

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**HAITI**

**PORT-AU-PRINCE WATER AND SANITATION PROJECT III**

**(HA-L1103)**

**GRANT PROPOSAL**

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ABBREVIATIONS	
AECID	Spanish Agency for International Development Cooperation
AOP	Annual Operating Plan
CAEPA	Water and Sanitation Committees
CRF	Corporate Results Framework
CTE	<i>Centre Technique d'Exploitation</i>
CTE-MRPP	<i>Centre Technique d'Exploitation of the Metropolitan Region of Port-au-Prince</i>
DINEPA	<i>Direction Nationale de l'Eau Potable et de l'Assainissement</i>
EA	Executing Agency
EdH	<i>Electricite d'Haiti</i>
EHS	Environmental and Health and Safety Impact
ERR	Economic Rate of Return
ESA	Environmental and Social Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMR	Environmental and Social Management Report
FECASALC	Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean
GIS	Geographical Information System
GoH	Government of Haiti
IDB	Inter-American Development Bank
IRR	Internal Rate of Return
MEF	Ministry of Economy and Finance
MRPP	Metropolitan Region of Port-au-Prince
MTPTC	Ministry of Public Works, Transportation and Communication
NGO	Non-Governmental Organization
NPV	Net Present Value
OM	Operations Manual
OREPA	Regional Water and Sanitation Offices
OTA	Operational Technical Assistance
PBG	Policy Based Grant
PCR	Project Completion Report
PESA	Programmatic Environmental and Social Assessment
PMR	Project Monitoring Report
PPP	Public/Private Partnership
SIC	Commercial Information System
TC	Technical Cooperation
UIS	Update Institutional Strategy
UNICEF	United Nations Children's Fund
WHO	World Health Organization

**PROJECT SUMMARY**  
**HAITI**  
**PORT-AU-PRINCE WATER AND SANITATION PROJECT III**  
**(HA-L1103)**

Financial Terms and Conditions				
<b>Beneficiary:</b> Republic of Haiti			<b>Amortization Period:</b>	N/A
<b>Executing Agency (EA):</b> <i>Direction Nationale de l'Eau Potable et de l'Assainissement</i> (DINEPA), through its <i>Centre Technique d'Exploitation</i> of the Metropolitan Region of Port-au-Prince (CTE-MRPP) and its West Regional Water and Sanitation Office (OREPA Ouest).			<b>Disbursement Period:</b>	5 Years
			<b>Grace Period:</b>	N/A
			<b>Interest rate:</b>	N/A
<b>Source</b>	<b>Amount (US\$)</b>	<b>%</b>	<b>Inspection and supervision fee:</b>	N/A
<b>IDB (Grant Facility)</b>	65,000,000	100%	<b>Weighted Average Life (WAL):</b>	N/A
<b>Total:</b>	65,000,000	100%	<b>Currency of Approval:</b>	Dollars of the United States of America
Project at a Glance				
<b>Objective:</b> The general objective of the project is to improve the quality of life and sanitary conditions of the population of Port-au-Prince and rural communities through the provision of sustainable water and sanitation services. The specific objectives are to: (i) improve water and sanitation coverage, quality of service, and hygiene practices in Port-au-Prince; (ii) improve water coverage and hygiene in rural areas affected by Hurricane Matthew and in OREPA Ouest; (iii) improve the financial sustainability of CTE-MRPP; and (iv) achieve an effective regulation of the sector by DINEPA and the deconcentration of the OREPA Ouest.				
<b>Special Contractual Conditions Prior to the First Disbursement:</b> The EA will provide evidence to the Bank's satisfaction of: (i) the entry into force of an agreement between the Ministry of Economy and Finance (MEF), the Ministry of Public Works, Transportation and Communication (MTPTC), and DINEPA, specifying DINEPA's obligations as the project's EA, and the coordination between the parties for the disbursement of funds and execution of project activities; (ii) the entry into force of the project's Operations Manual (OM) pursuant to terms previously agreed upon with the Bank, which will include procedures to ensure compliance with the Bank's environmental and social safeguards; (iii) DINEPA's approval of CTE-MRPP's new water rate structure with an increase of at least 8% starting as of January 1, 2018 and every calendar year during the project disbursement period to offset CTE-MRPP's operating costs increase (¶3.3); and (iv) See special contractual conditions in the Environmental and Social Management Report (ESMR) ( <a href="#">REL#3</a> ) ( <a href="#">OEL#12</a> ) and in the Fiduciary Arrangements (Annex III).				
<b>Exceptions to Bank Policies:</b> None				
Strategic Alignment				
<b>Challenges<sup>(a)</sup>:</b>	SI <input checked="" type="checkbox"/>	PI <input type="checkbox"/>	EI <input type="checkbox"/>	
<b>Cross-Cutting Themes<sup>(b)</sup>:</b>	GD <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/>	IC <input checked="" type="checkbox"/>	

<sup>(a)</sup> SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

<sup>(b)</sup> GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, Problem Addressed, Justification

- 1.1 Haiti has a total population of 10.3 million inhabitants, of which 60% live in rural areas. Water and sanitation services are characterized by very low water coverage consisting of 65%<sup>1</sup> in urban areas and 48% in rural areas, unreliable water supply (less than 4 hours a day) and high levels of water losses, reaching 90% in some instances. Sewerage systems<sup>2</sup> are non-existent with a 72% access to individual sanitation solutions in urban areas and 32% in rural areas, which make water sources highly vulnerable to contamination due to population proximity.
- 1.2 In the post-earthquake setting, in July 2010, the Inter-American Development Bank (IDB) approved the first phase of the Port-au-Prince Water and Sanitation Project (2351/GR-HA and GRT/WS-12277-HA) in the amount of US\$50 million (US\$15 million from the Bank and US\$35 million in Bank-administered co-financing from Spanish Cooperation Fund for Water and Sanitation in Latin America and the Caribbean (FECASALC). This project aimed at responding to an emergency situation by financing activities to strengthen the water utility, the *Centre Technique d'Exploitation of the Metropolitan Region of Port-au-Prince* (CTE-MRPP), rehabilitate existing facilities, and improve access to water, especially for low-income families. Port-au-Prince Water and Sanitation Project II (2946/GR-HA), for US\$35.5 million, approved in June 2013, further improved the water utility's financial and technical performance and the quality of water services in the MRPP through significant investments in rehabilitation of the network. A key element of these operations was the signing of a three-year Operational Technical Assistance (OTA) contract with the international water operator Agbar-Lyonnaise des Eaux-United Water in 2011, to support CTE-MRPP with its reorganization, training of its staff and identification of priority water works. That contract was renewed in 2014 for an additional three years and mainly focused on the improvement of water production and distribution and increase in the utility's revenues.
- 1.3 **Outcomes from Potable Water and Sanitation Port-au-Prince Projects I and II.** At the service level, average hours of water distribution by sector almost doubled (from 13 to 24 hours per week). From the business standpoint, CTE-MRPP increased its active clients by 41% between 2011 and 2016, expanding its customer base from 32,000 to 46,000 customers today. Non-revenue water is estimated to have decreased from 83%<sup>3</sup> to 61%<sup>4</sup> between 2011 and 2016. CTE-MRPP's revenues increased by over 50% between 2011 and 2016.
- 1.4 With financing from the two projects under execution, CTE-MRPP has implemented new operational tools consisting of a Commercial Information System (SIC), a Geographical Information System (GIS) and an Information Management System to support the utility's financial management. In addition, the OTA team has provided over 28,000 hours of training to CTE-MRPP's staff between 2011 and 2015. The

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<sup>1</sup> Source: World Health Organization (WHO)/United Nations Children's Fund (UNICEF), Progress on sanitation and drinking water, 2015 update.

<sup>2</sup> Source: WHO/UNICEF, Progress on sanitation and drinking water, 2015 update.

<sup>3</sup> It means that, of 100 liters of water produced, only 61 liters are billed. The figure ranges between 40% and 60% in many Latin American and Caribbean countries.

<sup>4</sup> Source: *Tableau de Bord Mensuel* –CTE-MRPP, December 2015. Those are estimates since only 10% of the water connections are metered.

utility's productivity<sup>5</sup> significantly improved from 14.3 in 2011 to 6.7 in 2016. However, CTE-MRPP's results are very fragile and directly linked to water availability and its capacity to distribute it efficiently.

- 1.5 **Access to Water and Quality of Service.** In 2016, a household survey, financed by the IDB in collaboration with *Direction Nationale de l'Eau Potable et de l'Assainissement* (DINEPA), indicated that 43.9% of the MRPP population has access to improved drinking water,<sup>6</sup> consisting of piped water to the household (19.8%), shared tap (5.1%) and other access to improved water (19%) (OEL#6). A household with a water connection that sells water to the neighbors (29.6%) is the most common type of informal service provided in Port-au-Prince, which has one of the most severe intermittent water supply systems in the world with an average service continuity of 3.3 hours per day.
- 1.6 Water piped to the premises in the densely populated informal settlements of Port-au-Prince (about 50% of the city's population) is difficult to implement given the urban pattern and socio-economic characteristics of these communities. Therefore, the water utility is pursuing different alternatives such as semi-collective (also called "condominial") water systems or the delegation of service to small providers.
- 1.7 **Access to Sanitation.** Sanitation services are virtually non-existent with a 43.6% of the population using improved sanitation facility<sup>7</sup> shared with other households. About 1.7 % of the population practices open defecation and only 5.2% of the population disposes of hand washing facilities and soap at home.
- 1.8 **Financial Sustainability of CTE-MRPP.** With support from the OTA, the utility has expanded its customer base and revenues significantly between 2011 and 2014. However, these actions had to slow down due to insufficient availability of water for distribution. Current water produced is 125,000m<sup>3</sup>/day while current water requirements amount to 300,000m<sup>3</sup>/day as per the Master Plan (OEL#8). In 2016, the water utility undertook US\$20 million water works financed by the second operation to strengthen production and distribution in the MRPP. In addition, the third operation will finance works to reduce commercial water losses with the renewal and relocation of a 6km water main accounting for 65% of water losses<sup>8</sup> (Tunnel Diquini). It is expected that the increased availability of water, as a result of this project, will improve the non-revenue water indicator of CTE-MRPP as well as the utility's collection rate. In addition, CTE-MRPP pumps on average 33% of its water. While CTE-MRPP is the largest client of the electricity company, *Electricite d'Haiti* (EdH), it can only be supplied 10 hours of electricity per day. To compensate for this, the utility operates 40 generators, making its water production and distribution very inefficient and costly.<sup>9</sup>

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<sup>5</sup> Productivity is measured in terms of number of employees per 1,000 connections.

<sup>6</sup> WHO/UNICEF Joint Monitoring Programme 2015 for Water Supply and Sanitation. Access to an improved drinking water source include sources that are protected from contamination such as piped household water connection, public tap or public standpipe, boreholes, protected dug wells, protected springs and rainwater collection.

<sup>7</sup> Improved sanitation facilities are facilities that ensure hygienic separation of human excreta from human contact such as flush/pour flush toilet (to pipe sewer system, septic tank, pit latrine), ventilated improved pit (VIP) latrine, pit latrine with slab, and composting toilet.

<sup>8</sup> Physical losses and commercial losses due to illegal connections to the water main.

<sup>9</sup> <https://publications.iadb.org/handle/11319/8094> and <https://publications.iadb.org/handle/11319/8428>

- 1.9 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. CTE-MRPP has been able to stabilize its personnel costs, and cover them with its own revenues, while the GoH, through Bank financing, partially covers its operation and maintenance costs (approximately US\$2 million/year).
- 1.10 CTE-MRPP implemented a revised tariff structure in 2013, which reduces the 900 tariff categories to 39. The Business Plan prepared by CTE-MRPP ([OEL#10](#)) shows that the minimum financial equilibrium is expected to be achieved in 2018. Indeed, while a 4% tariff increase has been applied annually, as per grant agreement (2946/GR-HA), it has not been sufficient to compensate for the increase in energy costs as well as chemicals.
- 1.11 **Rural Water and Sanitation Sector.** Hurricane Matthew caused 546 deaths and significant damage in the departments of Grande Anse, Nippes and Sud when it hit Haiti on October 4<sup>th</sup>, 2016. Total damages and losses were estimated at US\$1.9 billion, of which US\$20.6 million correspond to estimated damages and losses in the water and sanitation sector.<sup>10</sup> In rural areas, damages and losses were estimated at US\$14.2 million, affecting access to potable water and sanitation for 700,000 people ([OEL#7](#)). OREPA Ouest was prioritized as it is the department with the least amount of rural investments, resulting in very low water coverage.
- 1.12 **Sector Institutional Aspects.** In March 2009, the Government of Haiti (GoH) initiated a reform process with the passing of the Framework Law,<sup>11</sup> which established DINEPA,<sup>12</sup> an autonomous entity responsible for the development, planning and regulation of the sector. However, DINEPA has, since its creation, been an Executing Agency (EA) of investment projects financed by the GoH and the international community and has not been able to play its role of regulator.
- 1.13 The reform process has been evolving slowly mainly due to the GoH's investments priority in rural and urban systems and responses to emergencies (i.e. natural disasters and cholera). The Bank addressed this issue with the approval of a first Policy Based Grant (PBG) operation in 2014 to support the GoH to implement policy, institutional and legal reforms in the sector. The PBG has facilitated the completion of the legal framework with the establishment of DINEPA's Board of Directors, the approval of water tariff adjustments, the publication of a technical norms manual and the implementation of PPPs to improve the performance of operators in St Marc and Port-au-Prince.
- 1.14 **Gender Context.** Women around the world shoulder the largest burden of collecting water (64% vs 24% of men)<sup>13</sup> and dedicate over 125 million hours per day on this

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<sup>10</sup> *Evaluation rapide des dommages et des pertes occasionnées par l'Ouragan Matthew*. October 2016. Ministry of Economy and Finance (MEF).

<sup>11</sup> The Framework Law was a key component of Bank's grant 2381/GR-HA, which contemplates: (i) the creation of a regulatory entity; (ii) the diversification in the nature of the service providers; and (iii) the separation of the functions of planning/regulation, ownership of the systems and operation of the services.

<sup>12</sup> DINEPA was created in 2009 pursuant to the Framework Law (*Loi Cadre portant organisation du secteur de l'eau potable et de l'assainissement*). Four Regional Water and Sanitation Offices (OREPAs) were created as deconcentrated entities of DINEPA, as the owners of the water and sanitation infrastructure. In urban areas, the operational functions rest with the CTEs. In rural areas, Water and Sanitation Committees (CAEPAs) are the service providers.

<sup>13</sup> Women bear 64% of the burden of collecting water, while men bear 24%, girls 8% and boys 4%. See WHO and UNICEF (2010). *Progress on Sanitation and Drinking-Water*.



task.<sup>14</sup> In Port-au-Prince, women dedicate an important percentage of their time to collect and transport water from water kiosks to their homes,<sup>15</sup> time they cannot dedicate to income generating activities or education. In fact, women represent 47.5% of the total labor force,<sup>16</sup> but are confined to informal jobs and jobs on the lower tier of the salary scale. Additionally, 44% of households in Haiti are led by women, and 60%<sup>17</sup> of these households are in extreme poverty,<sup>18</sup> compared to 53% led by men.<sup>19</sup> Moreover, even if women are the primary water collectors, their opinions and needs are very rarely taken into account since they do not participate in the decision-making process.

- 1.15 **Climate Vulnerability Context.** Haiti is highly vulnerable to climate impacts, with increase in temperatures, high variability in rainfall due to the influence of El Nino, drying trends due to decrease in annual rainfall, dramatic increase in frequency and duration of hurricanes (i.e. Hurricane Matthew), and higher rates of increase in sea level rise. Managing the existing and future surface and sub-surface water resources, and coping with current and future climate threats are critical for Haiti's economic development, infrastructure build-up and livelihood support ([OEL#13](#)).
- 1.16 **Progress with Execution.** As of July 31<sup>st</sup>, 2017, project 2351/GR-HA is completely disbursed. Of the US\$35 million from the 2946/GR-HA project, over 32% have been disbursed and the remainder is fully committed. The main objective of that second operation is to increase water production (works are expected to be completed within one year).
- 1.17 **The Proposed Project.** The new project is expected to increase the number of household connections from 46,000 to 100,500, the number of water kiosks from 185 to 280 and add 12,000 new condominium water connections, bringing the improved access to drinking water from 44% of the population to 60%.
- 1.18 **Lessons Learned.** Experience gained in five intermediate cities through the Potable Water and Sanitation Sector Reform (2381/GR-HA) and the Water and Sanitation in Intermediate Cities (2190/GR-HA) projects, approved by the Bank in 1998 and 2009 respectively, has demonstrated that infrastructure can only be viable with a well-managed utility staffed with trained personnel. To achieve this objective, and given the lack of national experts in this domain, the Bank operations financed external support to train CTE-MRPP professionals to underpin the sustainability of the infrastructure and the operation of the country's potable water systems. Similar arrangements were put in place in the utilities of Port-de-Paix, St. Marc and Les Cayes, which have produced very positive results.
- 1.19 **Proposed Intervention and Justification.** The project's intervention is justified as it will improve access to potable water for a large number of households in Port-au-Prince and rural areas that currently do not have proper access to water and support the sustainability of water supply in Port-au-Prince. The absence of a

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<sup>14</sup> Water.org - <http://water.org/water-crisis/women-children-facts>.

<sup>15</sup> In urban areas, 82% of the population travel 30 minutes to reach the closest water source (source: The Now Institute (2014). Haiti Now).

<sup>16</sup> <http://databank.worldbank.org>.

<sup>17</sup> Oxfam, Haiti, 2009.

<sup>18</sup> Extreme Poverty is defined as "those living on less than \$1.25 a day" (World Bank definition), leaving them unable to meet basic needs for food, water, shelter, sanitation and health care.

<sup>19</sup> IDB Haiti Country Strategy 2011-2015, Gender Note.

convenient and reliable supply of safe water limits economic development as women and children are usually assigned the task of collecting water and carrying it to the households, often walking several hours a day to fetch water.<sup>20</sup> As a result, the operation will have a positive impact on productivity and inclusiveness.

- 1.20 In addition, for the past twenty years, the Bank has been supporting the sector through the preparation of the sector framework law and investments in urban and rural areas. The GoH has demonstrated a commitment to the sector through the passing of the law in 2009 and by prioritizing the sector for investments.
- 1.21 Given that Port-au-Prince is a fast-growing city and has not received any investment since the 1980s, investment requirements are greater than the contemplated investments in the projects. Investment requirements in Port-au-Prince until 2020 are estimated at more than US\$200 million.<sup>21</sup> For instance, some African cities, with similar sizes and socioeconomic profiles have demonstrated that steady investments are key to turn around a water utility. The city of Dakar has obtained excellent results with respect to coverage increase and improvement of its management due to annual investments of US\$50 million over a 10-year period.<sup>22</sup> In Congo, the water utility of Kinshasa, Regideso, was restructured in 2006 and significantly improved after a 190 million investment program.<sup>23</sup> This indicates that consistent investments over a minimum of 10 years are usually necessary to turn around a utility.
- 1.22 External technical assistance is justified given the existing context and constraints in terms of quality of service and management and the qualifications of CTE's staff. A new public/private participation modality will be selected to give external experts more responsibility with respect to changes in the utility's indicators and the management of change within the organization. A transaction advisor with expertise in structuring Public/Private Partnerships (PPP), contracted with financing from a Technical Cooperation (TC) operation (ATN/MA-15164-HA),<sup>24</sup> has proposed alternatives of management models for water provision in the MRPP, based on past experience. The contracts will be designed to include proper incentives to generate increased results and achieve expected outcomes. IDB support and continuing external support are essential if the utility is to make progress in meeting this challenge.
- 1.23 While the results achieved to date with the first two projects are promising, the sustainability of these investments also depends upon the improvement of the performance of CTE-MRPP, the professionalization of its staff, and a tariff that is commensurate with the costs of the utility if the service is to improve noticeably ([OEL#9](#)).
- 1.24 **Consistency with the Government of Haiti's Country Strategy.** The program is consistent with the Haitian National Water and Sanitation Strategy for 2010-2025 as

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<sup>20</sup> When the water source is located outside the household, women spend more than 80% of their time fetching water.

<sup>21</sup> *Schema Directeur Eau Potable MRPP Phase 3 Version Finale (Master Plan for Water Production and Distribution)* ATO October 2012.

<sup>22</sup> Reforming Water Supply in Abidjan, Cote d'Ivoire, Policy Research Working paper, World Bank, June 2000.

<sup>23</sup> *Evolution Institutionnelle du Secteur de l' Eau en milieu urbain en RDC* (June 2<sup>nd</sup>, 2015) and Water Supply and Sanitation in the Democratic Republic of Congo, World Bank, UNICEF (2011).

<sup>24</sup> The Technical Cooperation operation was approved for US\$1.150 million to support the preparation of this project.

the above-mentioned issues are identified by the GoH as some of the key constraints to develop the water and sanitation sector.

- 1.25 **Coordination with Donors.** The Spanish Agency for International Development Cooperation (AECID) and the IDB are the main donors in terms of financial support to the sector (US\$156.6<sup>25</sup> million administered by the Bank and US\$100 million administered through the Spanish Government bilateral fund). They co-financed the first stage of the Port-au-Prince project as well as the projects for intermediate and rural cities. In addition, the IDB has been coordinating efforts in the sector with other multilateral and bilateral institutions such as the United Nations Children's Fund, Swiss Cooperation, United Nations Development Program (UNICEF), the French Development Agency, the European Union, the World Bank (a main donor in the water and sanitation sector) and Non-Governmental Organizations (NGO) through the *Table Sectorielle*,<sup>26</sup> to generate national consensus for the supply of water and sanitation services.
- 1.26 **Consistency with the Update Institutional Strategy (UIS).** The project is consistent with the (UIS) 2010-2020 (AB-3008) and is aligned with the development challenge(s) of: (i) social inclusion and equality as it is directed to vulnerable population and women's labor participation will be increased. The project is also aligned with the cross-cutting themes of: (i) gender equality and diversity by increasing women's participation in water-related decisions; (ii) climate change and environmental sustainability by investing 20.08% in climate adaptation activities, according to the Joint-MDB approach and climate finance tracking. This contributes to the IDB Group's goal of reaching 30% in climate investments by 2020 ([OEL#13](#)); and (iii) institutional capacity and Rule of Law by implementing measures to strengthen key sector entities.
- 1.27 **Gender Aspects.** To promote gender equality in the sector, the project will focus on: (i) increasing women's participation in water related decision-making processes both at the community level, and within the CTE-MRPP; and (ii) increasing women's labor participation in water kiosk management. Additionally, ATN/MA-15164-HA will finance an awareness campaign to help improve household's hygiene behavior and health (including menstrual hygiene management, healthy cooking tips and reproductive health).
- 1.28 **Consistency with Public Utility Policy of the Bank.** The proposed operation is consistent with the principles of the Bank's Public Utilities Policy (GN-2716-6) in that the project is economically viable and it complies with the aspect of financial sustainability of the utility through the contribution of a transparent budgetary allocation of funds to expand services and improve quality of service ([OEL#5](#)).
- 1.29 **Consistency with the IDB Country Strategy with Haiti.** The water and sanitation sector is one of the six priority sectors identified in the 2011-2015 country strategy with Haiti (document GN-2646) agreed upon with the GoH. This project is consistent with that strategy, which focuses on improving potable water coverage and quality of water and sanitation services in Port-au-Prince. A new country strategy is expected

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<sup>25</sup> As of March 31<sup>st</sup>, 2016, out of this US\$156.6 million portfolio, 65% have been disbursed and the remainder is committed.

<sup>26</sup> DINEPA-led thematic coordination group of donors and the public sector.

to be discussed<sup>27</sup> with the newly-elected government. The operation is included in the 2017 Haiti Country Program Document (CPD 2017).<sup>28</sup> The operation is consistent with the Water and Sanitation Sector Framework (GN-2781-3.)

## **B. Objective, Components and Cost**

- 1.30 **Objective.** The general objective of the project is to improve the quality of life and sanitary conditions of the population of Port-au-Prince and rural communities through the provision of sustainable water and sanitation services. The specific objectives of this third project are to: (i) improve water and sanitation coverage, quality of service, and hygiene practices in Port-au-Prince; (ii) improve water coverage and hygiene in rural areas affected by Hurricane Matthew and in OREPA Ouest; (iii) improve the financial sustainability of CTE-MRPP; and (iv) achieve an effective regulation of the sector by DINEPA and the deconcentration of the OREPA Ouest.
- 1.31 **Component I (US\$12 million). Institutional Strengthening of CTE-MRPP, OREPA Ouest and DINEPA.** Will finance the contracting of international experts pursuant to an international bidding process to fill key positions in CTE-MRPP such as water production and distribution, based on a new management modality to be selected in 2017. In addition, this component will finance the development of planning and monitoring tools to support DINEPA as a regulatory institution and the OREPA Ouest as a deconcentrated entity.
- 1.32 **Component II (US\$2.5 million). Support to Operation and Maintenance.** Will finance CTE-MRPP's operation and maintenance costs, specifically energy, chlorine and repair equipment, which cannot be covered by its current annual revenues.
- 1.33 **Component III (US\$39.5 million). Investments in Urban Potable Water and Sanitation Works.** 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 the refurbishment of the Bolosse reservoir, the construction of a new 2,000 m<sup>3</sup> reservoir in Vivy-Mitchell and Mariani, 33,000 new household connections, as well as 95 new and rehabilitated water kiosks, the improvement of water distribution in Cite Soleil, the final designs of water works for the MRPP (US\$1 million) as well as the installation of 4,000 meters. The project is expected to benefit 226,500 households.
- 1.34 In addition, the component will provide financing for pilot projects consisting of the construction of 400 semi-collective small potable water systems (400 randomly selected clusters in four neighborhoods in the MRPP), which have proved successful in similar context such as Rio de Janeiro, and, as a result, 12,000 water connections will be implemented. The component will also finance the development of marketing and communication campaigns to improve connectivity to the water systems as well as hygiene.

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<sup>27</sup> The Transition Period of the Country Strategy with Haiti 2011-2015 has been extended until December 31<sup>st</sup>, 2017 (GN-2646-2 and CII/GN-324).

<sup>28</sup> During the June 3, 2017 high level meeting between the GoH and the IDB, it was confirmed to include this project in the 2017 pipeline.

- 1.35 Lastly, it will finance 15 semi-collective sanitation systems (450 households) equipped with improved septic tanks in the Martissant area. The objective is to test a methodology, successfully developed by the NGO *Solidarité<sup>29</sup> in Christ Roi*. Effectiveness of these interventions was evaluated in various studies.<sup>30</sup> Beneficiaries will be selected based on: (i) least investment cost; (ii) space availability for treatment; and (iii) coverage in improved sanitation.
- 1.36 **Component IV (US\$7.0 million). Investments in Rural Water Works.** Will provide resources for the construction and rehabilitation of water works in OREPA Ouest as well as emergency works needed to restore access to potable water in rural areas, which were affected by Hurricane Matthew in the southern part of the country and Ile de la Gonave. The component will finance water systems emergency survey and planning, expansion or rehabilitation of potable water systems, protection of water sources and supervision of works as well as a communication campaign on sanitation and hygiene in four communities of OREPA Ouest. A decentralized decision tool for rural projects will be developed at the OREPA Ouest level and simple planning indicators of water, sanitation and hygiene coverage will designate the neediest communal sections. The project is expected to benefit 24,000 households.
- 1.37 **Project Administration, Monitoring, Evaluation and External Audit (US\$4 million).** This will include the support to CTE-MRPP and one staff at OREPA Ouest associated with the execution of the project, the installation of an accounting system at the CTE-MRPP for project funds administration, the costs of the environmental monitoring and the intermediate and final evaluations.

### C. Key Results Indicators

- 1.38 **Expected Results.** The four expected outcomes are: (i) water and sanitation coverage, the quality of water service and hygiene have improved in Port-au-Prince; (ii) access to water supply and hygiene have improved in rural areas affected by Hurricane Matthew and OREPA Ouest; (iii) CTE-MRPP's financial sustainability has improved; and (iv) DINEPA is conducting an effective regulation of the sector and OREPA Ouest's functions have been deconcentrated.
- 1.39 The most relevant indicators and expected results of the project are shown in Table 1 below. The Results Matrix is included in Annex II. [Infographic Port-au-Prince](#).

**Table 1. Key Project Indicators**

Indicator	Baseline	Target
Operating ratio (annual operating revenue/annual operating expenses)	67%	141%
Percentage of households with improved access to water in MRPP	44%	60%
Number of new household with improved access to water in rural areas of OREPA Ouest	0	4,000
Percentage of women working in new or rehabilitated water kiosks in Carrefour and Centre-Ville	13%	20%

<sup>29</sup> NGO with many years of experience developing social projects in that area.

<sup>30</sup> "Providing Water to Poor People in Africa Effectively", 2016, WB. "Planned, motivated and habitual hygiene behavior: An Eleven Country Review, de Valerie A. Curtis, Lisa O. Danquah and Robert V. Auger.

## II. FINANCING STRUCTURE AND MAIN RISKS

### A. Financing Instruments

- 2.1 This is an investment project with an estimated cost of US\$65 million, which will be financed by the IDB Grant Facility. Component IV will be designed as a multiple-works modality in the amount of US\$7.0 million. The disbursement period will be 60 months (5 years). Table 2 provides the cost summary by component.

**Table 2. Costs of Project (US\$)**

Category		Financing	%
<b>I. Direct expenses</b>		<b>61,000,000</b>	<b>93.85%</b>
I.1	Component I - Institutional Strengthening	12,000,000	18.50%
I.2	Component II - Support to Operation and Maintenance	2,500,000	3.84%
I.3	Component III - Investments in Potable Water and Sanitation Works	39,500,000	60.76%
I.4	Component IV - Investments in Rural Water Works	7,000,000	10.76%
<b>II. Project administration</b>		<b>4,000,000</b>	<b>6.15%</b>
II.1	Executing unit	1,500,000	2.3%
<b>II.2 Direct associated costs</b>		<b>2,500,000</b>	<b>3.84%</b>
	Project audits	375,000	0.58%
	Environmental monitoring	200,000	0.31%
	Monitoring & evaluation	500,000	0.76%
	Contingencies	1,425,000	2.19%
<b>Total costs</b>		<b>65,000,000</b>	<b>100.00%</b>

- 2.2 **Eligibility Criteria and Representative Sample for Component IV.** A representative sample of rural projects was considered (48% of multiple work investments). The main criteria for project selection includes: (i) the project is located in OREPA Ouest in a community, whose population is comprised between 2,500 and 10,000 inhabitants; (ii) the project is deemed technically, economically, environmentally, financially and institutionally viable as per Bank standards;<sup>31</sup> and (iii) the community has been consulted with respect to the level of service and costs and maintenance ([Rural projects](#)). The subsequent projects to be financed under the program will follow the same eligibility criteria used for the sample.

- 2.3 **Project Cycle.** The project cycle will consist of: (i) identification of the community in OREPA Ouest, based on the planning tool; (ii) design: project specifications are prepared by the Rural Department at DINEPA; and (iii) execution: contracting of civil works including supervision to be carried out by OREPA Ouest.

- 2.4 **Disbursement Schedule.** The tentative disbursement schedule is as follows:

**Table 3. Disbursement Schedule (US\$)\***

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB	9,870,000	19,010,000	25,730,000	6,155,000	4,235,000	65,000,000
Percentage	15.4%	28.0%	39.5%	9.2%	7.9%	100.0%

\* This schedule is based on progress with the contracts and commitments of the program currently under way and on the fact that the bidding documents for the third stage are already being prepared.

<sup>31</sup> The OM includes a detailed description of the selection criteria for projects ([OEL#11](#)).



## **B. Environmental and Social Safeguard Risks**

- 2.5 The overall environmental and social impacts from the program are expected to be largely positive, particularly, the increased availability and reliability of potable water for the population in the affected areas. Given the nature and location of the proposed interventions, the construction techniques to be employed, and the short duration of individual works, it is anticipated that the principal negative environmental and social impacts and risks are likely to be moderate, mostly localized and short-term, for which effective mitigation measures are known. The risk associated with high population density and insecurity in that area will be mitigated through the contracting of experienced NGOs. This operation is therefore classified as a Category “B” operation under the Bank’s Environmental and Safeguards Compliance Policy (OP-703). Additionally, as per the Bank’s Disaster Risk Management Policy (OP-704) the program is categorized as “moderate” as mitigation measures are expected to adequately manage the overall risk from natural disasters to the project ([REL#3](#)).
- 2.6 The principal potential negative social impacts are related to the disruption of economic activities to local commerce and street vendors. The implementation of adequate Environmental and Social Management Plans (ESMPs) that include the Emergency Contingency and Response Plan will mitigate the potential environmental and social impacts and risks during the construction phase. Although economic disruption and resettlement is not expected at this stage, a livelihood framework has been prepared to be used as a guideline for the preparation of livelihood plans, which would be prepared and implemented prior to any works to ensure compensation for disruption of economic activities. Other potential negative environmental and social risks are related to typical Environmental and Health and Safety Impact (EHS) risks and impacts during construction.
- 2.7 The Programmatic Environmental and Social Assessment (PESA) and Environmental and Social Management Framework (ESMF) for the Program have been disclosed (on November 11, 2016 on the IDB website, and November 17, 2016 on the DINEPA website) and consulted with affected people between January 8<sup>th</sup> and 25<sup>th</sup>, 2017 for the urban component and March 9<sup>th</sup> and 10<sup>th</sup>, 2017 for the rural component. Public consultation events were held with affected parties and relevant stakeholders to discuss the Program and its potential environmental and social impacts. A total of 11 public consultation events were held in the MRPP between January 8<sup>th</sup> and 25<sup>th</sup> of 2017 for the urban component and events were held for the rural component on March 9<sup>th</sup> and 10<sup>th</sup> of 2017 in the community of Pye Kabwet in Artibonite. Further information on the consultations is attached ([Plan et Consultation](#)) and ([Plan de consultation et mobilisation](#)).
- 2.8 Detailed Environmental and Social Assessment (ESA) and ESMPs were prepared for project activities of the sample - the rehabilitation of the Bolosse Reservoir, the improvement in the network between Diquini tunnel and Bolosse Reservoir, as well as works in Pye Kabwet. The results of the public consultations, ESAs and ESMPs were disclosed in July.

### **C. Fiduciary Risk**

- 2.9 The Medium risk of delays in processing and reporting transactions will be mitigated through the installation of the accounting system currently in place at DINEPA (ACCPAC) at CTE-MRPP.

### **D. Other Key Issues and Risks**

- 2.10 **Monitoring and Accountability Risk (Medium).** The risk of insufficient capacity of supervision, monitoring and procurement will be mitigated through the strengthening of the procurement unit in OREPA as well as the signing of a memorandum between DINEPA, OREPA and CTE-MRPP, defining clearly the roles and responsibilities of each entity and the delegation of authority.
- 2.11 **Development Risk (Medium).** The risks associated with: (i) not implementing a tariff increase to ensure sustainability of the investments, will be mitigated as a new tariff structure is being developed and tariff increases were approved in the past 5 years; (ii) the lack of progress in the energy sector reform, will be mitigated through the utility's use of generators and a close control of its operating costs; and (iii) the financial sustainability of the CTE-MRPP, will be mitigated through periodic monitoring of the utility's financial situation.
- 2.12 **Macroeconomic and Fiscal Sustainability Risk (Medium).** The risk of inflation and consequent impact on project costs will be mitigated through a US Dollars project budget as well as contingency funds in the budget.
- 2.13 **Technical Viability.** Due to operational and production problems, virtually all CTE-MRPP's customers in Port-au-Prince are provided with an intermittent water supply of 3.3 hours per day. Resources from the second operation finance investments to increase the utility's production capacity by 40% (up to 40,000 m<sup>3</sup>/day) through the equipment of 8 new boreholes, the rehabilitation of existing ones and the reinforcement of the Mariani pumping station.
- 2.14 This project will include US\$39.5 million in investments to reduce non-revenue water, increase collection efficiency and boost labor productivity giving improved access to water service. The project will also finance 130 km of additional pipes to allow for an increase in household water connections and the construction of an interconnection between the Tunnel Diquini source, Centre Ville and Mariani, where an estimated 12,000 m<sup>3</sup>/day of water is lost. Some technical designs for infrastructure are expected to be launched in bidding process shortly, which will facilitate project execution.
- 2.15 Pilot projects will be conducted in four neighborhoods of Port-au-Prince consisting of a semi-collective network supplying water to a meter at the border of the informal settlements. The pilots will consider two management alternatives: (i) management of the network conducted by private operators; and/or (ii) management by water committees. Once completed, the project is expected to finance 400 condominiumal networks.
- 2.16 The pilot condominiumal sanitation project is considered a viable technical option where neither individual on-site systems nor centralized sewerage systems can fulfill the need of the population for basic sanitation. A marketing and communication



campaign will: (i) increase the demand for sanitation services based on the results of the sanitation research; (ii) increase the connectivity to the network; and (iii) improve hygiene behavior.

- 2.17 **Rural Areas.** Water systems will be constructed or rehabilitated in OREPA Ouest. In addition, in response to 2016 hurricane Matthew, the project will support the rehabilitation of damaged water systems and the restoration of access to water for households in the areas located in the south and Ile de la Gonave.
- 2.18 **Financial Viability.** An analysis of CTE-MRPP's financial statements for the last three years revealed a fragile financial situation. The utility faces significant challenges, including: (i) non-revenue water levels at 61%; and (ii) an insufficient number of active connections.
- 2.19 The monitoring of CTE-MRPP's financial situation going forward will be keyed to: (i) implementation of annual rate adjustments; (ii) payment of the debt and ability to control operating costs; and (iii) improvement of collection efficiency, specifically from state entities. CTE-MRPP has few options for improving its financial situation and salary control is essential in this regard (salaries represent 60% of total operating costs). The utility should also focus its efforts on: (i) reducing non-revenue water levels; (ii) proposing and implementing periodic rate adjustments; (iii) increasing collection efficiency; and (iv) controlling its operating costs (personnel and energy costs).
- 2.20 Based on projections, CTE-MRPP could strike a financial equilibrium in 2018, provided the following conditions are met: (i) external support for the operation and maintenance, in decreasing amounts over time; and (ii) new rate adjustments in 2018.
- 2.21 With respect to rural areas, the water systems require minimal operation and maintenance costs, which usually fluctuate between 3% to 7% of total investments (about US\$0.25 per month) for gravitational systems and can be higher in the case of water systems using pumping and for which energy costs can be significant. Tariffs can range from 20 to 50 gourdes and are sometimes even higher when water is provided through pumping. Gravity-fed systems and wells with hand pumps will be given priority.
- 2.22 **Institutional Viability.** Since it was created in 2009, DINEPA's capacity for execution has been considerably strengthened. DINEPA's investment portfolio has increased from US\$54 million in 2009 to US\$300 million in 2017. DINEPA's capacity for project management, for procurement and for supplier payment processing has improved. Since 2014, DINEPA began transferring some of its fiduciary functions to OREPAs ([OEL#4](#)). The execution modalities of this program are consistent with the institutional reform described in the Framework Law, stipulates the separation of the functions of regulation, planning and operations of the services by strengthening OREPAs competencies and modernizing the CTE-MRPP. The Bank, through the PBG, is supporting the reform process with the preparation and passing of key laws and measures to strengthen CTEs and OREPAs, such as the organic law, which will establish CTE-MRPP as a legal entity.
- 2.23 **Socioeconomic Viability.** A cost-benefit analysis of the MRPP project was performed. Benefits taken into account were cost of fetching water and making it

potable, and the willingness to pay to eliminate or reduce the shortages. These benefits also include economic and social cost generated by water borne diseases. This analysis shows that the program is economically feasible, showing an Economic Rate of Return (ERR) of 31.5% and an economic Net Present Value (NPV) of US\$100 million. The analysis was complemented by an appropriate sensitivity assessment ([OEL#2](#)).

- 2.24 A cost-benefit analysis was performed for a sample of rural projects included in the project to estimate a threshold value (cost per beneficiary). This value will determine if a new project is economically feasible (this component of the project is the kind of multiple works). Only the projects with an Internal Rate of Return (IRR) greater than 12% will be financed. From a sample, a threshold parameter (per capita cost of the actual benefited population) was deducted. Benefits taken into account included: (i) incremental benefits, which come from increases in water demand as families do not have to walk long distances to fetch water and can obtain it in the household or at a nearby fountains at a lower cost; and (ii) non-incremental benefits, which result from cost savings in obtaining the current volume of water consumed by each family. The threshold value is US\$262.6 or 17,241 Gourdes per person. Communities with projects with a per capita investment costs lower than this value will be eligible for financing.
- 2.25 **Climate Change Risk.** In response to climate risks, the operation will direct investments to reduce water loss and improve the use of existing and future water resources in Port-au-Prince, and to increase climate resilience in the rural areas ([OEL#13](#)).

### III. IMPLEMENTATION AND MANAGEMENT PLAN

#### A. Summary of Implementation Arrangements

- 3.1 The beneficiary of the project will be the Republic of Haiti and the EA will be DINEPA<sup>32</sup> through its CTE-MRPP and its OREPA Ouest. The procurement unit of the OREPA Ouest will perform the procurement activities of the project. The personnel assigned to the project will be staff members of the CTE-MRPP under the authority of its general manager. The Director of CTE-MRPP will be the project coordinator. The procurement and financial officers will work exclusively on project implementation. DINEPA has already transferred project authority to the OREPA Ouest and CTE-MRPP to expedite the administrative and procurement processes involved in implementing the projects currently under way (2351/GR-HA and 2946/GR-HA) and this third operation. DINEPA's rural department will implement the rural component of the project, as it has previously implemented rural projects HA-L1007 and HA-X1014 successfully. To ensure compliance with adequate budget and tariff level assigned to DINEPA and CTE-MRPP respectively, the conditions below will be stipulated.
- 3.2 To ensure proper coordination among DINEPA, OREPA Ouest and CTE-MRPP, DINEPA will supervise project execution while OREPA Ouest will oversee procurement processes and CTE-MRPP will manage project activities. CTE-MRPP will hold on a bi-monthly basis steering committee, with the participation of the

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<sup>32</sup> DINEPA is an autonomous entity overseen by the MTPTC.

procurement and financial officers, representatives of DINEPA and the Bank. Such coordination mechanism has been successful in the two previous operations.

- 3.3 **Special Contractual Conditions prior to the first disbursement.** The EA will provide evidence to the Bank's satisfaction of: (i) the entry into force of an agreement between the Ministry of Economy and Finance (MEF), the Ministry of Public Works, Transportation and Communication (MTPTC), and DINEPA, specifying DINEPA's obligations as the project's EA, and the coordination between the parties for the execution of project activities; (ii) the entry into force of the project's Operations Manual (OM) pursuant to terms previously agreed upon with the Bank, which will include procedures to ensure compliance with the Bank's environmental and social safeguards (§3.7); and (iii) DINEPA's approval of CTE-MRPP's new water rate structure with an increase by at least 8% starting on January 1st, 2018 and every calendar year during the project disbursement period to offset CTE-MRPP's operating costs increase.
- 3.4 Condition (i) is required to ensure the transfer of execution responsibilities and financing from the MEF to DINEPA. Condition (ii) is required to ensure that project execution procedures are followed by DINEPA, CTE-MRPP and OREPA Ouest. Condition (iii) is critical to ensure CTE-MRPP's financial sustainability.
- 3.5 **Procurement.** Goods, works and consulting services will be procured in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-9). All activities foreseen for this project will be included in the procurement plan, and will be executed in accordance with the bidding methods and terms established therein. The project procurement plan will be agreed upon by the EA and the Bank, and an updated version will be submitted every six months along with the semiannual project report, or as necessary or required by the Bank during the execution period.
- 3.6 **Project Financial Management** will follow the Financial Management Policy for IDB-Financed projects (OP-273-6). CTE-MRPP will prepare annual planning of project cash flows in accordance with Annual Operating Plan (AOP) which will be submitted to DINEPA for approval. Advance of funds methodology will be used for the disbursement of project funds based on activities derived from the annual operating plans for a period of four months. For each new advance, CTE-MRPP will need to justify 80% of advance received. Request for payments will be prepared by CTE-MRPP and sent to DINEPA for approval prior to submission to IDB for payment. Disbursement supervision will be ex ante during the first year. At the end of the first year of execution, the financial management execution capacity of CTE-MRPP will be reassessed to see if disbursement supervision should be ex post.
- 3.7 **Operating Manual.** The operation will be governed by the OM for the execution of the three Port-au-Prince water and sanitation projects, which shall set out the procedures to be followed by DINEPA, CTE-MRPP and OREPA Ouest regarding planning and reporting of activities, financial management, audits, procurement and contracting, and monitoring and evaluation. The OM shall include: (i) the role of each entity for the implementation of the project; (ii) a code of ethics section; (iii) an annex describing the procedure and timeframe for the approval process for procurement

contracts and disbursement requests for the Monitoring and Evaluation Plan ([REL#2](#)), for the management of inventory, particularly fuel and chlorine; and (iv) procedures and conditions of execution to ensure compliance with the Bank's environmental and social safeguards ([OM](#)).

- 3.8 **Audit.** DINEPA will be responsible for the recruitment of external auditors to perform the audit of the program as follows: (i) annual financial audit of the program to be submitted within 120 days after the closure of each fiscal year; (ii) a semi-annual ex post review of the procurement processes executed by OREPA Ouest to be submitted within 60 days after the closure on the first semester of each fiscal year; (iii) a final financial audit to be submitted within 120 days after the date of the last disbursement; (iv) during the first year of execution, the program will also submit semi-annual unaudited financial reports 60 days after the end of each semester of each fiscal year. For the following years, the frequency for the submission of unaudited reports will be based on risk evaluation updates determined during supervision missions. Audits of the program will be financed by project funds; and (v) an annual financial audit of CTE-MRPP will be required and will be submitted within 180 days after the closure of each fiscal year to be financed with CTE-MRPP funds. The latter will be responsible for the hiring of the audit firm.

## **B. Summary of Arrangements for Monitoring Results**

- 3.9 **Monitoring and Evaluation.** The project will be monitored using the Bank's supervision instruments, based on the annual work plan, the multiyear execution plan, the procurement plan, and the results matrix data development and collection plan, prepared by the EA and accepted by the Bank. In addition, two independent evaluations will be performed: (i) the first, 18 months after disbursement eligibility, or when 20% of the proceeds have been disbursed, whichever occurs first; and (ii) the final evaluation, when 80% of the proceeds have been disbursed. The final evaluation will include an ex post socioeconomic assessment, the elements of which are set out in the Monitoring and Evaluation Plan ([REL#2](#)).
- 3.10 For purposes of project monitoring, the EA will submit semi-annual progress reports, which will be used as the basis for the Project Monitoring Reports (PMRs) and the Project Completion Report (PCR). Achievement of project objectives will be reviewed annually, problems that arose during execution will be examined, and pertinent adjustments will be agreed upon jointly. Semi-annual reports will reflect program indicators and will include: (i) a description of, and general information on, the activities implemented, including fulfillment of the contractual conditions agreed upon in the grant funding contract; (ii) progress achieved with respect to the results matrix indicators; (iii) a summary of the program's financial situation; (iv) the estimated cash flow for the next six-month period; (v) in the annual year-end reports, the updated annual work plan and procurement plan; (vi) analysis of the problems encountered and corrective measures adopted; and (vii) issues that could jeopardize the timely execution of the project.

Development Effectiveness Matrix		
Summary		
<b>I. Corporate and Country Priorities</b>		
<b>1. IDB Development Objectives</b>	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Gender Equality and Diversity -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law	
Country Development Results Indicators	-Property value within project area of influence (% change)* -Households with new or upgraded access to drinking water (#)* -Households with new or upgraded access to sanitation (#)*	
<b>2. Country Development Objectives</b>	Yes	
Country Strategy Results Matrix	GN-2646	i) Improve coverage and management of water and sanitation services in urban areas, and ii) Improve the coverage of water and sanitation services in rural areas.
Country Program Results Matrix	GN-2884	The intervention is included in the 2017 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
<b>II. Development Outcomes - Evaluability</b>	Evaluable	
<b>3. Evidence-based Assessment &amp; Solution</b>	10.0	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	4.0	
3.3 Results Matrix Quality	3.0	
<b>4. Ex ante Economic Analysis</b>	10.0	
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0	
4.2 Identified and Quantified Benefits	1.5	
4.3 Identified and Quantified Costs	1.5	
4.4 Reasonable Assumptions	1.5	
4.5 Sensitivity Analysis	1.5	
<b>5. Monitoring and Evaluation</b>	6.6	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	4.1	
<b>III. Risks &amp; Mitigation Monitoring Matrix</b>		
Overall risks rate = magnitude of risks*likelihood	Medium	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation	Yes	
Environmental & social risk classification	B	
<b>IV. IDB's Role - Additionality</b>		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)		
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Gender Equality		
Labor	Yes	It is estimated that the water works construction will generate about 600 short-term jobs, and the maintenance and operation of the condominal networks and the water kiosks will create around 400 long-term jobs.
Environment		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Support was provided for the establishment of a three-year Operational Technical Assistance (OTA) contract with the international water operator Agbar-Lyonnaise des Eaux-United Water in 2011, to support CTE-MRPP with its reorganization, staff training and identification of priority water works. That contract was renewed in 2014 for three additional years and mainly focuses on the improvement of water production and distribution and increase in the utility's revenues.
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan		

Note: (\*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

Using global figures and specific local surveys, the program presents a good overall assessment of the problem of access to drinking water, service quality and basic sanitation in the rural areas of the intervention and the Metropolitan Region of Port-au-Prince (MRPP). The evidence of effectiveness for the proposed actions is well documented and justified. However, it should be noted that for some interventions the program will implement pilot projects with the objective of evaluating the effectiveness of the solutions in the local context, prior to a potential expansion.

Since Component IV of the program (Investments in Rural Water Works) has a Multiple Works modality, not all direct beneficiaries are clearly identified; however, the program has defined the criteria for project prioritization.

The program has a clear vertical logic that is reflected in the results matrix. The quality of the results matrix is adequate and includes outcome and output indicators that meet the SMART criteria. However, while the program mentions that its general objective is to improve the quality of life and sanitary conditions of the population, the results matrix does not include final development indicators in these areas, due to the lack of information.

The monitoring and evaluation plan includes a monitoring scheme based on standard instruments. For the effectiveness evaluation, the plan includes an ex-post socioeconomic evaluation, which will report on the achievement of several expected results (coverage, quality, etc.). Since an impact evaluation will not be available for the expected results, the attribution analysis will be based on the program's theory of change.

RESULTS MATRIX										
<b>Project objective</b>	The specific objectives of this third project are to: (i) improve water and sanitation coverage, quality of service, and hygiene practices in Port-au-Prince; (ii) improve water coverage and hygiene in rural areas affected by Hurricane Matthew and in OREPA Ouest; (iii) improve the financial sustainability of CTE-MRPP; and (iv) achieve an effective regulation of the sector by DINEPA and the deconcentration of the OREPA Ouest.									
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/ Means of verification
<b>Outcome 1: DINEPA effectively implements regulation at the level of DINEPA CENTRAL and deconcentration at the level of OREPA OUEST</b>										
Number of DINEPA entities effectively operating in accordance with the institutional framework for regulation and planning	Regulated entity	0	2017	0	0	3	8	10		Includes the following entities: DINEPA Central (1), OREPA OUEST (1), URD OUEST (2), and CTEs (6). DINEPA's annual management report will be the means of verification.
<b>Outcome 2: CTE-MRPP improves its financial sustainability</b>										
Number of employees per 1,000 connections	Number of employees	12	2016	12	10.5	9	7.5	6	<b>6</b>	CTE-MRPP monthly reports.
Sustainable water production by CTE-MRPP	m <sup>3</sup> /day	103,000	2016	111,500	162,000	169,000	183,000	183,000	<b>183,000</b>	The indicator includes the improved capacity of CTE-MRPP to operate supply sources sustainably. Monthly reports by the CTE-MRPP operations department. DINEPA evaluation reports.
<b>Outcome 2: CTE-MRPP improves its financial sustainability</b>										
CTE-MRPP operating ratio (ratio of annual operating revenue to annual operating expenditure)	Ratio	0.67	2016	0.9	1.07	1.22	1.32	1.41	<b>1.41</b>	CTE-MRPP financial management reports. DINEPA evaluation reports.
Percentage of households with an improved water source in the MRPP	%	44%	2016	45%	47%	50%	55%	60%	<b>60%</b>	Survey of households and beginning and ending water distribution points. Definition of improved access according to the JMP (household connections shared or not, kiosks, improved wells, rainwater, or improved collection methods).

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/ Means of verification
<b>Outcome 3: Household access to water and sanitation services, quality of the water service, and hygiene practices have improved in the MRPP</b>										
Number of new households with a network water connection in their homes in the MRPP	Households	92,000	2016	100,000	120,000	130,000	160,000	212,000	<b>212,000</b>	Survey of households and beginning and ending water distribution points. Includes households supplied from connections shared or not, and condominal systems in households or on lots. Does not include households supplied from a neighbor. An average of two households per connection has been applied, as well as the condominal connections (400), regularizations (16,000), and 5,000 additional connections from the Port-au-Prince program II.
Percentage of new households receiving drinking water from kiosks in the MRPP	Households	0	2016	5%	5%	6%	7%	7%	<b>7%</b>	Annual surveys of water distribution points. CTE-MRPP monthly reports. The calculations are based on 150 households per kiosk. The total number of new households would be 14,250.
Number of hours per day that the households are supplied from a CTE-MRPP connection.	Hours/day	3.3	2016	4	6	9	12	12	<b>12</b>	Beginning and ending project surveys. Monthly reports by the CTE-MRPP operations department.
% of women working in new or rehabilitated kiosks in the Carrefour and Centre Ville area	%	13%	2016	15%	18%	23%	27%	35%	<b>20%</b>	Management reports on disadvantaged neighborhoods in the CTE-MRPP. Annual surveys of water distribution points.
% households with handwashing facilities including soap in Carrefour and Centre Ville	%	5%	2016	5%	5%	35%	30%	25%	<b>25%</b>	Initial, midterm, and final surveys of households and water distribution points. The campaign will take place in the third year of the program. The persistence of the change in behavior will be measured two years after the campaign. The calculation considered similar campaigns in other countries.



Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/ Means of verification
% of women using hygienic supplies during menstruation in Carrefour and Centre Ville	%	75%	2016	75%	75%	90%	88%	85%	<b>85%</b>	Initial, midterm, and final surveys of households and water distribution points. The campaign will take place in the third year of the program. The persistence of the change in behavior will be measured two years after the campaign. The calculation considered similar campaigns in other countries.
<b>Outcome 4. Access to water and sanitation and hygiene services in rural areas of OREPA Ouest and areas affected by Hurricane Matthew has improved</b>										
Number of households with an improved water supply in OREPA OUEST	Households	0	2016	0	1,000	2,000	3,000	4,000	<b>8,000</b>	Survey of households and beginning and ending water distribution points. Administrative data for intermediate years.
Number of new households with access to sanitation and improved hygiene practices	Households	0	2016	0	1,000	2,000	3,000	4,000	<b>8,000</b>	Survey of households and beginning and ending water distribution points. Administrative data for intermediate years.
Number of households supplied from an improved water source in systems affected by Hurricane Matthew	Households	0	2016	0	4,000	4,000	8,000	0	<b>16,000</b>	Survey of households and beginning and ending water distribution points. Administrative data for intermediate years.



Output	Unit of measure	Associated outcomes	Cost	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/ Means of verification
Component I. Institutional strengthening of CTE-MRPP OREPA Ouest and DINEPA										
Number of consulting engagements for results-based external support of CTE-MRPP management	Unit	R1+R2+ R3+R4	10,000,000	1	0	0	0	0	1	Quarterly reports based on a results framework. The support will be provided under a PPP.
Number of consulting engagements to support the effective establishment of DINEPA as a regulatory entity	Unit	R1+R2+ R3+R4	1,000,000	2	3	0	0	0	5	Quarterly reports based on a results framework. Support will include contracting individual consultants as technical assistance.
Number of consulting engagements to support the establishment of OREPA OUEST as a regulatory entity.	Unit	R1+R2+ R3+R4	800,000	2	2	0	0	0	4	Quarterly reports based on a results framework. Support will include contracting individual consultants as technical assistance.
Rural monitoring and planning tool implemented in OREPA OUEST	Unit	R1+R2+ R3+R4	200,000	0	1	0	0	0	1	Approval of complete survey of water distribution points and sanitation coverage in OREPA OUEST. Approval of the planning tool.
Inclusive gender policy implemented and published by CTE-MRPP to increase the number of women taking part in decision-making	Unit	R1+R2+ R3+R4	See comment	0	0	0	1	0	1	Costs included in results-based external support for management. Publication of the policy by CTE-MRPP.
			12,000,000							
Component II. Support to operation and maintenance										
Agreements on subsidies to CTE for EdH charges	Agreement s	R2+R3	1,200,000	1	1	0	0	0	2	Bank transfers + payment receipts.
Signed fuel supply contracts	Contracts	R2+R3	1,300,000	1	1	0	0	0	2	Certificates of receipt and payment receipts.
			2,500,000							
Component III: Investments in urban potable water and sanitation and works										
Meters of network built to improve and expand water distribution in the Carrefour and Centre Ville, Cité Soleil, and Vivy Michell areas	m	R2+R3	21,900,000	5,400	42,000	67,000	20,000	0	134,400	Supervision costs included. Certificates of receipt of works with valuations. Supervision reports.
Rehabilitation of the Bolosse reservoir and construction of the Mariani and R236 reservoirs	Reservoir	R2+R3	5,300,000	0	0	3	0	0	3	Supervision costs included. Certificates of receipt of works with valuations.

Output	Unit of measure	Associated outcomes	Cost	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/ Means of verification
Meters of Duvivier well discharge pipe replaced	m	R2+R3	2,300,000	700	3,100	0	0	0	<b>3,800</b>	Supervision costs included. Certificates of material delivery. Certificate of receipt of works.
New household connections subsidized in the project area.	Connection	R2+R3	4,200,000	4,000	4,000	7,000	11,000	7,000	<b>33,000</b>	The cost to the user of the subsidized connections is US\$16. Certificates of receipt of works plus work orders executed.
Number of meters installed on existing connections in the MRPP.	Meter	R2+R3	200,000	0	0	1,000	2,000	1,000	<b>4,000</b>	Certificates of receipt of works plus work orders executed.
New or rehabilitated kiosks in the project area.	Kiosk	R2+R3	800,000	0	30	40	25	0	<b>95</b>	Supervision costs included. Certificates of receipt of works plus work orders executed.
Communications and marketing campaign to improve water network connectivity and hygiene in the project area.	Contract	R2+R3	500,000	0	0	1	0	0	<b>1</b>	The survey includes gender-specific indicators. Final contract report and project evaluation and monitoring reports.
Communication and marketing campaign to improve menstrual hygiene in the project area.	Contract	R2+R3	100,000	0	0	1	0	0	<b>1</b>	The survey includes gender-specific indicators. Final contract report and project evaluation and monitoring reports.
Final report prepared on technical, social, and operational assistance for implementation of condominal supply and semicollective network sanitation projects in the MRPP.	Final report	R2+R3	900,000	0	1	0	0	0	<b>1</b>	Final report.
Number of mini condominal water networks built.	Mini condominal network (30 homes)	R2+R3	1,600,000	0	20	100	140	140	<b>400</b>	The average number of households supplied by each condominal network is considered to be 30.
Number of semicollective sanitation projects built.	Mini semi-collective network (30 households)	R2+R3	300,000	0	5	5	5	0	<b>15</b>	Certificates of receipt of works plus work orders executed. The average number of households for each mini network is considered to be 30.
Final designs for drinking water projects for the MRPP prepared.	Unit	R2+R3	1,400,000	0	1	1	1	2	<b>5</b>	Initial, midterm, and final reports on the designs
			<b>39,500,000</b>							

Output	Unit of measure	Associated outcomes	Cost	Year 1	Year 2	Year 3	Year 4	Year 5	End of project	Comments/ Means of verification
<b>Component IV: Investments in rural water works</b>										
Number of sanitation and hygiene campaigns implemented in four communities of OREPA OUEST	Campaigns	R4	500,000	0	1	0	0	0	1	According to the DINEPA's national sanitation strategy. According to the planning for OREPA OUEST.
Number of drinking water supply systems affected by Hurricane Matthew rehabilitated	Systems	R4	3,000,000	0	6	9	5	0	20	Supervision costs included. Certificates of receipt of works plus work orders executed.
Number of drinking water systems (including water distribution points) built in OREPA OUEST	Systems	R4	3,500,000	0	2	4	2	0	8	Supervision costs included. Certificates of receipt of works plus work orders executed.
			<b>7,000,000</b>							

## FIDUCIARY ARRANGEMENTS

**COUNTRY:** Republic of Haiti  
**PROJECT NUMBER:** HA-L1103  
**NAME:** Port-au-Prince Water and Sanitation Project III  
**EXECUTING AGENCY (EA):** *Direction Nationale de l'Eau Potable et de l'Assainissement*  
**FIDUCIARY TEAM:** Marise E. Salnave and Romina Kirkagacli

### I. EXECUTIVE SUMMARY

- 1.1 Since 2010, the Bank has been promoting water and sanitation investments<sup>1</sup>. This third operation in the amount of US\$65 million from the IDB Grant Facility has the following objectives: (i) increase water coverage and quality of service in Port-au-Prince; (ii) improve access to water in rural areas; (iii) continue improving the financial sustainability of the Metropolitan area of Port-au-Prince water utility (CTE-MRPP); and (iv) achieve an effective regulation of the sector by the National Directorate for Water and Sanitation (DINEPA). DINEPA will be responsible for the implementation of the project with the support of CTE-MRPP, which will ensure the financial management of the project. The procurement unit of the *Office Régional d'Eau Potable et d'Assainissement* (OREPA-Ouest) will perform the procurement activities of the project.
- 1.2 The latest evaluation of the public financial management systems of the Republic of Haiti is included in the Public Expenditure and Financial Accountability (PEFA) assessment report conducted in 2011 and published in February 2012. The Government of Haiti has shown continued commitment in improving the country system and has adopted in May 2014 Public Financial Management reform strategy including an action plan 2014-2016 to consolidate basic public financial management functions focus on: (a) continuing the implementation of a Single Treasury Account (STA) with the support of the IMF; (b) reaffirming the role of public accountants in the monitoring of expenses in all line ministries; and (c) improving the monitoring of public debt. Despite these measures, the country financial management systems and external control mechanism require further improvements to conform to levels consistent with their utilization for the fiduciary management of Bank's funded projects. As a result, no country systems will be used for the financial management of the project. An evaluation of the National Procurement System was performed in 2013, applying the methodology established by the Organization for Economic Co-operation and Development (OECD/DAC). Recommendations were identified for the modernization of the national procurement system. Based on the current situation and the need to align the national system to international standards and best practices, the Bank's procurement policies will govern procurement activities foreseen under this project. Therefore, to mitigate these risks, the Bank will continue to: (i) rely on special project execution units for the execution of all projects while at the same time developing institutional strengthening; and (ii) implement special fiduciary arrangements for the execution of its projects and conduct close operation

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<sup>1</sup> Since 2010, the Bank has been promoting water and sanitation investments. with the execution of projects 2351/GR-HA and 2946/GR-HA in the amount of US\$50 million and US\$35.5 million respectively.

supervision of project execution units. External control will be performed for all Bank operations by independent audit firms acceptable to the Bank.

## **II. EXECUTING AGENCY'S FIDUCIARY CONTEXT**

- 2.1 As is the case for the two previous projects, DINEPA will be responsible for the implementation and the overall administration of the project, including: planning and reporting of technical and fiduciary aspects; financial and accounting management; execution of procurement activities; supervision of firms and service providers; monitoring and evaluation; and compliance with grant agreement's contractual conditions.
- 2.2 The CTE-MRPP is placed under the supervision of DINEPA and will be closely involved in the financial management and execution of this new project. Currently all payments for operational expenses under US\$5,000 for operations 2351/GR-HA and GRT/WS-12277-HA, are executed directly by CTE-MRPP for a total amount of US\$524,570 as of September 30, 2015. CTE-MRPP is also responsible for the preparation of financial reports and disbursement requests for both operations, which are approved by DINEPA prior to submission to the Bank. Clean audit opinions were provided by auditors for projects 2351/GR-HA and 12277/GR-HA and 2946/GR-HA for fiscal year ending September 30, 2016. The current memorandum of understanding signed between DINEPA, OREPA-Ouest and CTE-MRPP is currently being revised to increase the value amount of expenses that can be executed directly by the CTE-MRPP.
- 2.3 DINEPA and the Bank agreed to decentralize the procurement function to the OREPA Ouest to allow DINEPA to focus on regulatory matters. The OREPA-Ouest was designated as pilot in late 2014 to execute all procurement activities of projects 2351/GR-HA and 2946/GR-HA. A procurement specialist from central DINEPA was seconded to the OREPA to handle all procurement activities in liaison with the central procurement unit. Following the success of this pilot, a mechanism of delegation of authority was established through the present operation, to streamline procurement execution.

### **A. Fiduciary Risk Evaluation and Mitigation Actions**

- 2.4 According to the latest institutional assessment of DINEPA performed in March 2016, the fiduciary risk for financial management continues to be evaluated as medium risk as new installed accounting system is not being used for the preparation of financial reports and due to delays in the reporting of transaction. Delays are mainly due to limited number of accountants despite the increase in the number of projects managed by DINEPA. In addition, strengthening measures are also needed in the management of assets and inventory, which continue to be done via an Excel spreadsheet. To mitigate those risks DINEPA should consider including in their payment request forms the accounting codes to facilitate the processing of transactions, provide additional training to its staff in the use of the new software, implement an inventory module for the monitoring of inventory and finalize the preparation of procedure manuals. The recruitment of one accountant is recommended given the increase in work load.

- 2.5 The Bank performed an assessment of CTE-MRPP in March 2016, which revealed significant improvement in risk rating since last review performed in 2013 due to the hiring of key personnel in the “*Direction Administrative and Financière*”, the strengthening of the internal control unit, the implementation of accounting system for the management of project and the training of personnel in IDB financial management procedures. The medium Risk rating would be further improved with the installation of the ACCPAC accounting system at CTE-MRPP, which would reduce the delays in the processing and reporting of transactions, the formatting of accounting software to allow the preparation of financial reports, the inclusion of project budget in the accounting system to allow the monitoring of budget execution and the continued strengthening of its Internal Control Unit.
- 2.6 The Procurement capacity of central DINEPA was evaluated through the Technical Cooperation executed between 2014 and 2015 (ATN/FC-14198-HA). Based on this evaluation and the Bank’s supervision, the risk level of this operation is rated as medium. However, given that OREPA-Ouest will be executing procurement activities through a mechanism of delegation of authority up to defined threshold, special mitigation measures will include: (i) the approval process applicable to all procurement activities conducted in the OREPA by central DINEPA will have to be clearly described with established thresholds for delegation of authority. A procedure manual describing the functioning of the decentralized structures should be adopted and agreed between the Bank and DINEPA’s senior management. The role and responsibilities of the procurement team in OREPA-Ouest shall be clearly defined as well as the applicable supervision lines; (ii) in order to absorb the workload of this new operation without jeopardizing the quality of the procurement activities, it is recommended that OREPA-Ouest hires an additional staff, who will be supporting the procurement specialist in all administrative matters and the organization of the filing system; and (iii) with the decentralized structure and delegation of authority, it is essential that all files related to procurement activities conducted at the level of the OREPA be available at all times. The procurement team at OREPA is currently working on the establishment of a paper and electronic filing system to be completed and organized by commencement of project execution.

### **III. ASPECTS TO BE CONSIDERED IN THE SPECIAL CONDITIONS OF CONTRACT**

- 3.1 **The following elements will be treated as conditions to first disbursement:** (i) the entry into force of an agreement governing the roles and responsibilities of DINEPA, OREPA-Ouest and CTE-MRPP for the execution of the project; (ii) DINEPA’s approval of a Procurement Procedure Manual establishing procurement processes and authorities for the execution of the project’s procurement activities; and (iii) CTE-MRPP’s installation of the accounting system currently in place at DINEPA to manage Bank projects.
- 3.2 These conditions are justified since CTE-MRPP and OREPA will have additional responsibilities in the execution of the project.
- 3.3 **Special accounts and authorized signatures:** DINEPA and CTE-MRPP will open two bank accounts (in dollars and in local currency) at the Central Bank of Haiti for the management of grant resources. CTE-MRPP will also have to prepare a chart of accounts for the project.

- 3.4 **Audit Special Requirements:** DINEPA will be responsible for the recruitment of external auditors eligible to the Bank to perform the audit of the program as follows: (i) annual financial audit of the program to be submitted within 120 days after the closure of each fiscal year; (ii) a semi-annual ex post review of the procurement processes executed by DINEPA and OREPA-Ouest to be submitted within 60 days after the closure the first semester of each fiscal year; (iii) a final financial audit to be submitted within 120 days after the date of the last disbursement; (iv) during the first year of execution, the program will also submit semi-annual unaudited financial reports 60 days after the end of each semester of each fiscal year. For the following years, the frequency for the submission of unaudited report will be based on risk evaluation updates determined during supervision missions. Audits of the program will be financed by project funds; and (v) an annual financial audit of CTE-MRPP will be submitted within 180 days after the closure of each fiscal year to be contracted and financed by CTE-MRPP funds.

#### IV. FIDUCIARY ARRANGEMENTS FOR PROCUREMENT EXECUTION

- 4.1 **Procurement Execution.** The procurement plan covering the entire duration of the project will be agreed between DINEPA and the Bank. It will be updated semiannually or whenever necessary or as required by the Bank's policies.
- 4.2 Procurement for the proposed project will be carried out in accordance with the Policies for the Procurement of Works and Goods financed by the Bank (GN-2349-9) of March 2011; and the Policies for the Selection and Contracting of Consultants financed by the Bank (GN-2350-9), of March 2011.
- 4.3 **Procurement of Works, Goods and Non-Consulting Services:** the contracts for works, goods, and non-consulting services<sup>2</sup> generated under the project and subject to International Competitive Bidding will be executed through the use of the Standard Bidding Documents (SBDs) issued by the Bank. The processes subject to National Competitive Bidding (NCB) will be executed through the use of National Bidding Documents agreed to by the Bank. The technical specifications review during the preparation of the selection process, is the responsibility of the project sector specialist.
- 4.4 **Community Participation in Procurement:** for improving the management of water kiosks in the poor urban settlements in the project area, an NGO will be contracted through a competitive process.
- 4.5 **Selection and Contracting of Consultants:** the consulting services contracts generated under this project will be executed through the use of the Standard Request for Proposals (SRFPs) issued or agreed to by the Bank. The terms of reference review for the selection of consulting services is the responsibility of the project sector specialist.
- 4.6 **Direct Contracting:** The Firm SAFEGE will be contracted for the supervision of the works for the Bolosse Mariani and R236 reservoir and water distribution works in

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<sup>2</sup> Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank ([GN-2349-9](#)) paragraph 1.1: The services different from consulting services have a similar process as procurement of Goods.

Carrefour and Cité Soleil. This direct contracting is justified (d) given the firm's experience of exceptional worth for the assignment. This firm was in charge of the final designs of the works and therefore demonstrates an in-depth knowledge of the project. The services performed were satisfactory to DINEPA and the firms' knowledge of the project and expertise constitute a crucial factor for the execution of these works.

- 4.7 **Recurrent Expenses:** based on CTE MRPP's business plan, which was recently updated, the operator still requires financial support on recurrent expenses associated with the purchase of fuel, chlorine as well as the provision of electricity. It is expected that this financial support will be required up to 2018, until a financial balance is reached. Framework contracts will be established for these recurrent expenses, as previously done under the operation 2946/GR-HA, which will continue covering these costs, along with the current operation. These procurement processes will be carried out following the administrative procedures of the Executing Agency, which have been revised and accepted by the Bank.

**ICB and Consulting Services International Short List Thresholds (miles US\$)**

Haiti – Limit amounts (in thousands of US\$)							
Works			Goods			Consulting	
ICB	NCB	PC	ICB	NCB	PC	International	100% National
≥1,000	100<1,000	<100	≥100	25<100	<25	>100	<100

- 4.8 **Procurement Supervision:** the procurement supervision method will be determined by the Bank for each selection process<sup>3</sup> in the Procurement Plan. For the time being, most of the activities will be supervised on an ex ante basis. Inspection visits will be conducted by the Bank on a quarterly basis and according to the supervision plan of the project. Based on the findings of these visits, some of the activities might be considered for ex-post supervision.

<sup>3</sup> The responsibility, the review support and the methodology are described in the Document Procurement Ex Post.



### Main Procurement Activities

Activity	Procurement Method	Estimated Date	Estimated Amount US\$
<b>Goods</b>			
Equipment for the installation of household water connections	International Competitive Bidding by Lots	October 2017	3,000,000
<b>Works</b>			
Piping for the expansion of water distribution in Carrefour and Centre Ville	International Competitive Bidding by Lots	October 2017	7,700,000
Expansion of the water distribution network in Carrefour (first phase)	International Competitive Bidding by Lots	October 2017	3,000,000
Expansion of the water distribution network in Carrefour (second phase)	International Competitive Bidding lots	April 2018	2,820,000
Expansion of the water distribution network from R120	International Competitive Bidding by Lots	November 2017	5,540,000
Rehabilitation of the Bolosse water reservoir	International Competitive Bidding by Lots	November 2017	1,230,000
Interconnection line for the new wells in Cite Soleil	International Competitive Bidding by Lots	October 2017	2,300,000
<b>Firms Services</b>			
External support for the management of CTE-MRPP pursuant to performance-based contract.	Quality and Cost based selection	October 2017	12,000,000
Supervision of Works for the Bolosse reservoir, Mariani and R236, pipes for the improvement of water distribution in Carrefour, interconnection of wells in Cite Soleil. Support to constitution of a supervision unit at DINEPA	Single Source Selection	November 2017	860,000
Technical, social and operational assistance for the implementation of condominial projects and semi-collective sanitation networks in RMPP.	Quality and Cost Based Selection	September 2017	900,000

\*To access Procurement Plan, click [here](#)

- 4.9 Records and files of the project will be kept at the office of OREPA-Ouest. OREPA-Ouest cannot currently count on an organized filing system. The team is currently working on the organization of its paper and electronic filing system, which is expected to be in place before initiation of project execution. The Bank's procurement team will closely supervise this activity in the context of the supervision of the projects that are currently under execution.

## V. FIDUCIARY ARRANGEMENTS FOR FINANCIAL MANAGEMENT

### A. Programming and Budget

- 5.1 CTE-MRPP will prepare annually, an Annual Operation Plan (AOP), a procurement plan and a twelve-month detailed financial plan to be approved by DINEPA. The financial plan will respect the budget lines defined in the grant agreement. The execution of the project's financial plans will be evaluated every four months. Financial Management arrangement can be reevaluated subject to performance.

## **B. Accounting and Information Systems**

- 5.2 Turbo system will be used for the management of CTE-MRPP funds. The ACCPAC software will be used for the management of project resources which is the same system used by DINEPA and which is currently being used for the financial reporting of the two projects in execution. We recommend that CTE-MRPP inquiries regarding an interface between the two software to transfer project information into the general accounting of CTE-MRPP for consolidated purposes. The software should be installed at CTE-MRPP to allow the timely processing of transactions and the preparation of financial reports.

## **C. Disbursements and Funds Flows**

- 5.3 Project financial management will be executed according to OP-273-6. CTE-MRPP will prepare annual project cash flows in accordance with AOP to be approved by DINEPA. Advance of funds methodology will be used for the disbursement of project funds based on activities derived from the AOPs for period of four months. For each new advance, CTE-MRPP will need to justify 80% of advance received. Request for payments will be prepared by CTE-MRPP and sent to DINEPA for approval prior to submission to IDB for payment. Disbursement supervision will be ex-ante during the first year. At the end of the first year of execution, the financial management execution capacity of CTE-MRPP will be reassessed to see if disbursement supervision should be ex post. CTE-MRPP resources will be used to finance recurrent operating costs mainly payroll of its personnel. IDB resources will cover operation and maintenance costs such as energy costs (electricity and fuel), water treatment chemicals (chlorine) as well as maintenance of repair equipment. The Central Bank exchange rate valid on the day of transaction will be used to record all expenses made in local currency.

## **D. Internal Control and Audit**

- 5.4 The internal control environment of DINEPA will be strengthened with the continuing implementation of the ACCPAC accounting system for the preparation of financial reports and the monitoring of budget execution. DINEPA should complete the implementation of the inventory module and finalize the preparation of procedure manuals including those for budget execution, petit cash and the management inventory.
- 5.5 The internal control unit of CTE-MRPP has been reinforced since last assessment with additional personnel and a technical assistance for a period of 12 months ending in July 2016. The internal control environment could be improved through the development of a procedure manual including a check list for execution and documenting the review of the different internal control processes.

## **E. External Control and Reporting**

- 5.6 Audits of financial statements of the project will be performed in accordance with International Audit Standards and Bank's Guidelines for Financial Reports and External Audits and will be financed by IDB grant and estimated at US\$375,000. The project financial statements will correspond to the Haitian fiscal year.

The audit firm will carry out the audit of the project based on specific terms of reference to be agreed between the DINEPA and the Bank.

**F. Financial Supervision Plan**

- 5.7 During the first year of execution, fiduciary staff will review the execution of financial plan every four months. For the following years, the frequency of visits is subject to change based on findings raised during supervision missions.

**G. Execution Mechanism**

- 5.8 The CTE-MRPP will be responsible for the preparation of financial reports and disbursement requests to be approved by DINEPA prior to submission to the Bank. The disbursement methodology will be executed as stated in section 5.3 above. **The amount and the nature of expenses to be purchased and paid directly by CTE-MRPP are currently being reviewed by DINEPA and will be included in the agreement to be signed by DINEPA, OREPA-Ouest and CTE-MRPP as a condition prior to first disbursement.**

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/17

Haiti. Nonreimbursable Financing \_\_\_/GR-HA to the Republic of Haiti  
Port-au-Prince Water and Sanitation Project III

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as Administrator of the IDB Grant Facility (hereinafter referred to as the "Account"), to enter into such contract or contracts as may be necessary with the Republic of Haiti, as Beneficiary, for the purpose of granting it a nonreimbursable financing to cooperate in the execution of the Port-au-Prince Water and Sanitation Project III. Such nonreimbursable financing will be for an amount of up to US\$65,000,000, which form part of the Account, and will be subject to the Terms and Financial Conditions and the Special Contractual Conditions in the Project Summary of the Grant Proposal.

(Adopted on \_\_ \_\_\_\_\_ 2017)