالتزام بقواعد السلامة والصحة المهنية في العمل.
 - على صاحب العمل تقديم الإسعافات الأولية اللازمة للعامل في حال الاصابة ونقله إلى اقرب مركز للعلاج.
- الإلتزام باجراءات ومتطلبات السلامة والصحة العامة المتعلقة بكوفيد 19 بما فيها التباعد الجسدي واللبس الواقي وكل ما ينص عليه البروتوكول الصحى.

توقيع العامل

توفيع الجهة المشغلة

Annex 8: TORs for Environmental and Social Specialists

Water Security and Resilience Program Terms of Reference Environmental Specialist

1. Introduction

The Palestinian Water Authority (PWA) is requesting a grant from the World Bank, International Development Association (IDA) to increase equitable access to safe water and sanitation services and to improve service delivery. This objective is expected to be achieved over a 12-year period through a Series of Projects (SoP), of which the operation detailed in this document is the first. The programmatic approach will ensure continuity of the sector engagement and also facilitate a sustained contribution to the Bank's ongoing support to the water sector in the West Bank and Gaza (WB&G). The proposed Program will have strong links to the water sector interventions co-financed by the World Bank and the Partnership for Infrastructure Development Multi-Donor Trust Fund (PID MDTF) that play a crucial role in addressing the challenges in the sector and critical water services in priority areas under the first project, while also laying the basis for rebuilding better in the long-term.

The Program is expected to consist of three projects that will overlap in time and vary in geography, with a consistent component-level design to facilitate scaling-up. The three projects are expected to commence in 2023, 2026 and 2028, respectively. The anticipated duration of the first project is five years while the duration of subsequent projects is expected to be six years each, with overlapping periods. Overall SoP completion is expected by 2035.

The focus of the proposed SoP-1 will be on improving water services in line with the PWA's priorities and the water sector's strategic development plan and desire to improve water services in areas with the lowest water per capita and improve service providers operational and financial performance. In order to address the long-term structural challenges of lack of water supply, and contribute to a resilient and sustainable recovery, the project will also undertake strategic sector reform and capacity building activities supporting water sector institutions, encouraging a robust reform agenda and providing targeted technical support for improved management of O&M toward financial sustainability of the sector and contribute to the improvement and containment of and bolster the water sector's resilience to future disasters such as COVID-19.

Project Components: The Project will consist of four components:

Component 1 - Improvement of Water and Wastewater service management: the project will finance investments in the water and wastewater facilities. The aim of these investments is to provide safely managed water supply services to unserved population and ensure efficiency of the operation and maintenance of existing wastewater treatment plants. This component will finance the implementation of the water supply infrastructure required to improve access to and quality of water supply in North Jenin including expansion of water distribution networks to remove critical bottlenecks and improve water allocation in selected areas in WB&G and preparation of feasibility studies for the second Project.

Component 2 - Improve performance of Water Sector Service Providers: This component aims at strengthening the capacity of the water institutions and the SPs' operational and financial efficiency, and their responsiveness

emergencies. It will also provide necessary technical assistance and capacity building activities to address sector challenges and sector reform to accelerate the implementation of reform related to the clustering of service providers under the LGUs and establishment of RWUs. This subcomponent will also include interventions to enhance the PWA's capacity to develop and implement water sector policies, strategies, and sector development plans and will support improved social accountability of service providers. The technical assistance will provide general planning and institution-building support to improve service providers performance in line with the PDO. In particular: (a) Sector Reform and Strategic Planning; (b) Improve Financial and Operational Performance of the Service Providers; (c) Improve Social Accountability of Service Providers.

Component 3 - Project Management and Monitoring: This component will support the Project Coordination Team (PCT) hosted within PWA and Project Implementation Unit (PIU) that will coordinate, implement, monitor and report on the project implementation progress.

Component 4 - Contingent Emergency Response Component This component will improve the PA's ability to respond effectively in the event of an emergency in line with World Bank procedures on disaster prevention and preparedness.

2. Environmental and Social Assessment of the Project

The Water Security and Resilience Program will be implemented in compliance with the World Bank new Environmental and Social Framework (World Bank ESF) that was approved in August 2016 and got effective in late 2018 (http://pubdocs.worldbank.org/en/837721522762050108/Environmental-and-Social-Framework.pdf), in addition to applicable Palestinian laws, policies and regulations governing environmental and social issues.

In order to fully comply with Palestinian Environmental Law and World Bank safeguard policies, as well as to support the sustainability of the expected project outputs and outcomes, the following documents will be developed by PWA, reviewed and cleared by the Bank, and published on the PWA website and the Bank system:

- 1. Environmental and Social Management Framework (ESMF)
- 2. Resettlement Framework (RF)
- 3. Labor Management Procedures (LMP), including details of workers' Grievance Mechanism (GM)
- 4. Stakeholder Engagement Plan (SEP), including details of project GM
- 5. Community Health and Safety Management Plan (CHSMP)
- 6. Site-specific Environmental and Social Impact Assessments/Environmental and Social Management Plans (ESIAs/ESMPs)
- 7. Site-specific Resettlement Plans (RPs)
- 8. Environment and Social Commitment Plan (ESCP)

A brief description of the project's potential (but not limited to) environmental risks and impacts and environmental risk mitigation instruments/measures, in relation to the relevant ESF Environmental Standards (ESSs), are summarized below:

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of application of ESS1:

Key environmental issues under ESS1 are related to occupational health and safety during the construction, and operation of wastewater treatment plants, other environmental risks including noise, dust, waste and hazardous waste generation, impact on the nature of land use, increase in the quantity of wastewater produced, impacts on road and traffic safety, and the yield of the agricultural wells in the area. Improved water supply

infrastructure to provide increased water services will have an impact on increased water extraction and thereby affect the groundwater levels and the safe yield of the groundwater aquifers; deterioration of water quality; drying up of wells resulting in increased pumping costs etc. The cumulative impact of increased water extraction across many wells being drilled under the water supply development projects should be assessed during the project preparation.

Environmental risks and impacts will be assessed, and requisite mitigation measures (commensurate to the severity of risk) will be included in the E&S instruments including the ESMF and site-specific ESIAs/ESMPs that will used during the design, construction and operational phases of the project.

An ESMF for the project and site-specific ESIAs/ESMPs for the sub-projects whose alignment/location is known by project appraisal will be prepared, consulted on, cleared by the Bank and publicly disclosed by project appraisal. For other sub-projects site-specific ESIAs/ESMPs will be prepared, during project implementation and once their locations are finalized. Finally, PWA will prepare an ESCP for the project which will be included in the legal agreement between the Bank and The Palestine Liberation Organization (for the benefit of the Palestinian Authority). The ESCP will also be prepared, finalized, cleared by the Bank and publicly disclosed by project appraisal.

ESS3 Resource Efficiency and Pollution Prevention and Management

Overview of the relevance of ESS3 for the project:

ESS3 is relevant to the Project as it will involve the construction of water systems, wells, and operation and maintenance activities for wastewater treatment plants that would lead to significant increase of the use of water, generate wastes, sludge, effluent discharges, laboratory wastes that could cause pollution and would require considerable energy use. The systems will be optimized by considering the following actions: (i) conducting detailed water balance; (ii) opportunities for improvement in water use efficiency; (iii) specific water use assessment; (iv) operation benchmarking, (iv) preparing OHS Plan and ERP for all the various sub-activities which will be financed which will be included in site-specific ESIA/ESMPs, and (v) assessing the laboratory capacity at PWA and/or in country and propose the necessary training. The wastewater treatment and sludge treatment processes will, by definition, prevent pollution caused by wastewater generated. If the physical, chemical and biological treatment processes are adequately optimized, additional pollution of the operation (such as odors and vectors) would be prevented at the source.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Overview of the relevance of ESS6 for the project:

This standard is relevant. Most of the project sites are in populated urban and rural areas that do not have high biodiversity conservation value and no ecosystem services are likely to be impacted by the Project. However, since the locations of some of the sub-projects related to water extraction is unknown, this ESS is relevant until additional information is obtained during preparation and revisited prior to appraisal. Moreover, the site-specific ESIAs/ESMPs will assess the impacts on habitats of importance if any identified are within the impact area and will propose alternative routes for the water pipes and/or other requisite mitigation measures in line with the ESS6. Additional information will be obtained and assessed on impacts on natural habitats once the exact project location and final project design are known.

ESS8 Cultural Heritage

Relevant. No tangible or intangible cultural heritage is expected to be impacted by project activities. However, the project will involve excavation and given the historic nature of the country there is always a chance to find

tangible cultural heritage. Consequently, as a minimum, the chance fund approach will be applied, and chance find procedures will be prepared as part of the ESMF by PWA and will be incorporated in all works' contracts.

3. Individual Consultancy Service for an Environmental Specialist

The PWA intends to engage an individual consultant in the West Bank as an Environmental Specialist.

Main Tasks, Responsibilities and Scope of Work:

The environmental Specialist is expected to monitor and follow up all the environmental aspects of the Water Security and Resilience Program, within all components of the project as follows:

- 1. In collaboration with the Social Specialist, lead and coordinate the PWA team's efforts in providing advice, building capacity, and advancing the development and implementation of the Donors' (such as World Bank, AFD) environmental risk management policies and procedures (e.g. the Bank's ESF) during project preparation and implementation.
- 2. Support and collaborate with the Social Specialist for, the preparation and implementation of the project's ESMF, CHSMP, LMP and other relevant E&S instruments, plans etc.
- 3. Ensure that all relevant E&S reviewed and cleared by the Bank, and disclosed in-country in accordance with the project ESCP.
- 4. In collaboration with the Social Specialist, prepare and develop site-specific ESIAs/ESMPs, in accordance with the terms of the ESMF and other relevant E&S instruments to monitor the implementation of each mitigating measure corresponding to a negative impact of the project.
- 5. In collaboration with the Social Specialist, supervise the implementation of the project ESIAs/ESMPs.
- 6. In collaboration with the Social Specialist, monitor the implementation of the project ESCP.
- 7. In collaboration with the Social Specialist, ensure the inclusion of specific environmental and social instruments in relevant bidding documents
- 8. Periodically carry out field visits and conduct monitoring of environmental management activities and provide timely advice as required
- 9. In collaboration with the Social Specialist, prepare and submit periodic environment and social monitoring reports to the Project Coordination Unit (PCU) Manager.
- 10. In collaboration with the Social Specialist, prepare and submit regular environmental and social progress reports to the World Bank as required by the project ESCP.
- 11. Participate in relevant meetings especially during the donors' missions and prepare all reports for the mission on environmental management.
- 12. In collaboration with the Social Specialist, conduct capacity assessment and identify what capacity building is needed in terms of environmental management aspects. Ensure capacity development in accordance with the project ESCP.
- 13. Provide support in conducting training on environmental issues.
- 14. Work in close collaboration with other members of the project team e.g. Social Specialist, M&E, Communication etc., for implementation of requirements outlined in the ESMF/ESMPs/ESIAs.
- 15. Undertake other duties as per the requirements of the project or as directed by the PCU manager at PWA.

Minimum Required Qualifications:

1. At least a bachelor degree in environmental studies, or any other related field.

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- 2. Minimum 5 years work experience in the field of environment including working according to the requirements of international/donor institutions.
- 3. Relevant experience in preparing environmental and social reports for donor financed projects (e.g. The World Bank).
- 4. Experience of working in teams at different levels.
- 5. Has self-initiative, is dynamic in establishing relationships and constant site visits to project locations.
- 6. Good management skills, particularly workshop organizing and moderation, communication skills as well as having the ability to work in a team.
- 7. Languages: Fluency in Arabic and good English skills (written and spoken)

5. **Time Frame and Application Procedure**

The contract will be for 1 year (renewable up to xx years).

Interested consultants shall submit her/his applications includes (Cover letter, CV describing similar assignments,

| experience in similar conditions, availability of appropriate skills, etc.) must be delivered by email addresse below no later than dd/mm/yyyy. |
|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Further details and information on the project can be found on the following links: |
| 1. xxx: |
| For further information please contacts us at: |
| PWA |
| Telephone: |

Water Security and Resilience Program Terms of Reference Social Development Specialist

1. Introduction

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The Program is expected to consist of three projects that will overlap in time and vary in geography, with a consistent component-level design to facilitate scaling-up. The three projects are expected to commence in 2023, 2026 and 2028, respectively. The anticipated duration of the first project is five years while the duration of subsequent projects is expected to be six years each, with overlapping periods. Overall SoP completion is expected by 2035.

The focus of the proposed SoP-1 will be on improving water services in line with the PWA's priorities and the water sector's strategic development plan and desire to improve water services in areas with the lowest water per capita and improve service providers operational and financial performance. In order to address the long-term structural challenges of lack of water supply, and contribute to a resilient and sustainable recovery, the project will also undertake strategic sector reform and capacity building activities supporting water sector institutions, encouraging a robust reform agenda and providing targeted technical support for improved management of O&M toward financial sustainability of the sector and contribute to the improvement and containment of and bolster the water sector's resilience to future disasters such as COVID-19.

Briefly, the Project will consist of four components:

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enhance the PWA's capacity to develop and implement water sector policies, strategies, and sector development plans and will support improved social accountability of service providers. The technical assistance will provide general planning and institution-building support to improve service providers performance in line with the PDO. In particular: (a) Sector Reform and Strategic Planning; (b) Improve Financial and Operational Performance of the Service Providers; (c) Improve Social Accountability of Service Providers.

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In order to fully comply with Palestinian Environmental Law and the World Bank ESF, as well as to support the sustainability of the expected project outputs and outcomes, the following documents will be developed by PWA, reviewed and cleared by the Bank, and published on the PWA website and the Bank system:

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- 13. Community Health and Safety Management Plan (CHSMP)
- 14. Site-specific Environmental and Social Impact Assessments/Environmental and Social Management Plans (ESIAs/ESMPs)
- 15. Site-specific Resettlement Plans (RPs)
- 16. Environment and Social Commitment Plan (ESCP)

A brief description of the project's potential (but not limited to) social risks and impacts and social risk mitigation instruments/measures, in relation to the relevant ESF Environmental and Social Standards (ESSs), are summarized below:

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Key social issues under ESS1 are related to inequitable distribution or potential exclusion of marginalized groups from project benefits; lack of meaningful engagement and consultation particularly with women, youth and vulnerable categories such as women headed households, persons with disabilities, the poor, people living in Area C, Access Reduced Areas (ARAs) and remote and rural locations, communities more susceptible to climate change etc.; social resistance to improved tariff collection and reduction in Non-Revenue Water (NRW) measures; and continuing lack of or poor water conservation practices among communities.

Social risks and impacts will be assessed, and requisite mitigation measures (commensurate to the severity of risk) will be included in the E&S instruments including the ESMF and site-specific ESIAs/ESMPs that will used during the design, construction and operational phases of the project. The ESMF/ESMPs/ESIAs will also include

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(but not limited to) an assessment of potential gender based violence/sexual exploitation and abuse/sexual harassment (GBV/SEA/SH) risks and preventive measures, proportionate to the level of risks.

A Social Assessment will be undertaken while identifying optimal tariff setting under the Technical Assistance. Robust and contextually appropriate citizen and stakeholder engagement systems and a communication strategy that also focus on women and vulnerable groups will need to be developed and implemented as part of the project design to address risks and impacts of social resistance to tariff collection and poor water conservation strategies among communities.

An ESMF for the project and site-specific ESIAs/ESMPs for the sub-projects whose alignment/location is known by project appraisal will be prepared, consulted on, cleared by the Bank and publicly disclosed by project appraisal. For other sub-projects site-specific ESIAs/ESMPs will be prepared, during project implementation and once their locations are finalized. Finally, PWA will prepare an ESCP for the project which will be included in the legal agreement between the Bank and The Palestine Liberation Organization (for the benefit of the Palestinian Authority). The ESCP will also be prepared, finalized, cleared by the Bank and publicly disclosed by project appraisal.

ESS2 Labor and Working Conditions

The project activities will involve direct workers (PMSU staff); contracted workers engaged in construction (hired by contractors and subcontractors) and consultancy services (e.g. for preparation of E&S documents); and primary supply workers (i.e workers of suppliers who, on an ongoing basis, provide directly goods or materials essential for the core functions of the project). An assessment of project workers will be made during project preparation.

Large labor camps are not anticipated for the project. The project will be divided into small packages to be implemented by local contractors and joint ventures; hence, a small number of foreign experts and highly skilled labor might also be involved. The project involves a range of construction activities such as pipeline trench excavation, new pipe and connection laying and joining, connection with existing pipes, trench backfilling, roadway reinstatement along the pipeline route, formworks for the building, foundations and retaining walls, mechanical work and fittings for the pump buildings and pipe yard, electrical work for lighting and instrumentation, and well borehole excavation, etc. to be implemented in Jenin and Hebron Governorates in the West Bank. Therefore, there will be labor management issues such as (but not limited to) OHS, working terms and conditions, equal opportunity, and SEA/SH. Risks of child and forced labor are not anticipated under the project. There might be some small-scale labor influx due to employment of workers from other governorates; however, this risk is currently assessed as low. A determination of the type and scale of labor risks and impacts, and relevant mitigation measures will be made during project preparation.

The project LMP will be prepared, cleared by the Bank and disclosed by appraisal and PWA will draw on its experience of preparing the LMP for the WMS project for this purpose.

The workers' GM for other World Bank projects are functioning and these will be adapted and augmented, as required, and used for the Water Security Development Program. Details of the workers' GM will be included in the project LMP.

ESS4 Community Health and Safety

The safety of communities living and working in areas where civil works will be conducted, e.g. digging of trenches for underground pipelines, foundations for the booster pumping stations, retaining walls and water reservoirs etc., will be also investigated and measures to mitigate any identified risks during construction will be included

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in the site-specific ESIAs/ESMPs. Wherever construction activities require route detours, safety measures to minimize the impact of construction activities and any related increase in traffic on nearby communities and road users, and measure to ensure road and traffic safety and prevent potential road accidents will be put in place and enforced in accordance with acceptable norms and as per the World Bank's EHS guidelines. Additional community health and safety risks are related to the transmission of COVID-19 (during any future surge in infections) and potential exposure to communicable diseases from project workers; and risks associated with potential SEA/SH. PWA will prepare and implement a CHSMP that will be consulted on, cleared by the Bank, and disclosed by project appraisal.

Contractors might need to engage private security guards to protect construction sites, materials, equipment etc. The need for security arrangements at civil works sites will be determined according to the contextual and security requirements of each sub-project site and requisite risk mitigation and monitoring measures, as appropriate, will be included in the site-specific ESIA/ESMPs.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

No large-scale private land acquisition or resettlement is proposed for the project. However, there may potentially be some small-scale private land acquisition needs, for example, for the drilling of four groundwater wells and to expand ROW, if required, for the construction of the water supply systems. PWA has identified six locations in the West Bank that are suitable for the drilling of the groundwater wells in the Hebron, Bethlehem and Jericho governorates. However, a final determination about the specific locations for this intervention will be done during project preparation and will be based on identified needs and priorities and requisite approvals from the Israeli authorities. PWA and/or local government authorities will be responsible for the requisite private land acquisition. No physical resettlement or removal dwellings is expected as the locations and land that has been identified for potential interventions is being used for grazing and/or agricultural purposes. However, there may be some small-scale livelihood impacts that will need to be assessed and, if required, compensated.

A RF will be prepared for the project, consulted on, cleared by the Bank and publicly disclosed by appraisal. Site specific RPs will be prepared once the technical designs and locations/alignments of interventions are available. RPs will be consulted on, reviewed and cleared by the Bank and publicly disclosed. RPs will be implemented before commencement of construction. For sub-projects whose technical designs and locations are available during project preparation, site specific RPs, if required, will be prepared, consulted on, cleared by the Bank and publicly disclosed by project appraisal. A commitment to prepare and implement RPs during project implementation will be included in the project ESCP.

ESS10 Stakeholder Engagement and Information Disclosure

Project affected parties include (but are not limited to) people living in the project areas of influence such as project direct beneficiaries, community members and other parties that may be subject to direct impacts from project activities such as landowners, and land users and encroachers (if any). Other interested parties include (but not limited to) institutional actors such as PWA, the National Water Company, local government authorities, the Palestinian Land Authority and Ministry of Local Government. Disadvantaged and vulnerable groups may include (but are not restricted to) people living in remote and rural locations as well as Areas with Ristricted Access (ARAs), the poor, women headed households, persons with disabilities, youth, , etc. Other interested parties may include the Environmental Quality Authority, local media, Non-Governmental Organisations (NGOs) and Community Based Organizations (CBOs).

A SEP will be prepared for the project and PWA will draw on the experience of preparing and implementing SEP/stakeholder engagement activities for other projects for this purpose. The SEP will include a comprehensive identification of various categories of stakeholders and a methodology for information sharing and disclosure and for ongoing consultation with all stakeholders, including marginalized groups, to ensure that all stakeholders

are engaged throughout the project. The SEP will be prepared, consulted on, cleared by the Bank and publicly disclosed by project appraisal.

PWA has already established GMs to support Bank financed projects that are functional. The existing GMs will be adapted and augmented, as required, and used for the Water Security Development project and relevant details will be included in the project SEP.

3. Individual Consultancy Service for a Social Development Specialist

The PWA intends to engage an individual consultant in the West Bank as a Social Development Specialist (SDS)

Main Tasks, Responsibilities and Scope of Work

The SDS is expected to monitor and follow up on the social development/social risk management aspects of the Water Security and Resilience Program, within all components of the project, as follows:

- 16. In collaboration with the Environmental Specialist, lead and coordinate the PWA team's efforts in providing advice, building capacity, and advancing the development and implementation of the Donors' (such as World Bank, AFD) social development/social risk management policies and procedures (e.g. the Bank's ESF) during project preparation and implementation.
- 17. Support and supervise, and as required collaborate with the Environmental Specialist for, the preparation and implementation of the project's RF, SEP, CHSMP, LMP, ESMF and other relevant E&S instruments, plans etc.
- 18. Update any relevant project E&S instruments, for social management aspects, during project implementation as required and/or in accordance with the project ESCP.
- 19. Ensure that all relevant E&S documents are publicly consulted on, reviewed and cleared by the Bank, and disclosed in-country in accordance with the project ESCP.
- 20. In collaboration with the Environmental Specialist, prepare and develop site-specific ESIAs/ESMPs, including requirements for (but not limited to) stakeholder engagement, labor management, community health and safety etc., in accordance with the terms of the ESMF and other relevant E&S instruments to monitor the implementation of each mitigating measure corresponding to a negative impact of the project.
- 21. Prepare and implement site-specific RPs in accordance with the project RF.
- 22. Prepare any impact evaluations, as required, of resettlement activities in accordance with the RF and the project ESCP.
- 23. In collaboration with the Environmental Specialist, supervise the implementation of the project LMP and ensure effective implementation of the workers' GM established in accordance with the LMP.
- 24. In accordance with the project SEP, ensure effective engagement with the project's stakeholders and people living/working close to or within the project area and timely disclose the project Environmental and Social information during stakeholder's meetings and the related documentation on predesignated communication channels.
- 25. Follow up with stakeholders (throughout the project and as required by the project SEP and other relevant E&S instruments, project strategies and plans etc.) to ensure that the voice and needs of diverse and/or vulnerable individuals and groups (e.g., women, people living in rural/remote areas, people living in access reduced areas, communities vulnerable to climate change, persons with disabilities, the poor etc.) are focused on in the planning and delivery of project schemes/interventions/subprojects and that, in particular, these individuals and groups have equitable access to project benefits.

- 26. Maintain good community relations and address community concerns as they arise and develop measures to respond to grievances in liaison with the wider project team and develop measures to promote community and workers' safety and awareness.
- 27. In collaboration with the Environmental Specialist, monitor the implementation of the project ESCP.
- 28. In collaboration with the Environmental Specialist, ensure the inclusion of specific environmental and social instruments in relevant bidding documents
- 29. Periodically carry out field visits and conduct monitoring of social management activities and provide timely advice as required
- 30. In collaboration with the Environmental Specialist, prepare and submit periodic environment and social monitoring reports to the Project Coordination Unit (PCU) Manager.
- 31. In collaboration with the Environmental Specialist, prepare and submit regular environmental and social progress reports to the World Bank as required by the project ESCP.
- 32. Participate in relevant meetings especially during the donors' missions and prepare all reports for the mission on social management.
- 33. Ensure functionality and monitor the implementation of the project GMs, including for beneficiaries and workers (in accordance with the SEP and the LMP). Prepare and update, as required, the complaints procedures manuals; prepare a database for grievances and follow up, document and report all complaints received from affected parties within different components of the project.
- 34. Ensure proper handling and addressing of potential gender-based violence/sexual exploitation and abuse/sexual harassment (GBV/SEA/SH) grievances in accordance with the project SEP and LMP. Liaise with other members of the team (e.g. gender specialist) in this regard.
- 35. Conduct capacity assessment and identify what capacity building is needed for different stakeholders in terms of social management aspects. Ensure capacity development in accordance with the project ESCP.
- 36. Provide support in conducting training on social issues, public awareness campaigns and timely information disclosure, including website inputs, pamphlets, newsletter, public meetings, workshops, local TV and radio programs.
- 37. Work in close collaboration with other members of the project team e.g. Environmental Specialist, Gender, M&E, Communication etc., for implementation of requirements outlined in the ESMF/ESMPs/RF/RPs/SEP/LMP/CHSMP etc.
- 38. Undertake other duties as per the requirements of the project or as directed by the PCU manager at PWA.

4. Minimum Qualifications and Experience

- 8. At least a bachelor's degree in a social science discipline (sociology, anthropology, development studies etc.)
- 9. Minimum 5 years relevant work experience including working according to the requirements of international/donor institutions.
- 10. Relevant experience in preparing environmental and social reports for donor financed projects (e.g. The World Bank).
- 11. Experience of being active/working in the field such as for monitoring, community mobilization, community development etc.
- 12. Experience of working in teams at different levels.
- 13. Good management skills, particularly for organizing and moderating workshops and stakeholder/community consultation etc.

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- 14. Proven ability to communicate effectively, understand community and stakeholder perspectives and vulnerabilities and to engage with project affected people and project management teams positively and constructively
- 15. Languages: Fluency in Arabic and good English skills (written and spoken)

5. **Time Frame and Application Procedure**

The contract will be for 1 year (renewable up to XX years),

Interested consultants shall submit her/his applications including (Cover letter, CV describing similar

| assignments, experience in similar conditions | s, availability of appropriate skills, etc.) must be delivered by email |
|-----------------------------------------------|-------------------------------------------------------------------------|
| addressed below no later than dd/mm/yyyy. | |
| | |

| addressed below no later than day min, yyyyy. | |
|-------------------------------------------------------------------------------------|--|
| Further details and information on the project can be found on the following links: | |
| xxx: | |
| For further information please contacts us at: | |
| | |
| PWA | |
| Telephone: | |
| | |

Annex 9: Environmental and Social Screening of Sub-project Form

Environmental & Social Screening Form

SECTION 1: ACTIVITY OUTLINE

| Component | |
|---------------------------------------------------------------------------|--|
| Sub-component | |
| Sub-project Name | |
| Location | |
| Governorate/City | |
| Beneficiary of Sub-project/Municipality | |
| Financed Activities by the Project | |
| Expected Start Date and Expected Duration of Project Implementation Phase | |
| Environmental Specialist: | |
| | |
| SECTION 2: SCREENING PROCESS | |
| Objective of the Screening Process | |
| ESMF Risk Classification and Project Applicable ESSs per the ESMF | |
| Date and Day of Screening | |

| Description of Screened Site Location | |
|---------------------------------------|-----------------------|
| Coordinates of Site Location/s | "INSERT MAP IN ANNEX" |
| | |

SECTION 3: PROJECT & ACTIVITY DESCRIPTION

| Project Brief | |
|----------------------|--|
| Activity Description | |

SECTION 4: SUBPROJECT ELEGIBILITY SCREENING

| work include large scale sub-projects | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------|
| nental and social risks such as il roads; Large scale wastewater Large scale desalination plants; Large ; Landfills; Mega markets; or Supply of posive materials? | | |
| ect have long term permanent and/or is (e.g., loss of major natural habitat or and), and impossible to avoid entirely of the Project? ect have E&S impacts or cumulative | | |
| a o | nd), and impossible to avoid entirely f the Project? ct have E&S impacts or cumulative | nd), and impossible to avoid entirely f the Project? |

| | extent (the geographical area or size of the population | |
|----|----------------------------------------------------------|--|
| | likely to be affected is large to very large)? | |
| d. | Does the Sub-project have significant adverse | |
| | transboundary E&S impacts? | |
| e. | Does the Sub-project have a high probability of serious | |
| | adverse effects to human health and/or the | |
| | environment (e.g., due to accidents, toxic waste | |
| | disposal, etc.)? | |
| f. | Does the sub-project includes any removal and | |
| | resettlement of dwellings/ housing/ shelter | |
| g. | Does the sub-project located under exclusion list of AFD | |
| | group in foreign countries | |

Check with the exclusion list for the CERC component in case of activation as described in the CERC manual

Recommendations:

If the answer to any of the questions above is yes, the subproject should be excluded from financing.

- If all the answers are no, proceed with the subproject Environmental and Social Screening below and list the appropriate E&S mitigation measures/ instruments.

SECTION5: ENVIRONMENTAL AND SOCIAL SCREENING

Recreate the table below for both (i) construction (ii) operation phases.

| POTENTIAL ENVIRONMENTAL / SOCIAL RISKS | Yes | No | If answer is "yes": Due diligence/Action | Recommended Mitigation Measures |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------------------------------------------------|------------------------------------|
| ESS1: Assessment and Management of Environmental and Social Risks and Impacts | | | | |
| Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation? | | | ESIA/ESMP SEP | |
| Are there any anticipated potential impacts and risks to the physical environment, including water resources, atmospheric emissions, noise, solid waste, or ecological degradation? | | | ESIA/ESMP SEP | |
| Is there a risk of capturing project benefits by certain parties? Or diversion of financed activities benefits? | | | SEP GRM | |
| Is there a risk of lack of monitoring of financed activities due to remoteness of location? | | | SEP GRM | |
| Is there a likelihood that the activities would have inequitable or discriminatory adverse impacts on affected populations? Or to exclude individuals or groups? Including vulnerable and marginalized groups? | | | SEP GRM | |
| Does the subproject management have the institutional environmental and social capacity to manage and implement the E&S risks and mitigation measures? | | | ESIA/ESMP | |

| POTENTIAL ENVIRONMENTAL / SOCIAL RISKS | Yes | No | If answer is "yes": Due diligence/Action | Recommended Mitigation Measures |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------------------------------------------------|------------------------------------|
| ESS2: Labor Rights and Working Conditions Does the subproject involve recruitment of workers including direct, contracted, primary supply, and/or community workers? | | | LMP SEP | |
| Does the subproject have potential GBV/SEA/SH risks? Are the financed activities expected to be sensitive to such risks? | | | LMP ESIA/ESMP GRM | |
| Is there a risk that any employment resulting from the execution of the financed activities will be biased towards marginalized and vulnerable groups (e.g., women, people with disability) | | | ESIA/ESMP LMP SEP | |
| Is there a risk of unfair recruitment process if the financed activities will require recruitment activities? | | | LMP GRM | |
| ESS3: Resource Efficiency and Pollution Prevention and Management | | | | |
| Is the subproject expected to be associated with generation of e-waste? | | | E-WMP | |
| Is the subproject expected to be associated with generation of substantial quantities of construction/demolition waste? | | | ESIA/ESMP | |

| POTENTIAL ENVIRONMENTAL / SOCIAL RISKS | Yes | No | If answer is "yes": Due diligence/Action | Recommended Mitigation Measures |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------------------------------------------------|------------------------------------|
| Is the subproject expected to entail the use/generation of hazardous chemical material/waste? | | | ESIA/ESMP | |
| Is the subproject expected to generate dust/noise/vibrations/nuisance? | | | ESIA/ESMP | |
| ESS4: Community Health and Safety | | | | |
| Are the financed activities expected to carry discriminatory or adverse negative impacts on vulnerable and marginalized groups | | | ESIA/ESMP SEP | |
| Are the financed activities expected to include measures to facilitate the access of vulnerable or disadvantaged persons to the benefits of the project? (examples: transportation, strategic location that is reachable by the stakeholders, facility and meeting hall equipment, ramps, and others) | | | ESIA/ESMP SEP | |
| Do the financed activities carry any high or substantial risks of causing incidents to the population and neighboring communities? | | | ESIA/ESMP | |
| Is there a risk of increasing the probability / creating GBV potential impacts due to the execution of financed activities? | | | ESIA/ESMP GRM LMP | |
| Does the subproject have the potential to upset community dynamics? (impacts on community culture, roles, religious believes, and social structure. For example: introducing information that could contradict with the local society's beliefs or religion) | | | SEP GRM | |

| POTENTIAL ENVIRONMENTAL / SOCIAL RISKS | Yes | No | If answer is "yes": Due diligence/Action | Recommended Mitigation Measures |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------------------------------------------------------------------|------------------------------------|
| Will the financed activities present hazards to community members on the sub-project site? | | | ESIA/ESMP | |
| Will the financed activities pose traffic and road safety hazards? | | | Traffic and Road Safety Plan/ incorporated in ESIA/ESMP | |
| Has the site been directly shelled or include rubble at the time of the sub-project identification? | | | ESIA/ESMP | |
| ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement | | | | |
| Will the Project require land acquisition, resettlement? | | | SEP LALP | |
| Will the project cause impacts on livelihood that cause loss of income of the affected persons (temporarily or permanently loss of crops, fruits, treesetc.) | | | SEP LALP | |
| ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources | | | | |
| Will the sub-project impact sensitive or protected areas? | | | ESIA/ESMP | |
| Is there a risk that the sub-project will result in (i) changes to landscapes and habitat (ii) habitat fragmentation (iii) increased water consumption (iv) contamination of natural habitats? | | | ESIA/ESMP | |

| POTENTIAL ENVIRONMENTAL / SOCIAL RISKS | Yes | No | If answer is "yes": Due diligence/Action | Recommended Mitigation Measures |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|------------------------------------------|------------------------------------|
| Is there a risk that the financed activities will result in any impacts on biodiversity or natural resources? | | | ESIA/ESMP | |
| ESS8: Cultural Heritage | | | | |
| Will the subproject be located in or close to a site of natural or cultural value or social heritage of local communities? | | | ESIA/ESMP | |
| Is the subproject site known to have the potential for the presence of cultural and natural heritage remains? | | | ESIA/ESMP | |
| ESS10: Stakeholder Engagement and Information Disclosure | | | | |
| Is there a risk that the activity fails to incorporate measures to allow meaningful, effective and informed consultation of stakeholders, such as community engagement activities? | | | SEP | |
| Has there been previous cases of exclusion of persons with disabilities or other marginalized related to the project's implementation? | | | SEP | |
| groups (women, children, ethnic minorities, elderly) in the area? | | | | |
| Are women likely to participate in decision-making processes regarding the activity? | | | SEP | |
| Is there a risk that exclusion of beneficiaries will lead to grievances? | | | SEP | |
| | | | GRM | |

| POTENTIAL ENVIRONMENTAL / SOCIAL RISKS | Yes | No | If answer is "yes": Due diligence/Action | Recommended Mitigation Measures |
|-------------------------------------------------------------------------------------------------------------------------|-----|----|------------------------------------------------|------------------------------------|
| Does the subproject have a GRM in place, to which all workers have access, designed to respond quickly and effectively? | | | SEP | |

Annex 10: Terms of Reference (ToR) of the ESIA Study

Introduction: The Palestinian Authority (PA) through the Palestinian Water Authority (PWA) has requested the World Bank (WB) to support the preparation and implementation of the WSRP-1 project.

An ESMF was prepared for WSRP-1 during appraisal mainly to address the potential environmental and social, labor, Environment, Health and Safety (EHS) and stakeholder's engagement issues related to the project activities to be implemented under the WSRP-1 infrastructural improvement. All the potential major environmental and social impacts along with mitigation and management measures have been compiled in the form of ESMF. More particularly, this ESMF highlights the requirements related to the 10 Environment and Social Standards (ESSs) of the World Bank Environmental and Social Framework (ESF).

Objectives of the ESIA: The objective of the assignment is to carry out the tasks related to environmental aspects in light of the ToR. These include preparation of the Environmental Impact Assessment (including ESMP) of the WSRP-1.

Scope of Services: Carry out an overall Environmental and Social Impact Assessment (ESIA) and prepare Environmental and Social Management Plan (ESMP) for the project area covered under the WSRP-1. ESIA and ESMP would be prepared according to the World Bank ESF and the Palestinian laws and regulations. The Consultant shall familiarize themselves with the project details and components. The Consultant should interact with other preparation consultants of PCU to determine best way of conducting environment activities. Consultant shall appropriately plan the timing of the deliverables.

The major activities to be carried out will include, but not limited to the following:

A. Review the ESMF Report

- a. Review the existing ESMF report prepared for the WSRP-1;
- b. Review the preliminary Baseline report prepared on the basis of reconnaissance field investigations carried out by PCU;
- c. Determine any gaps particularly in the ESMF;

B. Review the Project details

- a. Obtain from the WSRP-1 and PCU consultants all the details about the project;
- b. Hold meetings with the PCU team to understand the scope and nature of work;

C. Scoping

- a. Carry out reconnaissance field visit. On the basis of this field visit and review of the project details, carry out scoping for the ESIA study. Screen out the impacts that are not likely to take place and prepare a list of potential impacts that are likely to take place.
- b. Prepare criteria to be used to determine the program influence area for conducting ESIA;
- c. Specify the boundaries of the study area for the assessment (project influence area): land use, the drainage area and patterns, other development interventions current and proposed, access to sensitive/remote areas such as parks/ reserves/forests/agriculture land, elements of transport development program in the area.

D. Describe the Proposed Project

a. Provide information on the following: location of all project-related development sites and general layout and extent of facilities at project-related development sites;

diagrams/drawings of proposed structures; design basis, size, capacity; preconstruction activities; construction activities (land clearing, land grading, worker camps, if any), schedule, staffing and support, facilities and services; operation and maintenance activities, staffing and support, facilities and services; management of risks, including health and safety; life expectancy for major components. Components may include any or all of the following: structural measures; dikes and levees; drainage, and nonstructural measures, repair/replacement of infrastructures; and resettlement sites. Also describe sources of materials used during proposed works; generation of wastes and their disposal, expected volume of use, construction-related vehicular traffic; resettlement, land acquisition, safety features; staffing and accommodation of employees, including site clearance, scheduling of project activities, approximate quantity and likely source of construction materials.

b. Provide maps and diagrams with appropriate scales to illustrate the general setting of project-related development sites and key project components. These maps and diagrams shall include overall project layout, details of individual components, project time schedule, and any related aspects.

E. Description of the Environment

- a. Review the Baseline report prepared as part of the ESMF of the WSRP-1 and identify gaps if any. Obtain additional data as needed.
- b. Assemble and evaluate and baseline data on the environmental characteristics of the study area, including construction, resettlement sites, inundation, floodplain, and biological features (habitats and rare species, vegetation, fisheries, birds, terrestrial fauna), and floodplain (recession) agriculture. Include information on any changes anticipated before the project commences.
- c. Physical environment: geology, topography, soils, climate, surface and ground water hydrology, annual peak discharge, ambient air quality; noise; vehicular traffic; recurrence intervals of various peak discharges and peak stages of various discharges, erosion and sediment loading, existing/projected pollution discharges and receiving water quality; instances of flooding, siltation/erosion, depth, bottom topography of the rivers;
- d. Biological environment: ecology: flora and fauna, including rare or endangered species; sensitive natural habitats, including sanctuaries and reserves; biological connectivity; potential vectors for disease; exotics and aquatic weeds; application of pesticides and fertilizers (current and projected as agriculture production is expected to be increased);
- e. Socio-cultural environment: land use (including current crops and cropping patterns; fisheries and farm outputs and inputs; transportation; land tenure and land titling; present water supply and water uses (including current distribution of water resources); control over allocation of resource use rights; water and fisheries related human health problems; cultural sites, present and projected population; present land use/ownership; planned development activities; community structure; present and projected employment by industrial category; distribution of income, goods and services; recreation; public health; cultural properties; indigenous peoples, customs and aspirations; significant natural, cultural or historic sites, etc. Presence of Pandemic COVID-19 spreads/effects, and other sexually transmitted diseases;

F. Stakeholder consultations

- a. Consultations need to be carried out at least twice, in accordance with the WB requirements: (a) shortly after environmental screening and before the terms of reference for the ESIA is finalized; and (b) once a draft ESIA report is prepared.
- b. Review the consultations carried out during the ESMF.
- c. Carry out consultations with institutional stakeholders including but not limited to officials from DoE, DTE, Local Government, and also with local, national, and international NGOs, and other organization as appropriate and relevant.
- d. Carry out comprehensive consultations with primary stakeholders particularly with the communities to be positively and negatively affected by the project.
- e. Relevant materials will be provided to affected groups in a timely manner prior to consultations and in a form and language that is understandable and accessible to the groups being consulted. The Consultant should maintain a record of the public consultation (written and video and pictorial proof) and the records should indicate: means other than consultations (e.g., surveys) used to seek the views of affected stakeholders; the date and location of the consultation meetings, a list of the attendees and their affiliation and contact address; and, summary minutes.

G. Determination of the Potential Impacts of and Impacts on the Proposed Project

- a. Review the impact assessment carried out during the ESMP and identify gaps if any.
- b. Review the ESMP compliance for the ESMF, particularly review the institutional setup, implementation of mitigation measures, environmental monitoring and documentation, environmental monitoring reports, environmental quarterly progress reports, and other reports. Determine gaps if any; also determine impracticality and or inappropriateness of any ESMP aspect such as institutional set up, mitigation measures, monitoring measures, and others.
- c. This analysis will require in depth interpretation. In this analysis, distinguish between significant positive and negative impacts, direct and indirect impacts, and immediate and long-term impacts. Identify impacts that are unavoidable or irreversible. Wherever possible, describe impacts quantitatively, in terms of environmental costs and benefits. Assign economic values when feasible. Characterize the extent and quality of available data, explaining significant information deficiencies and any uncertainties associated with predictions of impact. Compare the impact with the baseline. Provide ToRs for studies to obtain the missing information. Special attention should be given to the environmental impact those identified during the screening process of ESMF.

H. Development of an Environmental and Social Management Plan (ESMP)

- a. Review the ESMP included guideline in the ESMF.
- b. Identify key mitigation and enhancement approaches and prepare the impact specific mitigation measures. Estimate the impacts and costs of the mitigation measures and of the institutional and training requirements to implement them. If appropriate, assess compensation to affected parties for impacts that cannot be mitigated. Prepare an ESMP, including proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating

- measures, monitoring, etc. Include measures for emergency response to accidental events (e.g. entry of raw sewage or toxic wastes into streams).
- c. Prepare a detailed plan to monitor the implementation of mitigating measures and the impacts of the project during rehabilitation and operation (e.g., emission and ambient levels of pollutants where these may be detrimental to human health, soil erosion, changes in the floodplain). Include in the plan an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to implement the plan. Include a regular schedule of monitoring the quality of surface and ground waters to ensure that mitigation measures are effective. Provide guidance for reporting and enforcement and conducting environmental audits.
- d. Estimate the costing of ESMP, and provide necessary clauses for incorporating in the bid document.
- e. Review the responsibilities and capability of institutions at local, provincial/regional, and national levels and recommend steps to strengthen or expand them so that the ESMP may be effectively implemented. The recommendations may extend to new laws and regulations, new agencies or agency functions, inter-sectoral arrangements, management procedures and training, staffing, operation and maintenance training, budgeting and financial support.
- f. An outline of the contents of the ESMP to be included in the project's Operational Manual should be provided along with environmental/social protection clauses for contracts and specifications.
- g. Define the roles and responsibilities of officials, staff, consultants and contractors of WSRP-1 on environmental management.
- h. Describe in detail who will (a) implement the environmental mitigation activities (b) carrying out environmental monitoring; (c) supervise environmental mitigation and monitoring; (d); and (e) prepare quarterly progress report on environmental management.

ESIA Report Compilation:

- a. Finalize the draft ESIA incorporating the comment from the consultation;
- b. Translate and finalize the executive summary of ESIA in Arabic.

Team composition and qualifications:

The assignment requires interdisciplinary analysis with specialized sector knowledge (i.e., ecology, fisheries, water resource and hydrology). The general skills required of the Environmental Safeguard team are: environmental management planning, civil engineer(s), with particular experience in building construction and educational institutional building projects, general construction, wildlife and aquatic biologist depending upon the predicted impacts, land use planner, sociologist, archaeologist and communications / stakeholder engagement. The consulting team must be able to demonstrate appropriate skill mix and depth of experience to cover all areas of the proposed analysis, including incorporation of other specialized skill sets where required. The consulting team shall be led by a Team Leader with at least 10 years of experience leading ESIA studies, including prior international experience on similar types of WSRP-1 project, and prior experience as either team leader or deputy team leader on at least one (1) previous major ESIA for World Bank funded projects.

Schedule/Duration of the study:

The study period shall be of 12 (twelve) months from the date of commencement of the study.

Reports:

After commencement of the study the submission of the reports shall be both in hard (3 copies) and soft copy as follows:

- Inception Report---submitted at the end of 1st month of signing the contract
- Draft Scoping Report ---submitted at the end of 3rd month of signing the contract
- Draft Baseline Report---submitted at the end of sixth month of signing the contract
- Draft Environmental and Social Impact Assessment with a standalone Executive Summary submitted at the end of 9th month of signing the contract
- Final Environmental and Social Impact Assessment with a standalone Executive Summary submitted at the end of 12th month of signing the contract
- Arabic Translation of the Executive Summary -- submitted at the end of 12th month of signing the contract.

Reporting:

The consultant will report to the Project Director of the PCU.

ANNEX 11: Suggested Terms of Reference10 for Borrower's Consultant11⁴ to carry out a Root Cause Analyses for a Workplace Accident

Background

The Project was approved by the Bank's Board of Executive Directors in (...) and was effective in (...). Construction Works started on (...) and are currently ongoing. The project closing date is (...).

Environmental and Social Impact Assessments (ESIAs) (...) including Environmental and Social Management Plans (ESMPs) were prepared. All Safeguards documents included measures for mitigating Occupational Health and Safety (OHS) risks. The ESMP requires that workers should be trained to recognize potential hazards and use safe work practices (...).

The objectives of these TORs are to: 1) identify the root cause of the accident, 2) identify immediate measures to be taken to improve the safety at the site and at other Project sites throughout the Project area and 3) identify effective preventive measures to be implemented to reduce OHS risks.

Scope of work

- Conduct root-cause analysis of the incident and identify the sequence of events and factual circumstances. The analysis should identify what failing(s) led to the accident, what safety measures were in place, and the risk information/training provided to workers on site. The level of supervision of unskilled labor should also be assessed.
- Recommend actions to be taken to rectify the failure(s) that led to the incident.
- Review the safety procedures at different sites and identify the health and safety measures to be taken to minimize the risks of future accidents both to workers and to local residents. Site visits should be carried out to a representative sample of construction sites, activities, regions and Contractors as applicable. Health and safety representatives of the Contractors and implementing agencies, as well as other technical counterparts as necessary should be interviewed to gain a comprehensive understanding about health and safety management.
- Review the OHS measures in Safeguards instruments and plans in construction contracts and recommend enhancements as needed. The assessment should identify what the existing procedures for safe performance of construction activities (excavation, scaffolding, working at heights, welding, etc.) are and should recommend appropriate procedures should the existing ones have gaps.
- Review the capacity of Contractors and supervision consultants to implement OHS standards. The assessment should review the training plans for skilled and unskilled labor for effectiveness and propose improvements to the training and communication program so that workers are adequately guided to safely perform their work.
- Review the existing arrangements for recruiting labor and what type of insurance (life or injuries and occupational health risks) and compensations are provided.
- Review compliance to the Labor Law and other international treaties by Contractors or Subcontractors.
- Assess the sufficiency of the measures that the Contractors take to minimize risk on the local communities and communicate with them. Recommend improvements as necessary.

Outputs

The consultant shall prepare the following outputs:

⁴ Consultant normally would be retained by the Contractor

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- A root-cause incident investigation report for the accident, including the recommended measures to improve OHS conditions at the site
- A diagnostic analysis of OHS measures and recommended measures for improvements

Timing

The draft incident investigation and OHS diagnostic analysis reports should be submitted within (...) days from commencement. The final report should be submitted within (...) days of receipt of comments on the draft.

Confidentiality

All documents provided to the consultant for carrying out this task should be considered confidential except if otherwise indicated.