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# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 05-Jun-2017 | Report No: PIDISDSC20365



**BASIC INFORMATION**

**A. Basic Project Data**

Country Bolivia	Project ID P162005	Parent Project ID (if any)	Project Name Water and Sanitation in Peri-Urban Areas and Small Towns (P162005)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date Jul 17, 2017	Estimated Board Date Sep 28, 2017	Practice Area (Lead) Water
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Development Planning	Implementing Agency Vice-Ministry of Drinking Water and Basic Sanitation (VAPSB)	

**Proposed Development Objective(s)**

The Project Development Objective (PDO) is to improve access to water and sewerage services in participating peri-urban areas and small towns, while mainstreaming climate-resilience in the planning and management of participating water and wastewater utilities.

**Financing (in USD Million)**

Financing Source	Amount
Borrower	22.50
International Bank for Reconstruction and Development	140.00
<b>Total Project Cost</b>	<b>162.50</b>

Environmental Assessment Category B-Partial Assessment	Concept Review Decision Track II-The review did authorize the preparation to continue
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Other Decision (as needed)

## **B. Introduction and Context**

### Country Context

In 2015, the population of Bolivia stood at approximately 11 million; 69 percent of which lived in urban areas. Boosted by gas and mining exports and rapidly increasing public investment, economic growth averaged roughly 5 percent per year since 2004. Strong economic growth in combination with prudent macroeconomic management has allowed for sizeable fiscal and current account surpluses. These surpluses in combination with the Multilateral Debt Relief Initiative<sup>1</sup> have resulted in a sharp decrease in public debt from 94 percent of GDP in 2004 to less than 40 percent in 2013. High dependence on commodity exports renders the economy vulnerable to downturns in export prices and/or international demand for such exports. The rapid decline in export prices had not yet affected the growth rate in 2015, but has resulted in fiscal and external deficits. The economic outlook looks less buoyant with GDP growth forecasted to decline to 3.6 percent per year.

The commodity boom resulted in strong progress on the poverty reduction and shared prosperity fronts. Between 2006 and 2015, the share of the population living in poverty decreased from 60 to 38.6 percent. Furthermore, the share of the population living under the extreme poverty line fell from 37.7 to 16.8 percent. Shared prosperity was strong over this period, as the average income of the bottom 40 percent of the population grew by about 9 percent per year on average, compared to 4 percent for the total population. As a result, Bolivia experienced one of the largest reductions in inequality in the LAC region, with the Gini coefficient decreasing by 12 points between 2006 and 2015. Despite this progress, Bolivia continues to face significant development challenges. The country has one of the lowest GDP per capital levels in Latin America and at 39 percent, it shows a much higher poverty rate than the average for Latin American (25 percent).

Bolivia is highly vulnerable to the impacts of climate change. The retreat of the glaciers, and more frequent and intense extreme weather events, such as the 2013 floods in the lowlands and the 2016 drought, have severe negative impacts on the welfare of the population and in the economy. In November 2016, 7 of the 9 departments declared a state of emergency, 51 percent of the country's municipalities suffered agricultural damages and 34 percent livestock losses. The current drought emergency has made it clear that making the country and its economy more resilient to deal with climate change is critical.

### Sectoral and Institutional Context

Although Bolivia is well endowed with renewable water resources, estimated at almost 53,000 cubic meter per person per year, the spatial distribution of water resources does not match the population distribution throughout the country, resulting in significant water scarcity in the Altiplano and inter-Andean valleys where two thirds of the population resides. In addition, water quality has been deteriorating significantly in recent years due to the extensive mining, urbanization, rapid deforestation, overgrazing and the subsequent land degradation.

Bolivia met the water supply target set by the Millennium Development Goals (MDGs). Access to improved water supply services increased from 68 percent in 1990 to 90 percent in 2015 at national level. Access to improved water in rural

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<sup>1</sup> The Multilateral Debt Relief Initiative (MDRI) provided for 100 percent relief on eligible debt from the IMF, IDA and AfDF to a group of low-income countries, including Bolivia. The initiative aimed to help eligible countries advance toward the United Nations' Millennium Development Goals (MDGs) focused on halving poverty by 2015.



areas increased from 55 percent in 2000 to 76 percent in 2015, narrowing the gap in service provision between rural and urban areas. Yet, access to piped water (including access to standpipes) increased more modestly from 71 to 77 percent between 2001 and 2012, showing an increase from 88 to 90 percent in urban areas and from 40 to 52 percent in rural areas. Even though access to municipal water services has increased over the past decade, the quality of water service delivery remains a challenge.

Progress on the sanitation front has been slower. Access to improved sanitation services increased from 28 percent to 50 percent between 1990 and 2015, while open defecation declined over the same period from 46 to 17 percent. About 70 percent of the population had access to a water closet according to the 2012 household survey. Yet, access is heavily skewed towards households in urban areas. In rural areas 63 percent of households did not have access to a toilet compared to 13 percent in urban areas. The quality of the toilet services is, however, low (e.g. 40 percent of households share toilets with other households, which is considered “unsafe access” by the MDGs). Regional variation in access to toilets is high – with the highest rates in Santa Cruz, Pando and Beni (more than 85 percent) and the lowest rates in Potosi, Oruro, Chuquisaca and La Paz (less than 60 percent). Access to safe wastewater collection services improved between 2001 and 2012 in all regions of the country. However, by 2012, only 40 percent of households had access to a connection to the sewer system, with large disparities between regions –from Tarija (53 percent) and La Paz (47 percent) to Pando (13 percent).

Although Government spending for the water supply and sanitation (WSS) sector has increased by 150 percent in the past 15 years, the overall share of spending on this sector dropped from 1.1 percent of GDP in 2000 to 0.7 percent in 2015. Since many utilities are not able to generate sufficient revenues to pay for their total operating costs, there is a high dependence on government funding. The lack of enough resources for maintenance has resulted in shorter lifespans of infrastructure assets causing water pipe breaks and sewer blockages. Therefore, a large part of investment spending has to be allocated to rehabilitation and premature replacement of existing infrastructure assets, as opposed to long-term investments to expand water supply and wastewater collection and treatment services.

This proposed project will be implemented under “*MI Agua*” (*Mas Inversión para Agua*) Program, which started in 2011 to boost investments aimed at increasing access to safe drinking water supply and irrigation for rural communities. Between 2011 to 2016, the Bolivian government invested over USD 600 million in the implementation of *MI Agua* and its equivalent *MI Riego* programs. According to information provided by its main executing agency, the National Fund for Social and Productive Investment (FPS), over 3,000 projects were implemented between 2011 and 2016 benefiting more than 1.5 million people. The program is credited to have been decisive in the country’s achievement of the water supply MDG target. *MI Agua* recently has expanded to promote investments in peri-urban areas and small towns.

The sector is made up of a **number** of institutions. The Ministry of Environment and Water (MMAyA) and its Vice-Ministry of Drinking Water and Sanitation (VAPSB) are responsible for: (i) formulating, implementing, and monitoring water and wastewater policies, including the 2015 water quality policy the 2015 water efficiency policy; (ii) setting technical standards and norms; and (iii) formulating the water and wastewater investments budget. The AAPS (*Autoridad de Fiscalización y Control Social en Agua Potable y Saneamiento*) is the agency that regulates the provision of water services. In 2015, AAPS regulated 60 utilities covering a service area of 7.9 million people. These utilities provided water supply and sewer services to 6.7 million and 4.3 million people, respectively, which represent coverage rates of 91 percent for water supply and 55 percent for sewerage. Operational performance is mixed. Median water consumption is low at 94 liters per capita per day. Metering is universal. Non-revenue water stands at 29 percent, and less than 17 cubic meter per kilometer per day. The financial performance of the utilities is in general poor. The typical utility only covers 76 percent of its operation and maintenance expenses; the median collection efficiency stood at 82 percent in 2015. EMAGUA (*Entidad Ejecutora de Medio Ambiente y Agua*), FPS (*Fondo de Inversión Productiva y Social*), and UCP (*Unidad Coordinadora de Programas*) implement investment programs in the sector, while SENASBA (*Servicio Nacional*



*para la Sostenibilidad de Servicios en Saneamiento Básico*) is tasked with improving the institutional capacity of the water and wastewater utilities and implementing community development programs in water and sanitation projects. Municipal governments are responsible for the provision of WSS services, and are, therefore involved alongside departmental governments in project implementation and financing. Water utilities in urban areas (EPSA, according to their Spanish acronym) are usually municipal or service cooperatives. Institutional arrangements for water resources management are weak. There is no a water resource management authority.

The donor community is active in the water sector. The Latin-American Development Bank (CAF) and the Inter-American Development Bank (IDB) are the largest donors with lending operations in the water sector each of more than USD 500 million. Their lending program focuses on the provision of water supply and sanitation services to urban cities, small towns and rural communities. The Spanish Cooperation Agency (AECID), German Cooperation Agency (GIZ), the Swiss Development Cooperation and the German Development Bank (KfW) have a long tradition of sector involvement. IDB, GIZ and the European Union also provide technical assistance to water utilities. The donor community has been active supporters of the "National Rural Water and Sanitation Strategy" and the "National Strategy for Wastewater Treatment".

#### Relationship to CPF

The proposed project will contribute to the achievement of higher level objectives of the Government of Bolivia and the World Bank. The Patriotic Agenda (2015-2025) focuses on providing universal access to basic social services, including water supply and sanitation by 2025. The Five –Year National Development Plan (*Plan de Desarrollo Económico Social*, PDES 2015-2020) aims to reach 95 percent access in urban water supply and 70 percent in urban sanitation. The PDES anticipates sharp increases in the access to high-quality water and sanitation services, while reducing the gaps between the urban and rural areas, and the poor and rich.

The most recent World Bank's Country Partnership Framework (100985-BO) for Bolivia is fully aligned with the Government's NDP. The CPF is organized around two pillars: (i) *promoting broad-based and inclusive growth*; and (ii) *supporting environmental and fiscal sustainability to improve public resource management and the business environment*. Support for key infrastructure is a core part to share prosperity through the expected reduction water-borne diseases resulting in absenteeism from work and/or school and the costs associated with out-of-pocket medical expenses and loss of income. The care for the sick and the responsibility of water collection and safety concerns also falls disproportionately on women and girls. Hence, improved access to water and wastewater services will help to improve social inclusion and poverty reduction (Pillar 1) as the ISHES survey showed that the poor suffer more from lack of access to improved water and wastewater services. When having access to the services, they tend to suffer more from poor service delivery (as measured by service interruptions) than other water users. By addressing inadequate water and wastewater service delivery, the project supports the Bank's Twin Goals. The project will also support the second pillar as water pollution is widespread in Bolivia, with insufficient collection and treatment of wastewater an important source of contamination.

### C. Proposed Development Objective(s)

**Note to Task Teams:** The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

The Project Development Objective (PDO) is to improve access to water and sewerage services in participating peri-



urban areas and small towns, while mainstreaming climate-resilience in the planning and management of participating water and wastewater utilities.

Key Results (From PCN)

Key PDO indicators will be:

- Direct project beneficiaries (number) , of which female beneficiaries (percentage) (core indicator)
- People provided with access to water through piped household water connections (core indicator)
- People provided with access to sanitation through sewer connections (core indicator)
- Volume of wastewater collected and safely disposed
- Number of participating utilities that have developed and implemented water emergency plans

**D. Concept Description**

The government’s Patriotic Agenda 2025 aims to achieve universal water and sanitation coverage by 2025. It also aims to achieve no contamination of water bodies by the same date. These goals are fully aligned with the newly defined Sustainable Development Goals (SDGs). The Vice Ministry of Water Supply and Sanitation hence has set goals to achieve increases in access to water supply and sanitation, while increasing the capacity to treat wastewater and subsequently reuse it. This project is aimed to improve water supply and sanitation coverage in urban areas.

The proposed project will support water supply and wastewater investments in high-priority areas that have been identified in the “MI Agua” program that aims to improve service delivery to underserved populations, mostly residing in peri-urban areas and small towns. The proposed project will also contribute to building climate resilience in the participating utilities to ensure that they can better cope with the country’s vulnerability to climate change. Building this climate resilience will include, but is not limited to improve the operational and financial viability of the utilities.

**Component 1: Infrastructure to Water Supply and Wastewater Services (USD 100 million)**

This component will include water and wastewater investments in peri-urban areas and small towns. This project will marginally increase the volume of raw water abstracted<sup>2</sup> (and hence water production) but will construct works that will especially focus on the construction of water supply and/or sewer networks, and wastewater treatment plants.

This component will fund a set of subprojects in water and wastewater services. The proposed project portfolio includes 20 subprojects in 6 regions and 13 municipalities. There are 13 subprojects located in peri-urban areas. The remaining 7 investment subprojects are located in smaller urban towns. In the current design, the Government estimates, that municipalities and departments will provide at least 20 percent of the investment funds.

The subprojects in peri-urban areas include investments in the cities of Cochabamba, Oruro, El Alto and La Paz. They include expansion of water and/or sewer networks in peri-urban neighborhoods. The total investment costs of the 6 subprojects with completed detailed designs for peri-urban areas is estimated at USD 54 million, which will directly benefit 91,400 people. The remaining sub-projects will benefit an additional 263,339 people. An assessment of the detailed designs and the capacity of municipalities to pay is underway. The population directly expected to benefit from these improvements through increases in access is estimated at 354,752 people.

**Component 2: Building Climate Resilient Utilities Component (USD 25 million)**

<sup>2</sup> There is only one project identified so far that may include some increase in water production.



This component aims to improve the performance and efficiency of the water and wastewater companies to make their infrastructure systems and operations more climate-resilient. The project will undertake climate change risk screening as building more climate resilient water and wastewater utilities is an explicit objective of this project.

The project will work in particular with the water utilities in El Alto and La Paz, Oruro, Cochabamba (the main beneficiaries of the water supply and wastewater subprojects that will be implemented in peri-urban areas) so they mainstream climate resilience in the way they plan and manage the delivery of their services. This component will include:

- Assistance to water and wastewater companies in developing infrastructure investment plans that improve their resilience to climate change (including but not limited to improved management of water resources) underpinned by the introduction and/or improvement of information and information management systems, hydrological and hydraulic models to assist in making utilities more climate resilient;
- Assistance to water and wastewater companies in improving preparedness for extreme weather events to include amongst others the preparation of contingency plans, early warning systems, measures to ensure drinking water quality in emergencies;
- Technical assistance in demand management (including but not limited to improving commercial systems, revenue policies, and customer outreach to promote water conservation);
- Strengthening social accountability measures to improve customer-responsiveness and improve other feedback mechanisms on the performance of water and wastewater companies;
- Improve – where utilities are currently not supported by improvement plans – the financial and operational performance of participating utilities.

### **Component 3: Project Implementation and Monitoring Component (USD 15 million)**

This component will finance the operational costs of UCP to coordinate, implement, supervise and monitor the project. This component will also include the preparation of pre-investment studies and designs, including the preparation of detailed designs for the wastewater treatment solutions for La Paz, Tarija and eventually other cities.

### **Component 4: Contingency Emergency Component (estimated costs of USD 0 million)**

This component will finance a fourth component to enable flexible project design in an environment where climate vulnerability is a major risk. The objective of this component is to support potential disaster-recovery needs in water and wastewater systems in the participating utilities. This component could be triggered in the event of a disaster upon formal request from the Borrower. Upon triggering, reallocation of project funds from other project components could be undertaken to facilitate financing of goods and services that ensure the continuation of water and wastewater operations.

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## **SAFEGUARDS**

### **A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The proposed project will support water supply and wastewater collection and treatment investments in peri-urban areas of the cities of Oruro, La Paz, El Alto and Cochabamba, and mid-size cities/towns of Colquiri, Sorata, Chulumani,





Mairana, San Ramon, La Guardia, San Borja and Puerto Suarez. The borrower will conduct a Social Assessment (SA) that will analyze socio – cultural issues (including gender), and will identify social impacts in the proposed project area. Even though it is expected that the SA identifies diverse indigenous populations spread in peri-urban areas of large and in mid-size cities, IPPs and/or IPPF would only be developed if the SA confirms IPs as defined in O.P.4.10. Where subprojects have detailed final design (El Alto, Cochabamba and Oruro cities), temporal impacts on access to assets and economic activities may be caused; therefore O.P. 4.12 is triggered, and Resettlement Action Plans (RAPs) will be prepared for these subprojects. A Resettlement Policy Framework will also be prepared for subprojects that are still to be finalized. As the works might result in some moderate influx of laborers from outside the area during the construction works, the SA will include –in its social management framework– mitigation measures aimed at lessening the possibilities of any type of misconduct from outsiders in the proposed project area. Social Safeguard Instruments will be developed by the client before Appraisal.

To comply with the Bank’s environmental policies and safeguards, the borrower will formulate Environmental Assessments (EAs) for 6 subprojects for which detailed designs are complete (located in El Alto, Cochabamba and Oruro). These EAs will guide the preparation of Environmental Management Plans (EMPs). For the remaining subprojects without complete designs, Environmental and Social Management Framework (ESMF) will be prepared, as well as corresponding EMPs.

**B. Borrower’s Institutional Capacity for Safeguard Policies**

Institutional capacity for social and environmental safeguards will be evaluate during the preparation of the social and environmental safeguard instruments. Specific recommendations will be addressed before Appraisal.

**C. Environmental and Social Safeguards Specialists on the Team**

Juan Carlos Enriquez Uria, Angela Maria Caballero Espinoza

**D. Policies that might apply**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	This policy will be triggered as the project will have potential negative environmental and social impacts would mainly occur in the construction phase, and they would include soil erosion, noise, dust, shipping and disposal of construction waste, etc. These potential impacts will be discussed and mitigated. Overall, the impact of the project is positive. The expected benefits of the project will include (i) improvements in the access and quality of water supply and wastewater collection services provided to targeted urban areas; (ii) improvements in health indicators associated with poor water and wastewater services in the targeted areas; (iii) reduction in coping costs to deal with inadequate water and wastewater services; (iv) utilities that will be more resilient and





		<p>hence have more capacity to deal with the impacts of climate change; and (v) possible environmental externalities as the overall environment will benefit from improvements in the collection of wastewater.</p> <p>The Environmental and Social Management Framework (ESMF) will include the Environmental Impact Assessment (EIA) for each of the Subprojects. Based on the Environmental Impact Assessment (EIA), an Environmental Management Plan will be prepared including: (i) feasible and effective mitigation measures to prevent, eliminate, reduce, mitigate, or compensate for the adverse impacts of the subproject on the different means (abiotic, biotic and social) and during each stage of implementation and operation; (ii) feasible and effective measures to enhance the environmental benefits of each subproject; lii) The design of measures to recover and recompose the affected environment; and, iv) a timeline of initiation/implementation/finalization of the measures, and environmental actions. Environmental management measures and actions should be presented including technologies, technical specifications, personnel and logistical requirements, costs, scheduling activities, monitoring and supervision activities, and the responsibilities of the actors involved in each subproject. Likewise, the measures to be proposed should take into account the results of community consultation and participation activities.</p>
Natural Habitats OP/BP 4.04	No	.The project will be focused on the provision of water and wastewater infrastructure in peri-urban areas and small towns, and will therefore not in any way impact natural habitats.
Forests OP/BP 4.36	No	The project will be focused on the provision of water and wastewater infrastructure in peri-urban areas and small towns, and will therefore not in any way impact forests.
Pest Management OP 4.09	No	The project will be focused on the provision of water and wastewater infrastructure in peri-urban areas and small towns, and will not provide any funds for the purchase of pesticides, nor will it result in a change in pest management within the peri-urban areas and small towns targeted.
Physical Cultural Resources OP/BP 4.11	Yes	Considering the portfolio of investments supported by the project and expected to be financed, the major risks regarding OP/BP are associated with civil works



		that could possibly uncover significant physical cultural resources. The ESMF (and EMP) will contemplate all preventive measures in order to comply with the national regulations and the WB policies and safeguards.
Indigenous Peoples OP/BP 4.10	Yes	This Policy is triggered given that Indigenous Peoples may be present in the project area. A screening to determine whether Indigenous Peoples are present in, or have collective attachment to, the project area will be undertaken by the Bank. The screening will place special emphasis on whether or not a group has collective attachment to geographically distinct habitats and ancestral territories, as this is the criteria that groups that live in urban and peri-urban areas are least likely to meet. An Indigenous Peoples Policy Framework and/or Indigenous Peoples Plan will be developed by appraisal if Indigenous Peoples are deemed to be present, or have collective attachment to, the project area.
Involuntary Resettlement OP/BP 4.12	Yes	<p>This Policy is triggered given that project activities may result in temporary loss of assets or access to assets; and/or temporary loss of income sources. Subprojects located in the cities of El Alto, Cochabamba and Oruro that have finalized detailed designs, might cause temporal impacts on access to assets and economic activities, therefore Resettlement Action Plans (RAPs) will be prepared. Furthermore a Resettlement Policy Framework (RPF) that encompasses procedures and requirements to develop RAPs for subprojects whose detailed designs have yet to be determined, will be also developed.</p> <p>The RAPs and the RPF will define methodologies for compensation and resettlement of all types of possible permanent or temporary physical impacts on land, assets and economic activities that the proposed project might cause.</p>
Safety of Dams OP/BP 4.37	No	The project will not support the construction or rehabilitation of dams nor will support other investments which rely on the services of existing dams.
Projects on International Waterways OP/BP 7.50	No	The project will not affect international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	No project activities are contemplated in disputes areas as defined by OP/BP 7.60.



### **E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

Jun 23, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The Environmental and Social Management Framework will be prepared starting on January 2017, until May 2017.

### **CONTACT POINT**

#### **World Bank**

Caroline van den Berg, Luis Alfonso Alvestegui Justiniano  
Lead Water Economist

#### **Borrower/Client/Recipient**

Ministry of Development Planning  
Mariana Prado Noya  
Minister of Planning  
stephanie.bellot@planificacion.gob.bo

#### **Implementing Agencies**

Vice-Ministry of Drinking Water and Basic Sanitation (VAPSB)  
Carlos Ortuño Yañez  
Minister of Environment and Water  
carlos.ortuno@riegobolivia.org

### **FOR MORE INFORMATION CONTACT**

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>



**APPROVAL**

Task Team Leader(s):	Caroline van den Berg, Luis Alfonso Alvestegui Justiniano
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**Approved By**

Practice Manager/Manager:	Rita E. Cestti	06-Jun-2017
Country Director:	Boris Enrique Utria	26-Jun-2017

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