

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

HAITI

PORT-AU-PRINCE WATER AND SANITATION PROJECT III

(HA-L1103)

PROJECT PROFILE

The project team consisting of prepared this document: Corinne Cathala (INE/WSA) Team Leader; Sarah Mattheussent Romain (WSA/CHA) Alternate Team Leader; Efrain Rueda and Irene Cartin (INE/WSA); Sergio Perez Monforte (WSA/CHA); Romina-Kirkagacli and Marise Salnave (FMP/CHA); Ana María Nuñez (EXR); Laurence Telson (CDH/CDH); Louis-Francois Chrétien (LEG/SGO); Soraya Marie Claire Senosier (VPS/ESG) and Elizabeth Joana Graybill Do Nascimento Brito (VPS/ESG)

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PROJECT PROFILE

HAITI

I. BASIC DATA

Project Name:	Port-au-Prince Water and Sanitation Project III		
Project Number:	HA-L1103		
Project Team:	Corinne Cathala (INE/WSA) Team Leader; Sarah Matthieussent Romain (WSA/CHA) Alternate Team Leader; Efrain Rueda and Irene Cartin (INE/WSA); Sergio Perez Monforte (WSA/CHA); Romina-Kirkagacli and Marise Salnave (FMP/CHA); Ana María Nuñez (EXR); Laurence Telson (CDH/CDH); Louis-Francois Chrétien (LEG/SGO); Soraya Marie Claire Senosier (VPS/ESG) and Elizabeth Joana Graybill Do Nascimento Brito (VPS/ESG)		
Borrower:	Republic of Haiti		
Executing Agency:	DINEPA (<i>Direction Nationale de l' Eau Potable et de l'Assainissement</i>)		
Financial Plan:	IDB Grant Facility:	US\$	30 million
	Total:	US\$	30 million
Safeguards:	Policies triggered:	PTI, SEQ, OP-710, OP-102, OP-704, OP-761	
	Classification:	B	

II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1 Five years after the earthquake that shook Haiti and destroyed a large portion of its capital city, Port-au-Prince, the government has made significant strides in rebuilding the country and its infrastructure, specifically in the Metropolitan Region of Port-au-Prince (MRPP). In the water and sanitation sector, the IDB and the Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean continue being the two main donors in terms of financial support to the sector (US\$161.6¹ million administered by the Bank and US\$100 million administered by the Spanish Bilateral Fund).
- 2.2 **Results to date.** The first water and sanitation Port-au-Prince project (HA-L1044) and its co-financing (GRT/WS-12277-HA) in the amount of US\$50 million, approved in July 2010, are in their last year of execution. A second Port-au-Prince water and sanitation project (HA-L1075), in the amount of US\$35.5 million, was approved in June 2013, of which 14% has been disbursed and 73% is committed. These two projects financed investments to improve the water utility's (*Centre Technique d' Exploitation* or CTE) financial and technical

¹As of December 31, 2015, out of this US\$161.6 million portfolio, 64% have been disbursed and the remainder is committed.

performance with the objective to improve the quality of water services provision in the MRPP. The results achieved to date, while promising, are very fragile and directly linked to the availability of water. The utility's revenues doubled between 2011 and 2015.

- 2.3 However, the potential for revenue increase for the CTE is significant. Indeed, there are currently 45,700 water connections (approximately 275,000 people). There are currently 16 boreholes that produce 100,000m³/day when the water requirements are 300,000m³/day for Port-au-Prince, making Port-au-Prince one of the most severe intermittent water supply systems in the world. Non-revenue water has decreased from 83% to 60%². Currently, 33% of the water production is pumped, which represents a significant cost burden for the utility. In addition, while the CTE is the largest client of the electricity company, it can only be supplied 10 hours of electricity per day. To compensate for this lack of electricity supply, the CTE operates 25 generators, making its water production and distribution very inefficient.
- 2.4 In 2011, a consortium of international experts was appointed for three years. From 2011 to 2014, the consortium or the Operational Technical Assistance (OTA) to the CTE of the MRPP mainly supported the CTE with the reorganization of the utility, training of its staff and identification of priority water works. The OTA's contract was renewed in 2014. Since 2014, the OTA team has focused mainly on the improvement of water production and distribution and the increase in the utility's revenues. With the OTA's support, the CTE has implemented new operational tools consisting of a new customer management system and a geographical Information System (GIS).
- 2.5 With regards to water service quality, significant improvements took place due to several types of measures: (i) a better control of the management of the water network; (ii) specific minor technical works or interventions on the network; (iii) better quality of water distributed; and (iv) an increase in the numbers of hours of distribution. However, the volume of water produced decreased from 154,000m³ to 100,000m³ in 2015 due to a drop in surface water mainly due to reduced rainfall. However, given the water losses and the areas that are not currently receiving a service, the volumes that are actually delivered are probably lower on average.
- 2.6 **The diagnosis.** Port-au-Prince has a population of approximately 3 million people or 550,000 households. As of December 31st, 2015, there were 45,500 active water connections³, representing a water coverage of 8%. The households that are not connected to the water network obtain their water through water kiosks (there are 185 operating water kiosks that serve 74,000 households), water trucks, boreholes or from neighbors.
- 2.7 To address the lack of water supplied from the network, studies indicate that investment requirements until 2020 amount to more than US\$200 million. Priority

² Source : Tableau de Bord Mensuel –CTE-RMPP, December 2015.

³ *Rapports de Diagnostic et rapports trimestriels* – ATO – 2010-2015.

- investments needs identified includes the improvement in water distribution and production and the rehabilitation of the existing network⁴.
- 2.8 Studies⁵ also indicate that the sustainability of these investments also depend upon the improvement of the performance of the CTE, the professionalization of its staff and a tariff that is commensurate with the costs of the utility. The CTE implemented a revised tariff structure in 2013, which reduces the 900 tariff categories to 39.
- 2.9 To optimize the use of available resources (US\$18 million) and serve as many people as possible with the available budget, the area of Carrefour was selected. This neighborhood has 200,000 households, of which 20,000 have active water connections, and 24,800 are served through water kiosks. Current water production is 45,000 m³/day. Available water after technical losses is 27,000 m³/day. Current demand in this neighborhood is 65,200 m³/day. Therefore, there exists a shortage of 38,000 m³/day.
- 2.10 The current water consumption currently averages 17 liters/person/day and will increase to 35 liters/person/day once the project is completed. It is expected that the water service will go from 20 hours/week to 60 hours/week with the implementation of the project. While the shortage of water had a negative impact on the utility's revenues, it was observed that in areas that did not experience any water shortage like Carrefour, the number of clients has increased from 9,000 to 17,000. The new project is expected to bring the water coverage in Port-au-Prince to 11%.
- 2.11 **The CTE of the RMPP.** To date, the water utility has not been able to reach a financial equilibrium in spite of the technical and managerial improvements achieved since 2011. While the CTE of the MRPP can cover the cost of its personnel, it still receives a subsidy from the IDB to cover its operations and maintenance costs such as energy costs (electricity and fuel), water treatment chemicals (chlorine) as well as maintenance and repair equipment. In 2016, the CTE will undertake water works in the amount of US\$20 million financed by the second Port-au-Prince operation aiming at strengthening production and distribution in the MRPP. In addition, the third operation will also finance works to reduce commercial water losses with the renewal and relocation of a 6 km water main accounting for 50% of commercial losses in the MRPP.
- 2.12 **Financial situation.** The CTE's operating margin increased from 30% in 2010 to 65% in 2015. The CTE was successful in stabilizing its personnel costs and covering those costs with its own revenues. A key indicator of a utility's efficiency is the number of staff per thousand connections. The CTE achieved a decrease in the number of staff per thousand connections from nearly 20 in 2011 to 13 in 2015, and has now leveled at 11.8. The collection rate had improved significantly over the past years from 42% in 2011 to reach 75% in 2013. However, the severe lack of water had a negative impact on revenue collection at the end of 2015, which has leveled at 54%.

⁴ *Rapport d'Etape Intermédiaire du Plan Directeur de Production et Distribution d' Eau Potable* – ATO- Mars 2012.

⁵ *Schéma Directeur Eau Potable RMPP Phase 3 Version Finale* – ATO- Octobre 2012.

- 2.13 **The new proposed project.** The present project will be financed by a US\$30 million grant from the IDB Grant Facility for a third stage of the project. Given the investment requirements for the RMPP, new sources of financing from donors are being contemplated for this project.
- 2.14 The program is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (GN-2788-5) and is aligned with the development challenge(s) of: (i) social inclusion and equality; and (ii) productivity and innovation through the program's Results Matrix indicators (Households with new or upgraded access to drinking water and households with new or upgraded access to sanitation). The program is also aligned with the cross-cutting theme of (i) gender equality and diversity; and (ii) climate change and environmental sustainability through the program's Results Matrix indicators (Households with new or upgraded access to drinking water and households with new or upgraded access to sanitation). Additionally, the program will contribute to the Corporate Results Framework 2016-2019 (GN-2727-4) (CRF) by including the program's Result's Matrix indicators (Households with new or upgraded access to drinking water and households with new or upgraded access to sanitation).
- 2.15 **Objectives.** The Bank has been promoting water and sanitation investments in the MRPP, based on the knowledge that significant additional investments would be required in subsequent years to improve water service provision in the capital city. The results achieved with the first two projects were promising. However, they also indicate that a lot more needs to be done with respect to water production if the service is to improve noticeably. The objectives of the third project are: (i) continue improving the financial situation of the CTE of Port-au-Prince so that it does not operate at a loss; (ii) reduce the number of households in the MRPP which do not have access to potable water services.
- 2.16 **Component I (US\$8.0 million). Institutional Strengthening of the CTE of Port-au-Prince.** This component will finance a new public/private partnership contract. The current OTA contract is due to end in March 2017. However, both the CTE and DINEPA are convinced that the private sector will need to support the management of the water utility for an extended period of time. A consulting firm with expertise in structuring public/private partnerships will be contracted in early 2016 to propose management models for water provision involving public/private participation with financing from a Technical Cooperation (TC) operation (HA-T1214) in the amount of US\$1.150 million to support the preparation of the new operation.
- 2.17 **Component II (US\$2.5 million). Support to operation and maintenance.** This component will finance a portion of operation and maintenance costs (energy, chlorine and repair equipment), which cannot be covered by the current annual revenues generated by the water utility. While a tariff increase has been applied annually, as per the grant agreement, it has not been sufficient to compensate for the increase in energy costs as well as chemicals, as explained above.
- 2.18 **Component III (US\$18.0 million). Investments in potable water works and sanitation.** This component will finance the rehabilitation of water works as well as works aimed at improving water distribution and expansion of the water network. This component will also finance an estimated 12,000 household

connections and 5,000 regularized connections. The TC operation that is currently supporting the preparation of the project will finance the final designs of water works in Carrefour, Cité Soleil, and the center of Port-au-Prince, including the preparation of bidding documents. As a result, the implementation of the works is expected to initiate as soon as the project is eligible. The program will also include the implementation of DINEPA's sanitation framework to develop a flexible strategy for urban sanitation in Carrefour. A demand-oriented approach will be adopted that will consider the following: (i) different projects that could be implemented separately as, for example, semi-collective sanitation solutions; and (ii) the development of marketing and communication campaigns.

- 2.19 **Project administration (US\$1.5 million).** The project will support the Executing Unit. The water utility will be an integral part of the execution of the project.
- 2.20 **Consistency with Country Strategy.** The Water and Sanitation sector is one of the six priority sectors identified in the Country Strategy (CS) agreed upon with the Government of Haiti, currently in effect (GN-2646). The project is consistent with the CS as the objective of the project is to improve the potable water coverage and the management of water services in Port-au-Prince. The financial sustainability of the CTE of the MRPP is one of the conditions to achieve that goal. The project is fully consistent with the six objectives defined in the CS.
- 2.21 **Alignment with GCI-9.** The proposed project is consistent with two of the priorities defined in GCI-9: (i) focused on small and vulnerable countries; and (ii) reduction of poverty and promotion of equity.
- 2.22 **Lessons learned.** The lessons based on experience gained in five intermediate cities in Haiti through the Potable Water and Sanitation Sector Reform Loan (1010/SF-HA), have demonstrated that infrastructure can only be viable with a well-managed company staffed with trained personnel. The contracting of a specialized technical assistance to support the CTE's professionalization proved essential to improve the CTE's operations and water service provision as well as increase water coverage⁶.
- 2.23 **Intervention effectiveness.** External technical assistance is justified given the existing context and constraints in terms of quality of service and management and the qualifications of the CTE's staff. The new public/private participation modality will be drawn up to give international staff more responsibility with respect to changes in the utility's indicators and the management of change within the organization.

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **Executing agency.** The National Directorate for Water and Sanitation (DINEPA) will be responsible for the implementation of the project. DINEPA has been successfully implementing the two previous water and sanitation projects in

⁶ Project Monitoring Report for 1010/SF-HA and HA-L1039. *Rapports de Diagnostic et Rapports trimestriels* –ATO- 2010-2015.

Port-au-Prince. As was the case in the first two projects, the CTE will be closely involved in the execution of the project.

- 3.2 **Risks.** The main identified risks are as follows: (i) Public/private partnership. The current OTA contract will end in March 2017. The international bidding process is expected to initiate in the third quarter of 2016. The selected firm or consortium of firms will be expected to be on the ground in March 2017 to ensure a proper transition after the OTA contract. In order to speed up the process and avoid any potential delays, the Bank is executing the TC operation in close collaboration with DINEPA. (ii) Institutional risks. The sector reform initiated in 2010, with the creation of DINEPA, was implemented in an inconsistent manner since that date. The expected approval of the second tranche of a programmatic operation in 2016 (HA-L1090) will give a new impulse to that process and include several aspects such as the legal establishment of the CTEs. That reform is critical to the autonomy of the water utility; and (iii) financial sustainability risk (as of today, the CTE has not been able to generate a utility). Strict control of its operating costs and a focus on increasing the collection rate will be the CTE's main objectives to cover its costs.

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 The main rehabilitation site is along the route of a 24" water pipe in densely populated areas of Port-au-Prince (from Boulosse to Duquini). As an estimated 150,000 inhabitants will be affected by this project, the primary expected impacts are likely to be social. The current conduit will be rerouted and dismantled, which will affect how people from the surrounding areas access their water. It is also likely that small commerce activities will be temporarily displaced thus a compensation plan should be prepared in conformity with Bank Policy OP-710.
- 4.2 During construction, the main environmental and social negative impacts could occur from pollution of ground and surface water, soil erosion, waste disposal, traffic interference, and occupational health and safety risks. These impacts and risks can easily be controlled and managed with the use of standard procedures. Given the project's proximity to the Martissant Botanical Park, precautionary measures should be taken to ensure it is not affected. The project has been classified as Category B (OP-703) and will require environmental and thorough social impact analyses, which will be detailed in the Environmental and Social Assessment (ESA), and summarized in the Environmental and Social Management Report (ESMR). In compliance with IDB's Disaster Risk Management Policy (OP-704), adequate technical studies will be conducted to ensure adequate specifications are used to address these risks.
- 4.3 **Fiduciary aspects.** The project team will carry out a fiduciary analysis of DINEPA/OREPA to define mechanisms that will ensure efficiency and transparency during the project execution as well as prepare an action plan to implement the recommendations.

V. RESOURCES AND TIMETABLE

- 5.1 Annex V presents detailed costs and timetable to present the project for Board approval on June 15, 2016. The estimated administrative budget for the preparation of the project is US\$43,000, including the contracting of an external consultant in the amount of US\$25,000.
- 5.2 A cost-benefit analysis will be carried out to assess Component III of the project. The benefits will be calculated as the willingness to pay of the beneficiaries due to the reduction of the shortage of potable water. To monitor this result, the water utility will record consumption of the households that will benefit from the project.

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

SAFEGUARD POLICY FILTER REPORT

PROJECT DETAILS		
IDB Sector	WATER AND SANITATION-WATER SUPPLY URBAN	
Type of Operation	Other Lending or Financing Instrument	
Additional Operation Details		
Investment Checklist	Generic Checklist	
Team Leader	Matthieussent Romain, Sarah C. (SARAH@iadb.org)	
Project Title	Port-au-Prince Water and Sanitation Project III	
Project Number	HA-L1103	
Safeguard Screening Assessor(s)	Senosier, Soraya Marie Claire (sorayas@IADB.ORG)	
Assessment Date	2015-12-14	
SAFEGUARD POLICY FILTER RESULTS		
Type of Operation	Loan Operation	
Safeguard Policy Items Identified (Yes)	Potential disruption to people's livelihoods living in the project's area of influence (not limited to involuntary displacement, also see Resettlement Policy.)	(B.01) Resettlement Policy– OP-710
	Activities to be financed by the project are in a geographical area and sector exposed to natural hazards* (Type 1 Disaster Risk Scenario).	(B.01) Disaster Risk Management Policy– OP-704
	The Bank will make available to the public the relevant Project documents.	(B.01) Access to Information Policy– OP-102
	Potential to negatively affect women or gender equality (See Gender Equality Policy)	(B.01) Gender Equality Policy– OP-761
	Does this project offer opportunities to promote gender equality or women's empowerment through its project components?	(B.01) Gender Equality Policy– OP-761
	The operation is in compliance with environmental, specific women's rights, gender, and indigenous laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)

	The operation (including associated facilities) is screened and classified according to their potential environmental impacts.	(B.03)
	The Borrower/Executing Agency exhibits weak institutional capacity for managing environmental and social issues.	(B.04)
	If a Technical Cooperation, the operation is associated with the design and/or implementation of a major investment loan in infrastructure.	(B.04)
	An Environmental Assessment is required.	(B.05)
	Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation of women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.	(B.06)
	The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
	Suitable safeguard provisions for procurement of goods and services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.	(B.17)
Potential Safeguard Policy Items(?)	No potential issues identified	

<p>Recommended Action:</p>	<p>Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.</p> <p>The project triggered the Disaster Risk Management policy (OP-704). A Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704) in case of high risk, a limited DRA in case of moderate risk. Next, please complete a Disaster Risk Classification along with Impact Classification.</p> <p>The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.</p>
<p>Additional Comments:</p>	
<p>ASSESSOR DETAILS</p>	
<p>Name of person who completed screening:</p>	<p>Senosier, Soraya Marie Claire (sorayas@IADB.ORG)</p>
<p>Title:</p>	
<p>Date:</p>	<p>2015-12-14</p>
<p>COMMENTS</p>	
<p>No Comments</p>	

SAFEGUARD SCREENING FORM

PROJECT DETAILS	
IDB Sector	WATER AND SANITATION-WATER SUPPLY URBAN
Type of Operation	Other Lending or Financing Instrument
Additional Operation Details	
Country	HAITI
Project Status	
Investment Checklist	Generic Checklist
Team Leader	Matthieussent Romain, Sarah C. (SARAH@iadb.org)
Project Title	Port-au-Prince Water and Sanitation Project III
Project Number	HA-L1103
Safeguard Screening Assessor(s)	Senosier, Soraya Marie Claire (sorayas@IADB.ORG)
Assessment Date	2015-12-14

PROJECT CLASSIFICATION SUMMARY		
Project Category: B	Override Rating:	Override Justification:
		Comments:
Conditions/ Recommendations	<ul style="list-style-type: none"> • Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements). • The Project Team must send to ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports. • These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary. 	

SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	
Identified Impacts/Risks	Potential Solutions

<p>The project will or may require involuntary resettlement and/or economic displacement of a minor to moderate nature (i.e. it is a direct impact of the project) and does not affect indigenous peoples or other vulnerable land based groups.</p>	<p>Develop Resettlement Plan (RP):The borrower should be required to develop a simple RP that could be part of the ESMP and demonstrates the following attributes: (a) successful engagement with affected parties via a process of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.</p>
<p>Potential to exclude or discriminate women or men from project benefits based on gender *NOTE</p>	<p>Incorporation of gender analysis into its social impact and risk assessments: Where the Project or its context present potential for discrimination against women or men based on gender, Project preparation should include an analysis of exclusion or discriminatory factors (specific or as part of overall social assessment) and the Project should include information, dissemination, training and other corrective measures as appropriate aimed at overcoming barriers to afford women or men the same protection and access afforded to other groups and equal access to Project-generated resources and benefits (e.g. credit, employment, public services, etc.). The social impact and risk assessment and associated mitigation framework must address all the factors specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.</p>
<p>Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and workers but these are minor to moderate in nature.</p>	<p>Construction: The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).</p>
<p>DISASTER RISK SUMMARY</p>	
<p>Disaster Risk Category: High</p>	

Disaster/ Recommendations	<ul style="list-style-type: none">• The reports of the Safeguard Screening Form (i.e. of the Safeguards Policy and the Safeguard Classification Filters) constitute the Disaster Risk Profile to be summarized in and annexed to the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.• The Borrower should consider including disaster risk expertise in the organization of project oversight, e.g. in the project's panel of experts. For the Bank's requirements, the Borrower addresses the screened disaster risks in a Disaster Risk Management Summary reviewing disaster and climate change risks associated with the project on the basis of a Disaster Risk Assessment (DRA). Based on the specified hazards and the exposure of the project area, it demonstrates the potential impact of the rapid onset events and/or slow inset changes for the project and its area including exacerbated risks for people and environment, given local vulnerability levels and coping capacities. Furthermore the DRM Summary presents proposed measures to manage or mitigate these risks in a Disaster Risk Management Plan (DRMP). The DRA /DRMP to which the DRM Summary refers may be a stand-alone DRA document (see Directive A-2 of the DRM Policy OP-704) or included in other project documents, such as feasibility studies, engineering studies, environmental impact assessments, or specific natural disaster and climate change risk assessments, prepared for the project. These documents should be accessible for the Project Team.• The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.• Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options for climate change, and consult the INE/CCS adaptation group for guidance.
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SUMMARY OF DISASTER IMPACTS/RISKS AND POTENTIAL SOLUTIONS	
Identified Impacts/Risks	Potential Solutions
<p>Significant Earthquake may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the various seismic risks for the project and address potential exacerbated risks for people and the environment during construction and operation. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account the country's disaster alert and prevention system, general seismic design standards and other related regulations. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. Some sectors have developed comprehensive best practice.</p>
<p>Significant tsunami may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the coastal flood risks, including tsunami events for the project and address potential exacerbated risks for people and the environment during construction and operation. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP</p>
<p>Significant hurricane and other winds may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the storm and flood risks for the project and address potential exacerbated risks for people and the environment during construction and operation, as specified in the Disaster Risk Assessment, which must take into consideration changes in the frequency and intensity of tropical storms that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP.</p>

<p>Tropical Storms are prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of storm risks for the project and address potential exacerbated risks for people and the environment during construction and operation, which must take into consideration changes in the frequency and intensity of tropical storms that could occur with climate change. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
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DISASTER SUMMARY

Details

The Project should include the necessary measures to reduce disaster risk to acceptable levels as determined by the Bank on the basis of generally accepted standards and practices. Alternative prevention and mitigation measures that decrease vulnerability must be analyzed and included in project design and implementation as applicable. These measures should include safety and contingency planning to protect human health and economic assets. Expert opinion and adherence to international standards should be sought, where reasonably necessary.

Actions

The project triggered the Other Risks policy (B.04): climate risk. Please include sections on how climate risk will be dealt with in the ESS as well as client documents (EIA, EA, etc); Recommend addressing risks from gradual changes in climate for the project in cost/benefit and credit risk analyses as well as TORs for engineering studies.

ASSESSOR DETAILS

Name of person who completed screening:	Senosier, Soraya Marie Claire (sorayas@IADB.ORG)
Title:	
Date:	2015-12-14

COMMENTS

No Comments

ENVIRONMENTAL AND SOCIAL STRATEGY (ESS)

I. PROJECT DESCRIPTION

- 1.1 The multiple-works program is the third operation with DINEPA and will be implemented in collaboration with the Centre Technique d' Exploitation (CTE) of Port-au-Prince (PAP) the *Office Regional de l'Eau Potable et de l'Assainissement Ouest* (OREPA Ouest) and the *Assistance Technique Operationelle* (OTA). The objective of the project is to enhance the access to potable water to the population in the metropolitan region of PAP. It will include a component of investment in potable water in the communities of Carrefour and Petion-Ville, a component for the institutional strengthening of the public utility CTE/RMPP through public/private participation. The main rehabilitation site is along the route of a 24" water pipe in densely populated areas of PAP (from Boulosse to Duquini).
- 1.2 The first two operations were designed to improve water supply to customers in PAP and to address immediate and long-term needs resulting from the 2010 earthquake and deferred maintenance of existing systems and infrastructure.
- 1.3 Project financing by component is:
- Component 1: US\$ 8.0 million - Institutional Strengthening of the CTE of PAP
Component 2: US\$ 2.5 million – Support to operation and maintenance
Component 3: US\$18.0 million – Investment in potable water works

II. INSTITUTIONAL AND REGULATORY CONTEXT

A. Compliance with National Environmental Assessment and Permitting Requirements

- 2.1 The government has improved the governance of the water and sanitation sector by issuing, in March 2009, a Framework Law (Loi Cadre), that establishes the *Direction Nationale de l' Eau Potable et de l' Assainissement* (DINEPA) as the entity responsible for the sector, regional offices (OREPAS) to be responsible for the administration of services in population centers with over 5,000 inhabitants, and the CTEs as service providers in the cities. In Port au Prince, the CTE of PAP replaces the former water utility, the Centrale Autonome Métropolitaine d'Eau et de l'Assainissement (CAMEP).
- 2.2 The Haitian Ministry of the Environment (MDE) is responsible for national environmental and social laws and regulations in the country. An EIA law has been drafted and approved by the Parliament (<http://www.mde-h.gouv.ht>), and the decree for its application approved; however the Ministry has limited capacity to enforce it. Similarly, the department within the MDE responsible for Environmental Impact Assessment (EIA) is under creation but not yet operational.

- 2.3 The 1987 Haitian Constitution guarantees every citizen's right to housing and provides protections against the unlawful expropriation of that property by the state without due process and compensation. The legal and institutional framework in Haiti regulating resettlement is outlined by a number of laws, some of which are very old, which directly or indirectly affect the right of ownership, expropriation and compensation. Resettlement itself is not covered. Haitian law recognizes individuals' and entities' right of ownership of certain property. In cases of eminent domain, expropriation for public utility is lawful and may occur subject to payment or compensation, following court orders, of just and prior compensation as established by an expert. The Expropriation Commission (EC) of the Ministry of Public Works, Transport and Communication (MTPTC) is responsible for the compensation in these cases.
- 2.4 In Haiti, the World Health Organization (WHO) water quality standards are used; however, in many cases, water quality is not tested or does not comply with these Standards.

B. Compliance with IDB and Social Safeguard Requirements

- 2.5 Key policies and directives triggered in this project include the Environment and Safeguards Compliance Policy (OP-703), in particular, but not limited to, B.4 (Other Risks), due to the limited capacity of the executing agency, B.5 (Environmental Assessment), B.6 (Consultation), B.7 (Supervision and Compliance), B. 11 Pollution Prevention and Reduction, and B.17 (Safeguard Provisions for procurement of goods), ; Disclosure of Information Policy (OP-102); Involuntary Resettlement (OP-710); Gender Equality Policy (OP-761), and the Disaster Risk Management Policy (OP-704).
- 2.6 Approximately 150,000 inhabitants will be directly negatively affected by this project; therefore the primary expected impacts are likely to be social; as such it is classified as Category "B" under OP-703.
- 2.7 In accordance with Directive B.5 (Environmental Assessment) of OP-703 the assessments required are an Environmental Analysis (EA) and a Disaster Risks Assessment (DRA) and corresponding Management Plan (DRMP). In addition, as part of the EA an Environmental and Social Management Plan Framework (ESMF), including and Economic Rehabilitation Plan Framework (RPF). The option to prepare broad Frameworks rather than specific ESMPs was chosen because the scale and location of specific interventions are not known in advance. A gender analysis must be incorporated in the social impact and risks assessments. Although the project is a direct continuation of the first two PAP Water and Sanitation Project (HA-L1044 and HA-L1075) adjusted ESMF and RPF will likely be required because of the nature of the densely populated areas that this project will intervene in. For some specific projects and sites, specific EAs may be required. Mitigation measures will mostly be developed through specific Environmental and Social Management Plans (ESMPs) and Resettlement Action Plans (RAPs).
- 2.8 In accordance with the Disclosure of Information Policy (OP-102) the Frameworks will be disclosed on the IDB and DINEPA websites prior to the Analysis mission.
- 2.9 Two public consultations should be conducted one prior to the analysis mission and another prior to board approval.

III. ENVIRONMENTAL AND SOCIAL SETTING AND CONTEXT

- 3.1 Water and sanitation services in PAP, Haiti, are deficient, as has been documented in many studies¹. This has been the consequence of lack of investment and deficient management and maintenance of infrastructure for the last 20 years. No public sewerage networks have been constructed. The social and environmental risks associated with this situation are enormous, and they have been aggravated by a major earthquake that hit the city in Jan. 12, 2010². Even before the earthquake there was a clear need for the identification and implementation of emergency interventions, to at least improve water and sanitation services to the large number of poor families that live in the city. There is an evident need to integrate these interventions with others related to the collection and disposal of solid wastes.
- 3.2 The main rehabilitation site is along the route of a 24" water pipe in densely populated areas of PAP (from Boulosse to Duquini). Approximately 150,000 inhabitants will be affected by this specific work. The current conduit will be rerouted and dismantled, which will affect how people from the surrounding areas access and pay for their water.
- 3.3 Physical works could occur on any part of the network within PAP, whether in residential areas or along roads and network expansion would take place in areas not yet covered by the network.
- 3.4 Current access to water is provided by water trucks and through the tampering of water pipes (which contributes to waste of water). Some water trucks steal water from pipes and resell to neighboring communities. There are no systemic measures to pay for and access water, this project will likely contribute to a formalization of access to the water.
- 3.5 Haiti is located within the Atlantic hurricane belt, and as such is subject to tropical storms and hurricanes. The country is also located on the Circum-Caribbean Tectonic Belt, which has produced several earthquakes in magnitudes exceeding 7.0 since 1900; and is subject to floods and landslides.

IV. ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS AND CONTROL MEASURES

- 4.1 The rehabilitation and improvement of PAP's water network will have a positive impact on the population and improve the quality of life of its residents. Protection of water sources at the watershed level has the potential for a large scale positive impact on the environment and biodiversity.
- 4.2 The project is not expected to have significant and/or irreversible negative environmental and social impacts. Short term impacts on the surrounding community resulting from the intervention are expected. Water pipes will be rerouted and may

¹ See for example: Vermersch, M: *Plan Estratégico sectorial. Síntesis y Resumen Ejecutivo*, Abril 2008; Plancke, Juliaan: *Etude des Investissements Techniques a court et moyen termes*, Janvier 2008.

² Ver Plancke, Juliaan: *Situation de l'AEP de Port-au-Prince en Février 2010 ; Haiti – PDNA du Tremblement de Terre, Evaluation des dommages, des pertes et des besoins généraux et sectoriels*, March 2010.

- affect the way people access water, kiosks and water committees should be put in place in order to mitigate this issue.
- 4.3 Social impact includes economic displacement of merchants along the major corridor of Carrefour. A proper census of affected merchants must be conducted and a thorough compensation plan must be prepared for affected merchants.
 - 4.4 “Informal” water trucking will also be affected by this project, although the loss of this activity will not be compensated, public consultations will help to circumvent actions that will perturb the implementation of the program.
 - 4.5 Martissant is one of the neighborhoods that will be affected by the project. Martissant houses the Martissant Parc, a 42 acres Botanical Park in PAP.
 - 4.6 The project presents potential risks associated with the capacity of the CTE to manage and monitor the construction and operation of the project, their own day-to-day operations, and management of environmental and social issues. Observations have shown that within the CTE, health and safety practices are inadequate: for example poor maintenance of vehicles, poorly trained staff, low utilization of personal protective equipment (PPE), and accidents with chemicals (chlorine) have been observed in the past.
 - 4.7 The most noteworthy impacts are expected to be on economic displacement and health and safety, and noise and traffic disruption.

IV. ENVIRONMENTAL STRATEGY FOR DUE DILIGENCE

- 5.1 The focus of the environmental and social analysis for the proposed PAP Water and Sanitation Project III will be on the potential social and environmental impacts and risks during all phases of the project.
- 5.2 More specifically, the analysis will review the following aspects:
 - i. Assessing the adequacy of the frameworks (ESMF and Compensation Plan) to ensure that they adequately address impacts and risks and prescribe adequate mitigation measures;
 - ii. Assess the mechanisms to ensure that the Frameworks are utilized and applied to each activity financed; and that Environmental and Social Management Plans (ESMPs) and, as required, Compensation plans are prepared for each activity financed. As it is not known what mitigation activities would be required, ensure funds for mitigation activities are allocated in the project;
 - iii. Assess the need for resettlement and resettlement action plan if necessary.
 - iv. Because of the importance of EHS, and its cross-cutting nature (i) verify that an indicator of EHS performance during construction is included as one of the project-level indicators, for example number of accidents per month, and (ii) verify if EHS performance, as measured by the indicator, is included as a condition for financing;
 - v. Evaluate if water quality monitoring according to WHO standards is included in the project monitoring plan.
- 5.3 Furthermore, the analysis will review the following aspects:

- i. An assessment of compliance with applicable IDB environmental and social policies, including the Environmental and Safeguard Compliance Policy, Access to Information Policy, Disaster Risk Management Policy; Involuntary Resettlement Policy, and, if appropriate, the Gender Equality in Development Policy, will be carried out.
 - ii. An assessment of the public consultation undertaken as part of the Project's preparation will be carried out, and programs in place for continued consultation during construction and operation;
 - iii. Confirmation that the natural disaster risks have been adequately identified, and that proper mitigation is implemented in the design and operation of the project;
 - iv. Evaluation of project-related disclosure activities including confirmation that the participation processes of stakeholders has been adequately conducted and that the proposed future actions to provide adequate ongoing information disclosure is in compliance with IDB policies.
- 5.4 As part of the analysis process, the Bank will prepare an Environmental and Social Management Report (ESMR) presenting the conclusions of the analysis for consideration by the Bank's Quality and Risk Review Committee. The ESMR will outline the recommendations and requirements for inclusion in the relevant legal documents.

INDEX FOR COMPLETED AND PROPOSED SECTOR WORK

Issues	Description	Expected Dates
Technical designs	Feasibility studies completed for water provision in Carrefour and inner city of Port au Prince Final designs to be completed for Carrefour and inner city of Port au Prince	May 2016
Analysis of project economic viability	A cost/benefit analysis will be conducted. Economic viability of the program completed. Economic analysis completed.	March 2016
Financial analysis	Preparation/conclusion of financial analysis, including financial projections based on historical information and business plan of the water utility. Review of lessons learned will be included in the program.	February-March 2016
Institutional analysis/personnel, procedures other aspects of implementation capacity	An analysis of the execution capacity of DINEPA and the CTE of Port-au-Prince will be carried out. Human and financial resources will be analyzed to ensure they are adequate to implement the project. Preparation/conclusion of institutional analysis. Review of lessons learned will be included in the program.	March 2016
Stakeholders and political environment	Maintain close communication with stakeholders in DINEPA and the CTE of Port-au-Prince on the program. Consultation meetings will be held as part of the Project Risk Management.	March-April 2016
Social and environmental safeguards	Preparation/conclusion of ESA Review of aspects specific to the operation, additional baseline evaluation, budget	April 2016
Fiduciary analysis	The Project team will review the most recent fiduciary analysis that was carried out to identify the mechanisms that ensure transparency and efficiency during the project and will prepare an action plan to implement recommendations.	April 2016
Data collection and analysis for reporting on results	Identification of proposed indicators to measure impact of program	February-March 2016
Preparation of Operations Manual	Preparation of the Operations Manual for the operation	March-June 2016
Other key issues, such as donors, gender, sustainability, country/sector issues	N/A	N/A

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.