

PROJECT INFORMATION DOCUMENT (PID) CONCEPT STAGE

Report No.: PIDC25383

Project Name	Panama Oeste Wastewater Management Project (P154275)
Region	LATIN AMERICA AND CARIBBEAN
Country	Panama
Sector(s)	Sanitation (20%), Wastewater Collection and Transportation (60%), General water, sanitation and flood protection sector (20%)
Theme(s)	Pollution management and environmental health (100%)
Lending Instrument	Investment Project Financing
Project ID	P154275
Borrower(s)	Ministry of Finance
Implementing Agency	Ministry of Health
Environmental Category	B-Partial Assessment
Date PID Prepared/ Updated	15-May-2015
Date PID Approved/ Disclosed	18-May-2015
Estimated Date of Appraisal Completion	21-Dec-2015
Estimated Date of Board Approval	12-Feb-2016
Concept Review Decision	Track II - The review did authorize the preparation to continue

I. Introduction and Context

Country Context

1. Panama's extraordinary economic growth over the last decade has made headlines in Latin America. The small country of approximately 3.6 million citizens averaged 7.6 percent real GDP growth between 2001 and 2013, and growth is expected to maintain a rate of six percent over the coming years. Main propellers of the economy include the Panama Canal, which was handed over from the United States to Panama in 1999, and high rates of public and private investment in the country. The population at the bottom 40 percent of the country's economic scale has benefited from the economic boom – their incomes rose by 8.2 percent per year from 2007 to 2012 – but significant economic inequality persists (Panama has a Gini of 0.52). In addition to economic inequality, the bottom 40 percent suffers disproportionately from poor infrastructure and weak service provision.

2. These disparities are increasingly visible in the urban metropolis of Panama City, the

economic engine of the country and home to 43 percent of the population. The economic boom, which has been largely concentrated in Panama City, has attracted both foreign and local migration, leading to an overall increase in real estate prices in the city center. As a result, many of the urban poor have been pushed to areas around the periphery of the City. One area that has seen exceptional population growth as a result of this phenomenon is the Province of Panama Oeste, which sits just west of Panama City. Panama Oeste's District of Arraijan has registered 17 percent annual population growth rates in some areas. This rapid urban growth, however, has not been accompanied by solid urban planning and many residents do not have adequate access to basic services such as water supply and sanitation (WSS). The lack of quality WSS services poses risks to public health and the environmental sustainability of rivers and the Panama Bay that are contaminated with the Province's untreated sewage.

Sectoral and Institutional Context

3. The Government of Panama (GoP) has been focusing on closing the country's inequality gap and increasing shared prosperity through improving provision of basic services and extending basic infrastructure. The current administration, which took office in July 2014, has made Plan de Sanidad Basica 100/Cero, a program that aims to achieve 100 percent, 24-hour-a-day access to potable water and to eliminate the use of dry-pit latrines, its flagship project. The Plan is a key component of the GoP's Social Inclusion Strategy to revamp marginalized cities, such as Colon Chorrera, San Miguelito, and Arraijan, and is well aligned with the World Bank's Twin Goals. Approximately 94 percent of Panamanians have access to running water in their households and 72 percent have access to sanitation. However, only 33 percent of Panamanians are connected to a sewerage network and only a small percentage of carried wastewater is treated. The Panama Bay and City Sanitation Project (PBCSP), which began in 2001 with the goal of improving sanitary conditions in low-income urban communities and cleaning Panama Bay through extending sewerage networks and constructing a conveyance system and wastewater treatment plants (WWTP), directly supports 100/Cero. The GoP has committed itself to continuing the PBCSP in Panama City and extending the PBCSP to Panama Oeste's fast-growing districts of Arraijan and La Chorrera (see Figure 1 for a map of the area).

4. Panama Oeste is mostly urban (about 372,500 urban residents or 80 percent of its total population) and has a relatively high rate of water supply coverage (about 81 percent). Nevertheless, only 24 percent of Panama Oeste's population is connected to a sewerage system, and many of the sewerage systems are in poor condition. In Arraijan and La Chorrera, for example, the sewerage system is not connected to a WWTP, has not undergone major repairs for forty years, and cannot support additional connections, which is highly problematic given the area's dramatic population growth. The remainder of Panama Oeste's population utilizes septic tanks (38 percent) or pit latrines or simple ground holes (37 percent), many of which are in a dilapidated state due to a lack of maintenance (septage management services are provided by unregulated private entities). The state of sanitation in Panama Oeste poses major risks to public health and the environmental sustainability of rivers and the Panama Bay. In 2002, contamination in Panama Oeste's Caimito River, the main source of water for the Province, reached a level that caused IDAAN to consider re-locating the water supply system intake. Given these pressing issues, the GoP requested the assistance of the World Bank to carry out the PBCSP Project's first intervention in Panama Oeste.

5. The institutions in charge of the sector are the Ministry of Health (MINSa), which leads overall sector policy development and the implementation of rural WSS works, and IDAAN, which leads planning, infrastructure development and operation of services for the urban sector. The

National Authority of Public Services (ASEP) supervises and regulates service provision in urban areas. Other key actors include the National Environmental Authority (ANAM), which regulates and monitors water quality, and the Ministry of the Presidency through its National Council for Sustainable Development (CONADES), which implements high priority WSS infrastructure projects. As indicated in the Systematic Country Diagnostic (SCD) for Panama, institutional challenges, such as unclear institutional responsibilities, a lack of sector policy leadership, weak regulatory agencies, and IDAAN's limited operational and financial autonomy due to very low tariffs, have negatively affected WSS service provision and limited sustainable and equitable growth. IDAAN registers high water consumption rates (364 l/capita/day), high levels of non-revenue water (54 percent), and high staffing levels (5.3 per thousand water connections) and often lacks the technical capacity for effective service provision and management.

6. Recognizing these shortcomings, the GoP drafted a new water law in 2012 and supported efforts to improve IDAAN's operational efficiency, as well as management and planning capacity through various initiatives and projects with the Inter-American Development Bank (IDB), the Development Bank of Latin America (CAF) and the World Bank. This includes the Metro Water and Sanitation Improvement Project (Metro Agua I - P119694, approved in 2010) and Metro Agua II (under preparation). The latter in particular includes a strong institutional strengthening component with specific capacity building for management of sewerage facilities. At the launch of the PBCSP, however, IDAAN lacked the capacity to oversee the infrastructure investments and subsequent operation and maintenance (O&M) of the works. As a result, the GoP delegated this responsibility to MINSA, which is implementing the PBCSP through a Program Coordinating Unit (PCU). Although IDAAN still does not have the capacity to assume responsibility for the PBCSP, the ongoing modernization process is helping IDAAN build its capacity to manage the systems in the future.

Relationship to CAS

7. The proposed Project is strongly aligned with the 2015 Country Partnership Framework (CPF) and the SCD. The Project directly supports the CPF's pillar "ensuring inclusion and opportunities for marginalized and indigenous groups" through improving access to basic services in a sustainable manner and the pillar "bolstering resilience and sustainability" through supporting integrated urban water management (IUWM) in priority areas. The Project will directly contribute to the CPF's 2.5.1 indicator: "Additional people with access to reliable water supply or to improved sanitation services in targeted lower income urban areas and rural areas (disaggregated by gender)." The Project is also strongly aligned with the SCD, which highlights the importance of water resource management to Panama's environmental sustainability as well as the need for service providers and strong public institutions to keep pace with the country's rapid urbanization. The SCD also indicates an opportunity to improve environmental sustainability through reducing "pollution by improving sewerage treatment capacity and access to sanitation." The Project is also aligned with the World Bank Group (WBG) twin goals by (i) promoting shared prosperity to the country's bottom 40 percent of the population through improved access to sanitation services and (ii) improving sustainability of natural resources through a reduction of domestic wastewater.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

To (i) improve access to sanitation services, (ii) reduce environmental pollution from wastewater

generated in targeted areas of Panama Oeste, and (iii) to strengthen wastewater pollution management capacity in Panama

Key Results (From PCN)

Indicators to measure progress towards meeting the PDO and number of beneficiaries will be refined at a later stage in project preparation. Tentative PDO-level indicators include:

- Direct Project Beneficiaries (number), of which female (%)
- People provided with access to “improved sanitation facilities” under the project (number), of which female (%) and poor (%)
- Volume (mass) of Biochemical Oxygen Demand (BOD) pollution loads removed by the treatment plant supported under the project (tons/year)
- Integrated Water Pollution Management Plan for Panama Oeste prepared and adopted

III. Preliminary Description

Concept Description

8. The Project would support the PBCSP’s first intervention in the Panama Oeste Province. The Project would focus primarily on Arraijan’s sub-division (Corregimiento) of Burunga given its rapid urban growth, high urban poverty level and its current lack of a sewerage system (only 9 percent of households are connected to a sewerage network). Burunga is within the Country’s urban population bottom 40 percent according to an analysis of Unsatisfied Basic Needs . The Project would also help lay the groundwork for comprehensive wastewater management throughout Arraijan and La Chorrera to improve sanitation facilities and contribute to the environmental recovery of urban rivers and the Panama Bay.

9. The Project preliminary cost is US\$ 220 million with the World Bank loan of US\$ 100 million. The Project would be carried out in coordination with the Development Bank of Latin America (CAF) and the OPEC Fund for International Development (OFID), and would utilize parallel or complementary financing. A counterpart funding of USD 20 million is estimated. A description of the components is presented below and a preliminary financing plan is included in Annex 3.

10. Component One. Construction of a new sewerage system in Burunga. This component would finance the implementation of a sewerage system throughout Arraijan’s sub-division of Burunga that would include the design and construction of a separate secondary network, collectors, pumping stations, and a tertiary network to permit household connections. In addition, the sewerage works contract would include minor drainage and road access improvements.

11. The World Bank would finance one of Burunga’s three sectors, and the OFID and CAF would finance the remaining two. The sector the Bank would finance would service a design population of 31,000 people (41% of the Burunga population) and would function independently of the other two sectors given that it would be connected to the wastewater treatment plant (Component 2). Refer to Figure 2 to see a map of the three sectors.

12. Component Two. Wastewater treatment in Burunga. This component would finance the construction of a Wastewater Treatment Plant (WWTP) with a preliminary design capacity of 300 l/s to treat the wastewater collected in the newly constructed system, as well as part of the operation and maintenance of the plant. The World Bank would finance this component through a design, build and operate (DBO) contract. Under this model, the DBO contractor would design, build and

operate the plant for seven years. In addition, the DBO contract would include the operation and maintenance of the new sewerage system (Component 1). The Bank would finance the first years of operation as part of the guarantee period. Under this model, the DBO contractor would provide specific training to IDAAN and PCBSP staff on the operation of the WWTP and of the networks to ensure its long-term operational sustainability.

13. Component Three. Sustainable Wastewater Management throughout Panama Oeste. This Component would address two institutional strengthening priorities: water pollution control and wastewater facilities operation. Under the first subcomponent, the project will finance the development of an integrated water pollution management plan for Panama Oeste to strengthen ANAM and PCBSP monitoring and planning capacity. The Plan would determine a water quality baseline and monitoring strategy, source of pollutions (hotspots), define water quality objectives, and recommend infrastructure investments, as well as additional analytical studies and policies to improve environmental sustainability. The second subcomponent will support PCBSP and IDAAN on structuring long-term operational models for sewerage infrastructure management. This will also include a variety of knowledge exchange events such as conferences, workshops, training, and study visits to assist PCBSP and IDAAN's staff with the gradual transition of the operation, maintenance, and management of wastewater facilities. During preparation, the team would carry out an evaluation of current initiatives/activities and would coordinate with other agencies and donors to better define activities under this component and avoid possible duplication. The World Bank would finance this component.

14. Component 4. Feasibility Studies for Panama Oeste and Project Administration. This component would finance: (i) initial feasibility studies and basic designs to extend the PCBSP throughout La Chorrera and Arraijan; (ii) a project management consulting firm (Project Manager) to provide quality control, monitoring and inspection, and procurement support for Components 1 and 2; and (iii) the PCU's project administration activities, which include compliance with fiduciary management, reporting requirements and monitoring activities, and implementation of the Environmental and Social Management Plan, which contains Civil Engagement Strategy, gender analysis, and Grievance and Redress Mechanism (GRM). A social assessment will be conducted during project preparation to define the scope of these activities, as well as to ensure poor household are prioritized. This World Bank, the OFID, and the CAF would finance this component.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	x		
Natural Habitats OP/BP 4.04	x		
Forests OP/BP 4.36		x	
Pest Management OP 4.09		x	
Physical Cultural Resources OP/BP 4.11	x		
Indigenous Peoples OP/BP 4.10		x	
Involuntary Resettlement OP/BP 4.12	x		
Safety of Dams OP/BP 4.37		x	
Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	220.00	Total Bank Financing:	100.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			20.00
International Bank for Reconstruction and Development			100.00
OPEC FUND			50.00
Foreign Multilateral Institutions (unidentified)			50.00
Total			220.00

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