

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BOLIVIA

WATER AND SANITATION PROGRAM FOR SMALL AND MEDIUM-SIZED CITIES

(BO-L1184)

LOAN PROPOSAL

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<p>REQUIRED</p> <ol style="list-style-type: none"> 1. Multiyear execution plan and annual work plan 2. Monitoring and evaluation plan 3. Environmental and social management report 4. Procurement plan <p>OPTIONAL</p> <ol style="list-style-type: none"> 1. Technical feasibility 2. Socioeconomic feasibility 3. Institutional feasibility 4. Financial feasibility 5. Community development, gender, and interculturality 6. Draft program Operating Regulations, PCU 7. Draft program Operating Regulations, FPS 8. Compliance with the Bank's Public Utilities Policy 9. Progress monitoring report 10. Environmental and social analysis 11. Environmental and social management framework 12. Midterm program evaluation report for operations 2597/BL-BO and GRT/WS-12956 13. Lessons learned from the water and sanitation sector in small rural communities and medium-sized cities in Bolivia 14. Draft national rural water and sanitation strategy 15. Rural Water and Sanitation Information System Report 16. Sector Plan of Basic Sanitation Development 2016-2020 17. Project completion report for operation 1927/BL-BO 18. Itemized program budget 19. Impact evaluation findings 20. Multilateral Development Banks' Joint Methodologies for Tracking Climate Finance

ABBREVIATIONS

AAPS	Autoridad de Fiscalización y Control Social de Agua Potable y Saneamiento Básico [Authority for Drinking Water and Basic Sanitation Oversight and Social Control]
CRF	Corporate Results Framework
CQS	Selection based on the consultants' qualifications
DAG	Departmental autonomous government
EIRR	Economic internal rate of return
FPS	Fondo Nacional de Inversión Productiva y Social [National Productive and Social Investment Fund]
ICAS	Institutional Capacity Assessment System
ICB	International competitive bidding
INE	Instituto Nacional de Estadística [National Statistics Bureau]
LIBOR	London Interbank Offered Rate
MAG	Municipal autonomous government
MEP	Multiyear execution plan
N/A	Not applicable
NCB	National competitive bidding
NICQ	National individual consultant selection based on qualifications
O&M	Operation and maintenance
PCU	Program coordination unit
QCBS	Quality- and cost-based selection
SIASAR	Sistema de Información de Agua y Saneamiento Rural [Rural Water and Sanitation Information System]
SIGEP	Sistema Nacional de Gestión Pública [National Public Management System]
W&S	Water and sanitation

PROGRAM SUMMARY

BOLIVIA WATER AND SANITATION PROGRAM FOR SMALL AND MEDIUM-SIZED CITIES (BO-L1184)

Financial Terms and Conditions			
Borrower:	Source	Amount (US\$)	%
The Plurinational State of Bolivia	IDB (Ordinary Capital):	67,150,000	85
Executing agency:	IDB (Concessional Ordinary Capital):	11,850,000	15
Ministry of the Environment and Water, acting through the program coordination unit (PCU)	IDB total:	79,000,000	100
Coexecuting agency:			
Ministry of Planning and Development, through the National Productive and Social Development Fund			
	Regular Ordinary Capital (Flexible Financing Facility) ^(a)	Concessional Ordinary Capital	
Amortization period:	19.5 years	40 years	
Disbursement period:	5 years		
Grace period:	12.5 years ^(b)	40 years	
Interest rate:	LIBOR-based	0.25%	
Credit fee:	^(c)	N/A	
Inspection and supervision fee:	^(c)	N/A	
Weighted average life:	15.25 years	N/A	
Approval currency:	United States dollar (from the Ordinary Capital)		
Program at a Glance			
Program objective/description: The program objective is to improve the environmental and health-related living conditions of residents in Bolivia's small and medium-sized cities through increased coverage of water and sanitation (W&S) services.			
Special contractual conditions precedent to the first disbursement: In accordance with the terms and conditions previously agreed upon with the <i>Bank</i> : (i) approval of the program Operating Regulations by the Ministry of the Environment and Water, and the Bank's no objection, as well as their entry into effect under the terms previously agreed upon with the National Productive and Social Investment Fund (FPS); these regulations will include an environmental and social framework annex; and (ii) designation, by the executing and coexecuting agencies, of their key personnel for the program (paragraph 3.9). See also the special contractual conditions in Annex B of the environmental and social management report .			
Special contractual conditions for execution: Prior to the award of the works contracts, evidence will be submitted of the signature and entry into effect of an intergovernmental agreement for each works project between the corresponding executing agency or coexecuting agency, municipal autonomous government, departmental autonomous government, and water and sanitation service operator, in accordance with the terms and conditions previously agreed upon with the Bank (paragraph 3.10), for the operation and maintenance of such works. See also the special contractual conditions in Annex B of the environmental and social management report.			
Exceptions to Bank policies: None			
Strategic Alignment			
Challenges: ^(d)	SI <input checked="" type="checkbox"/>	PI <input type="checkbox"/>	EI <input type="checkbox"/>
Crosscutting themes: ^(e)	GD <input checked="" type="checkbox"/>	CC <input type="checkbox"/>	IC <input type="checkbox"/>

^(a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

^(b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.

^(c) The credit fee and the inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

^(d) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

^(e) 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, and rationale

- 1.1 **Background.** According to projections (through 2017) of the 2012 census,¹ Bolivia has a population of 11.1 million, 7.6 million of which live in urban areas of more than 2,000 inhabitants and 3.5 million in rural areas or small communities. The urban population includes some one million people living in small cities of between 2,000 and 20,000 inhabitants. The government has prioritized small and medium-sized cities due to gaps in poverty and development indicators. Although these have narrowed in recent years, rural residents remain highly vulnerable. According to Bolivia's National Statistics Bureau (INE), 55% of the population was living in small and medium-sized cities below the poverty line in 2015 (compared to 31% of the urban population); the rural illiteracy rate was 19.4% (more than double the national average);² and the infant mortality rate for rural areas was 67 per 1,000 live births, which is above the national average (50 per 1,000 live births).³
- 1.2 **Diagnostic assessment of the problem.** The 2012 census found that water and sanitation (W&S) coverage rates were 80.8% and 52.7%, respectively. Bank financing was used to prepare the Sector Plan of Basic Sanitation Development 2016-2020 ([optional link 16](#)), which reported that these coverage rates had risen in 2015 to 84.7% and 51.7%, respectively, after recent investments in the sector. In terms of geographic distribution, water coverage is 90.28% in communities of more than 20,000 inhabitants and 89% in small towns, compared to 60.91% in communities with fewer than 2,000 inhabitants (more than 20 percentage points below the national average). Sanitation coverage rates are 62.86%, 32.14%, and 40.06%, respectively, with gaps of 20 and 12 percentage points below the national average in small towns and communities, respectively. According to a recent inventory of wastewater treatment plants in Bolivia,⁴ just 91 towns of 2,000 to 20,000 inhabitants had such facilities, and only 50% of them were up and running, meaning that only 14% of this population segment had wastewater treatment coverage. These figures show that Bolivia, despite its many efforts in this population segment, still has significant coverage gaps, with some 1.34 million residents lacking access to clean water and 2.56 million lacking access to sanitation service.
- 1.3 This shortfall—accounting for about half of the population—poses a health risk exposure, which is even more concerning in that it coincides with areas that have the highest poverty rates (paragraph 1.1). This fact is significant in view of the positive correlation between health and access to W&S services.⁵ According to INE

¹ National Census of Housing and Population 2012, INE.

² INE, 2016.

³ Ministry of Health and Sports, National Demographic and Health Survey (2008).

⁴ Study conducted by the Ministry of the Environment and Water, 2017.

⁵ This is documented in numerous studies, such as those summarized by Brenneman, A. and M. Kerf, "Infrastructure and Poverty Linkages: A Literature Review," World Bank, 2002. Other studies include Annette Prüss-Ustün et al., "Burden of Disease from Inadequate Water, Sanitation and Hygiene in Low- and Middle-income Settings: A Retrospective Analysis of Data from 145 Countries," *Tropical Medicine & International Health*, volume 19, Issue 8, pages 894-905, August 2014; and Peterson Zwane, A. and M. Kremer, "What Works in Fighting Diarrheal Diseases in Developing Countries? A Critical Review," CID Working Paper No. 140, March 2007.

data for 2016, the incidence of acute diarrheal disease among children under 5 was 25.6% in small communities of Bolivia, compared to 18.9% in urban areas.

- 1.4 In addition to coverage gaps, there are also challenges in terms of service sustainability,⁶ which are associated with a lack of (i) operation and maintenance (O&M) efforts in systems and wastewater treatment plants in small towns, (ii) capacity among W&S service operators to charge a rate that will allow for O&M costs to be recovered,⁷ and (iii) effective use of sanitation solutions among the population (68%). These factors pose a challenge in achieving efficient management of W&S services, especially in small towns (categories “C” and “D” for W&S service operators regulated by the Authority for Drinking Water and Basic Sanitation Oversight and Social Control (AAPS)), most of which fell short of key performance indicators according to the 2015 performance indicators report.⁸ As a result, the services received by the public are inadequate in both quantity and quality, and service operators lack the resources to provide the services effectively and make necessary investments.⁹ Also, the small community W&S sector lacks a national information system that would assist in operational and financial management, planning, and monitoring of W&S systems.
- 1.5 Small communities exhibit gender gaps, for example: (i) women account for 77% of the population age 18 and older with no schooling, whereas the corresponding figure for men is 54%; (ii) women account for 83% of the inactive population, and their average monthly income is about US\$198, compared to US\$312 for men;¹⁰ and (iii) 80% of women work in agriculture, compared to 72% of men. However, women’s agricultural activities are largely confined to lands owned by their families (63%) and they do not receive payment for such work.¹¹ There is evidence¹² that gender gaps are limiting factors in terms of labor and participation, reducing women’s access to economic opportunities and their active involvement in decision-making bodies such as W&S service operators (the percentage of women working in small-community W&S service operators is 10.6%)¹³ ([optional link 5](#)).
- 1.6 Because the program benefits indigenous communities, the interventions call for an intercultural approach. Latin America exhibits a gap between the development levels of indigenous and nonindigenous communities,¹⁴ including access to basic

⁶ Soto, B. Ministry of the Environment and Water and Spanish Agency for International Development Cooperation. Midterm evaluation of the Water and Sanitation Program for Small Towns and Rural Communities in Bolivia (September 2016).

⁷ SIASAR analysis of 136 service operators: 38% do not monitor their revenues and outlays. Of those that do, some 20% are not able to cover their O&M and administrative costs with the rates they charge.

⁸ AAPS, 2015. [Performance Indicators 2015](#).

⁹ Renovation of networks, control of production (macromasurement) and consumption (micromasurement), program to reduce unmetered water, etc.

¹⁰ Household survey 2014.

¹¹ International Labour Organization (2013). *2012 Labor Overview: Latin America and the Caribbean*.

¹² See anthropological study in the annex on community development.

¹³ Rural Water and Sanitation Information System (SIASAR).

¹⁴ The World Bank (2015). *Indigenous Latin America in the Twenty-first Century*. Washington DC: The World Bank; Hall, G. and H.A. Patrinos (2006). *Indigenous Peoples, Poverty and Human Development in Latin America*. London: Palgrave Macmillan; United Nations (2009) *State of the World’s Indigenous Peoples*.

services.¹⁵ According to the 2012 Household Survey, 85.9% of Bolivia's nonindigenous population has access to water, compared to only 57.8% of the indigenous population¹⁶ ([optional link 5](#)).

- 1.7 **The sector's institutional framework.** The Framework Law on Autonomy and Decentralization¹⁷ makes the central government responsible for developing and approving the system and the policies, plans, and programs for basic services in Bolivia. The municipal autonomous governments (MAGs) are responsible for providing W&S services and approving the rates to be charged when they provide these services directly. Law 2066 on the Provision and Use of Water and Sanitation Services specifies separate and distinct entities to plan, regulate, and provide the services. The Ministry of the Environment and Water was designated the lead entity of the sector, and it acts through the Office of the Deputy Minister for Basic Water and Sanitation, which sets policies, plans investments, and manages international financing. Regulation of the sector is delegated to the AAPS,¹⁸ which is tasked with protecting consumers and approving rates charged by service operators. The MAGs are responsible for providing services and developing expansion plans and programs, acting either directly or through the W&S service operators, in coordination with the departmental autonomous governments (DAGs). The W&S service operators can be state or municipal entities, public/social enterprises, cooperatives, associations of municipios, or W&S committees.
- 1.8 **Rationale and proposed interventions.** This operation will finance interventions to increase the coverage of W&S services by helping to improve the quality of these services through greater efficiency and improved operational management of service operators, and by supporting the institutional strengthening of W&S service operators and subnational governments. It will also finance community development activities with a focus on gender and interculturality. These interventions will help improve environmental (less pollution caused by a lack of effective sanitation solutions) and health conditions (access to clean water and improved housing hygiene) among the beneficiary population.
- 1.9 The proposed interventions have been shown to be effective in various studies of works carried out in similar contexts.¹⁹ As for actions aimed at making the interventions sustainable, a study on the factors contributing to sustainability in small communities of Bolivia²⁰ identified the following determining factors: (i) quality

¹⁵ United Nations Development Programme (2014). [Imaginando un futuro común: Plan de Desarrollo Integral de los Pueblos Indígenas de Panamá](#), Panama City.

¹⁶ Source: Gender and Diversity Sector Framework Document. IDB calculation based on household surveys.

¹⁷ Law 031.

¹⁸ A decentralized entity under the Ministry of the Environment and Water.

¹⁹ Experimental impact evaluation carried out in small communities of Bolivia: W&S projects reduce diarrhea incidence among children in the 1 to 16 year age group by 10 percentage points with a 47% relative effect between treatment and control groups, a significant reduction in carry time (-0.1hrs) with a 35% relative effect between treatment and control groups ([optional link 19](#)). Investments in W&S systems in Bolivia led to decreases in mortality among children under 5 that are similar in magnitude to those associated with health interventions ([Newman et al., 2002](#), [Galiani et al., 2009](#)); impact of expansion of water networks in Argentina; major reductions in the presence, frequency, and severity of diarrhea episodes among children.

²⁰ Ministry of Public Works, Services, and Housing. The World Bank's Water and Sanitation Program. Bolivia 2003.

of the W&S service operator, (ii) appropriate payment of the rate, and (iii) effective O&M of systems. As for gender, international experience has shown that women fulfill an essential role in the sector by virtue of their involvement in water usage at the household level and their monitoring and promotion of good hygiene practices,²¹ and W&S projects that are designed and implemented with women's participation are more effective and sustainable.²²

- 1.10 **Status of operations 2597/BL-BO and GRT/WS-12956.** The Bank has supported the sector in rural areas and small towns through financing for the following programs: (i) operation 1927/BL-BO, Small Community Water Program, approved in 2007 and now completed, with 62 projects executed for US\$25.8 million, benefiting 17,086 households with water supply and 10,278 households with sewer connections ([optional link 17](#)); and (ii) operations GRT/WS-12956 and 2597/BL-BO, Water and Sanitation Program for Small Towns and Rural Communities of Bolivia, approved in 2012 for US\$40 million (91.1% and 100% executed and 94.8% and 100% committed, respectively, for grant and loan proceeds, with US\$6 million in local counterpart funding under execution), with 119 water projects and 24 sewerage projects executed and 3,528 individual sanitation solutions built, benefiting more than 40,000 households. These programs have also improved service efficiency by strengthening 86 small-community W&S service operators, which, in addition to strengthening more than 20 municipal infrastructure technical units and four departmental government Water, Basic Sanitation and Housing (UNASBVI) units, have helped address the challenge of service sustainability. Through the implementation of sustainability plans, more than 50,000 individuals have received training in water and sanitation service O&M. Likewise, intensive gender mainstreaming efforts have led to an increase in women's participation of between 8 and 25 percentage points, more of whom are reaching positions of responsibility. The impact evaluation's midterm follow-up survey identified a 38-percentage-point increase in access to improved water supply and a 57-percentage-point increase in access to upgraded sanitation facilities among beneficiary households (treatment) compared with the control group, thus building on the environmental and sanitation gains among the beneficiary populations of previous programs.
- 1.11 **The Bank's knowledge of the sector and lessons learned.** This operation has been prepared in view of lessons learned on similar operations in Bolivia and the region ([optional link 13](#)), with emphasis on the need to: (i) improve the preinvestment phase of projects; (ii) implement comprehensive interventions that promote coordination between the works, community-development, and institutional-strengthening components; (iii) include a postconstruction phase in the project cycle to support interventions and assist in service O&M; (iv) develop strategies to promote connectivity to sewerage services and the effective use of individual sanitation solutions; and (v) establish project monitoring systems to help identify key factors for sustainability.

²¹ United Nations (2012), page 25; IDB (2014).

²² Narayan, Deepa (1995). The Contribution of People's Participation: Evidence from 121 Rural Water Supply Projects. World Bank; UN-Water (2006); Gender, Water, and Sanitation: Policy Brief; and van Wijk-Sijbesma, Christine (1998). Gender in Water Resources Management, Water Supply, and Sanitation: Roles and Realities Revisited. International Research Center for Water and Sanitation.

- 1.12 The program includes resources to develop and/or supplement the projects' final designs, based on sociocultural, risk management, climate-change adaptation, community development, and institutional strengthening considerations, and it incorporates the recommendations of the anthropological and gender study conducted during program preparation. In addition, the program will use the joint intervention model combining works, community development, and institutional strengthening, which has been successfully used on previous Bank-financed interventions in Bolivia ([optional link 12](#)).
- 1.13 **The government's strategy.** The diagnostic assessment determined that the activities initiated will need to continue in to fulfill the constitutional mandate of access to W&S and the targets set by the government in the Sector Plan of Basic Sanitation Development 2016-2020 ([optional link 16](#)), namely, 95% water service coverage in urban areas and 80% in small communities, and 70% of sanitation service coverage in urban areas and 60% in small communities, which means that some 1.35 million people need to be connected to water service and 1.6 million to sanitation service in the 2016-2020 period. Meanwhile, the Ministry of the Environment and Water is developing the National Water and Sanitation Strategy's Rural and Small Town Sector Approach ([optional link 14](#)). Its objective is to establish an operational strategic framework for intervention in that sector and, to that end, incorporates lessons learned from previous Bank operations (paragraphs 1.10 and 1.11).
- 1.14 **The Bank's strategy with Bolivia.** The program is aligned with the IDB Country Strategy with Bolivia 2016-2020 (document GN-2843), as it will contribute to the strategic objective of "expand[ing] water and sanitation coverage," mainly in rural areas.
- 1.15 **Strategic alignment.** The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is aligned with the development challenge of social inclusion and equality through increased access to W&S services in areas with poverty rates above the national average. The program is also aligned with the crosscutting theme of climate change and environmental sustainability, as it will improve environmental conditions by building infrastructure to provide sewerage and wastewater treatment services. Approximately 67.84% of the operation's proceeds will be invested in climate-change adaptation activities, in accordance with the multilateral development banks' joint [methodologies](#) for tracking climate financing ([optional link 20](#)). These resources contribute to the IDB Group's target of increasing financing for projects related to climate change to 30% of all operation approvals by year-end 2020. The program is also aligned with the crosscutting theme of gender equality and diversity, as it includes activities aimed at empowering women and promoting development with identity. Moreover, the program will contribute to the Corporate Results Framework 2016-2019 (document GN-2727-6) through the outputs "households with new or upgraded access to drinking water," "households with new or upgraded access to sanitation," and "households with wastewater treatment." Lastly, it is aligned with the "Sustainable Infrastructure for Competitiveness and Inclusive Growth" strategy (document GN-2710-5), particularly with the priority area of "support the construction and maintenance of socially and environmentally sustainable infrastructure, thus enhancing quality of life," and it is consistent with the dimensions of success and lines of action set forth in the Water and Sanitation

Sector Framework (document GN-2781-8), of universal access and improved service quality and of social and environmental sustainability

- 1.16 **Compliance with the Public Utilities Policy.** The proposed program and the national sector-specific objectives are consistent with the principles of the Public Utilities Policy (document GN-2716-6) and satisfy the conditions of financial sustainability and economic evaluation. The W&S service operators included in the sample cover their O&M costs through a combination of user fees (regular and special) and timely transfers from MAGs, as needed. W&S service operators will be required to generate sufficient operating revenue to cover their O&M costs. Otherwise, the MAGs agree to take the necessary measures, acceptable to the Bank, to ensure the operators' financial sustainability (paragraph 1.25). The works to be financed under the program are socially and economically feasible (paragraph 1.23). For projects not included in the sample, the corresponding eligibility criteria are included to ensure compliance with this policy (paragraph 3.5) ([optional link 8](#)).

B. Objective, components, and cost

- 1.17 **Objective.** The program objective is to improve the environmental and health-related living conditions of residents in Bolivia's small and medium-sized cities by increasing coverage of W&S services. To achieve this objective, the program is structured in a single component:
- 1.18 **Component 1: Investments in water and sanitation, and support for management (US\$72.83 million).** This component includes the following: (i) preinvestment: feasibility studies and final design; (ii) W&S works: construction, rehabilitation/replacement, and expansion of water systems, sewerage networks, wastewater treatment plants, other sanitation solutions, and environmental management and works supervision; (iii) community development: financing will be provided for the following activities (a) community organization for community control of projects and service delivery; (b) awareness-raising for payment for service; (c) self-construction, use, and maintenance of sanitation solutions; and (d) health and environmental education workshops, with an emphasis on women's participation. Financing will also be provided for educational campaigns on: (i) appropriate use of and payment for services, (ii) connectivity to sewerage networks, and (iii) do-it-yourself bathroom construction; (a) service management through institutional strengthening of W&S service operators: training in O&M, to include strengthening of MAGs and DAGs for technical assistance and monitoring of systems built through the municipal internal technical units; and (b) the water and sanitation information system for small communities: specific consulting contracts will be financed to support the Ministry of the Environment and Water and the MAGs and DAGs in collecting and interpreting data on W&S services, including training and strengthening with the aim of maintaining an updated database for sector planning.
- 1.19 In addition, the program will provide financing for administrative, tracking, and monitoring expenditures (equipment and technical and fiduciary personnel of the executing and coexecuting agencies) as well as for spending related to the program's external auditing and midterm and final evaluations ([optional link 18](#)).

- 1.20 **Cost and financing.** The total program cost is US\$79 million and will be financed by the Bank. The budget is broken down by component in Table I-1. The proceeds of the loan will be used to finance the entire cost of the program ([optional link 18](#)).

Table I-1. Program cost (US\$ millions)

Component	IDB	TOTAL
Component 1: Investments in water and sanitation, and support for management	72.83	72.83
Administration, monitoring, evaluation, and auditing	6.17	6.17
Program total	79.00	79.00

C. Key results indicators

- 1.21 The main program outcomes are related to improving access to W&S through comprehensive interventions to reduce identified gaps in coverage (paragraph 1.2). The key outcome indicators are listed in Table I-2 below (see Annex II).

Table I-2 – Key indicators

Outcome indicator	Unit of measure	Baseline	Target
Households in communities of fewer than 2,000 inhabitants with new access to water network	Household	0	7,300
Households in small and medium-sized cities with more than 2,000 inhabitants with new access to water network	Household	0	6,500
Households connected to a new sanitation network in small and medium sized cities with more than 2,000 inhabitants	Household	0	12,400

- 1.22 **Technical feasibility.** A representative sample of 20 feasibility and preinvestment projects in 14 communities across nine departments was reviewed. The solutions' technical feasibility is duly justified in most of the designs, with additional information or minimal adjustments to project documents required in some cases ([optional link 1](#)). Feasibility studies and final designs will be completed before W&S construction works can be bid out. These studies and designs must also be approved in advance by the Ministry of the Environment and Water. All studies and designs will meet the requirements of Bolivian law and regulations, as well as international standards. The solutions adopted in each case will be the lowest-cost technically feasible alternative, pending agreement with the community. The program Operating Regulations will specify the technical criteria and procedures to be used by the executing agencies.
- 1.23 **Socioeconomic feasibility.** Because this will be a multiple-works program, a cost/benefit analysis of the representative sample of projects was prepared. Accordingly, 1,050 socioeconomic surveys were administered in communities of the sample. For the small and medium-sized cities segment, three water projects and six sanitation projects were analyzed. All of the projects evaluated were found to be economically feasible, with an economic internal rate of return (EIRR) of between 14.3% and 39.8%. For the small communities segment, a cost/benefit

analysis was conducted on a sample of six projects for water and individual sanitation solutions. All projects are economically feasible with EIRRs of between 12.8% and 37.0%. For projects not evaluated, a cost/benefit analysis will be carried out and only those with an EIRR above 12% would be eligible for program financing. The monthly rate that users of W&S systems in the sample would pay ranges from 4.1 to 30 bolivianos (US\$0.60 and US\$4.40) per connection. According to the socioeconomic surveys, the rates associated with the systems to be financed by the program are equivalent to between 0.3% and 1.6% of monthly family income, which are acceptable costs ([optional link 2](#)).

- 1.24 **Institutional feasibility.** Drawing on the lessons learned and synergies created, the execution arrangements with the same executing and coexecuting agencies for the previous phase of the program (paragraph 1.10) will remain in place to leverage installed capacity at the institutional level, including human resources and processes (paragraph 3.1). The learning curve for the aforementioned agencies will therefore be shorter, owing to: (i) their knowledge of the Bank's fiduciary policies; (ii) the diverse portfolio of the program's projects; and (iii) their previous execution experience with projects similar to the ones financed under this program, thereby facilitating the continuity of operations in rural areas of Bolivia. The Institutional Capacity Assessment System (ICAS) evaluation ([optional link 3](#)) conducted during the program preparation phase found that the executing and coexecuting agencies have a satisfactory degree of development and low level of risk. Capacity building of the executing and coexecuting agencies will consolidate their structure with technical and fiduciary personnel who will assume responsibility for programming; for financial, technical, and operational management; and for monitoring and evaluation. Institutional-strengthening activities for the executing and coexecuting agencies will also be included to help them execute and monitor the program.
- 1.25 **Sustainability of investments.** As part of the financial feasibility analysis, a representative sample of projects to be financed was analyzed. The design of these projects included service rates to cover the O&M and administrative costs of W&S systems associated with the operation. Before commencing the works, meetings will be held with the community to secure the beneficiaries' commitment to making the monthly payments needed to cover these costs; this criterion will be included in the program Operating Regulations (paragraph 3.5). Service management actions will also include institutional strengthening activities²³ (paragraph 1.18) to support the operational and financial sustainability of system operators (W&S service operators); this sustainability will be monitored through an information system, such as the Rural Water and Sanitation Information System (SIASAR)²⁴ (paragraph 1.26) ([optional link 4](#)). This system, in turn, will support investment planning in the sector ([optional link 15](#)). Accordingly, the program will provide the necessary resources for its use by the MAGs and DAGs. The intergovernmental agreements to be signed will include a requirement that service operators' operational revenues must be sufficient to cover their O&M costs. In the

²³ Using resources from operation ATN/OC-15935-BO, progress has been made in developing institutional-strengthening plans for four service operators in the sample ([optional link 4](#)).

²⁴ The SIASAR is an information platform for managing, planning, and monitoring the rural W&S sector (www.siasar.org).

event such revenues are insufficient, the MAGs will agree to take the necessary measures—that are acceptable to the Bank—to ensure the financial sustainability of the program’s works. Other eligibility criteria are included in the Operating Regulations to ensure financial sustainability (paragraph 3.5). The investment contracts with construction companies will include an “assisted operation phase” of between six months and one year. During this phase, the contractor will jointly operate the newly built systems together with the corresponding service operator, laying a solid foundation for their proper O&M. The above-mentioned intergovernmental agreements will also include a requirement to update the data in small-community water and sewer information systems prior to construction of the civil works.

- 1.26 The program also includes community development activities (paragraph 1.18) to be carried out alongside the institutional strengthening activities for service operators. The community development activities are based on the social regulations approved by the Ministry of the Environment and Water and in complementary instruments, such as the guidelines for implementing a comprehensive gender approach in Bolivia’s basic sanitation sector. During program preparation, an anthropological and gender study was conducted in eight indigenous communities to identify: (i) livelihoods, local and ancestral knowledge, and practices associated with the use of water resources; and (ii) gender roles in the delivery and management of W&S services in small communities. On this basis, financing will be provided for activities aimed at promoting women’s participation in: (i) construction and O&M of services; and (ii) decision-making processes of W&S service operators. Work related to menstrual hygiene will also be carried out at the community level and with school-aged children. To ensure that the program is culturally relevant, (i) training processes will use appropriate methodologies and languages; (ii) specialists from the executing agencies will receive intercultural training; and (iii) community engagement in the construction of the works will be promoted ([optional link 5](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 **Modality.** The program has been designed as a multiple-works investment loan as it encompasses separate W&S projects in accordance with eligibility criteria and includes a representative sample for evaluation and execution. With a five-year execution and disbursement period, consistent with the multiyear execution plan ([required link 1](#)), the program will address the demands prioritized by the national and municipal governments and will be governed by the Operating Regulations (paragraph 3.4). The disbursement timetable is shown in Table II-1.

Table II-1 – Disbursement timetable (US\$ millions)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB	6.25	18.50	17.52	22.51	14.22	79.00
%	8	23	22	29	18	100

- 2.2 **Representative sample.** To determine the program’s feasibility and expedite execution once it has been approved, a representative sample of the type of

projects to be executed was analyzed. The representative sample of projects amounted to a total investment of US\$29.13 million, which equates to 36.9% of the investment amount²⁵ ([optional link 1](#)). In addition, eligibility and prioritization criteria (paragraph 3.5) have been established for all project types to be financed under the program.

B. Environmental and social risks

- 2.3 **Environmental safeguards.** The negative impacts caused by the program are likely to be local and short-term for which and effective mitigation measures will be available. Therefore, in accordance with the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703), the program has been classified as category "B."
- 2.4 A prevention and mitigation program/environmental implementation and monitoring plan was prepared for each project in the sample, and the environmental and social impacts and risks that are typical for the type of works planned were analyzed. The corresponding mitigation measures have been identified, including a community relations plan, an industrial safety and occupational health plan, a contingency plan, and a solid waste management and control plan. As for social risks, the quality of life of local residents is likely to be temporarily affected by disruptions of vehicle and pedestrian traffic, demolition and repaving works, an increased risk of accidents, and potential conflicts between works personnel and local residents. The program will not entail the physical resettlement of residents, nor is it expected to cause harm owing to economic displacement. The projects in the sample have been reviewed with the beneficiary/affected communities, and their reaction has been quite favorable ([optional link 2](#)).
- 2.5 In accordance with the Disaster Risk Management Policy (Operational Policy OP-704), the operation entails a moderate level of risk due to the operation's and the country's vulnerability to floods and drought. To mitigate this risk, Bolivian law requires that the design include disaster-risk analysis and management as well as climate-change adaptation measures.
- 2.6 The program will be implemented in municipios with a majority indigenous population (no negative impacts on this population are anticipated). An intercultural and gender intervention strategy has been developed to ensure that projects are culturally relevant and promote the effective engagement of women in their activities and benefits.
- 2.7 The Environmental and Social Management Framework is part of the program Operating Regulations. It includes evaluation requirements and procedures for the projects to be financed, guidelines for consultation processes, and a complaints and claims mechanism.

²⁵ The sample, which was prepared in accordance with the program's eligibility criteria, consisted of 20 projects. Ten of these projects were in the segment of less than 2,000 inhabitants for US\$5.85 million (five water projects and five sanitation projects), and the other 10 were in the segment of towns of more than 2,000 inhabitants for US\$23.27 million (four water projects and six sewerage projects with wastewater treatment plants).

C. Fiduciary risks

- 2.8 The program's fiduciary risks are deemed low, and the executing and coexecuting agencies have prior experience with the Bank's fiduciary policies (paragraph 1.24).

D. Other risks

- 2.9 Additional medium- and high-level development risks were identified in connection with: (i) improper O&M of the systems; accordingly, the program includes activities to strengthen the W&S service operators and community development activities, as well as a provision for proper O&M; the fiscal situation of the MAGs and DAGs will be monitored as well; and (ii) out-of-date management information for existing water and sanitation systems; accordingly, the program includes resources to support the MAGs and DAGs in keeping these systems up to date, and a requirement to this effect will be included in the intergovernmental agreements.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Execution arrangements.** The borrower will be the Plurinational State of Bolivia. The Ministry of the Environment and Water will be responsible for the program's execution, through the program coordination unit (PCU)²⁶ and the FPS (paragraph 1.24).²⁷ The PCU will administer and execute the resources allocated for the projects to be financed for cities and communities with fewer than 10,000 inhabitants, and for water and sanitation information systems. The FPS will administer and execute the resources allocated for projects to be financed for medium-sized cities with more than 10,000 inhabitants. The Ministry of the Environment and Water, will be responsible for guiding and developing strategies and guidelines to facilitate effective implementation of the program ([optional link 3](#)).
- 3.2 The executing and coexecuting agencies will be responsible for overall coordination, resource management, and technical, administrative, and operational execution of the program. The structure of the executing and coexecuting agencies will include an execution team, the profiles of which will be included in the program Operating Regulations. Additionally, the Bank's no objection must be received prior to hiring the key members of that team. The responsibilities of the execution team of the executing and coexecuting agencies will include: (i) preparing and regularly updating the MEP, the annual work plan, and the procurement plan; (ii) conducting processes for the selection of works, goods, and consulting services; (iii) carrying out activities to supervise the works, monitor execution, and conduct evaluations; and (iv) financial management and submittal of required financial reports to the Bank ([optional link 3](#)).

²⁶ The PCU was created by Ministry of the Environment and Water Ministerial Resolution 283 of 3 December 2009. A decentralized unit within the Ministry of the Environment and Water, the PCU was established to execute, monitor, and evaluate W&S projects.

²⁷ The FPS was created by Executive Decree 25984 of 16 November 2000 as a decentralized agency governed by public law with its own legal standing, technical and social administrative autonomy, nationwide jurisdiction, and decentralized operations at the departmental level. It is currently attached to the Ministry of Development Planning.

- 3.3 The MAGs will be responsible for providing services, either directly or through the W&S service operators, in coordination with the DAGs. Respective intergovernmental agreements will be signed between the executing agency or coexecuting agency, the MAG, the DAG, and the appropriate W&S service operator for the purpose of O&M of the works. These agreements will set forth the conditions for participation in the program and commitments for O&M of the systems to be built.
- 3.4 **Program Operating Regulations.** Program execution will be governed by the program Operating Regulations, which will include: (i) detailed execution arrangements; (ii) eligibility and prioritization criteria; (iii) institutional roles and responsibilities of the entities involved; (iv) a strategy for intervention in the various phases of the project cycle; (v) rules and procedures for the selection and contracting of works, goods, and services; (vi) rules and procedures for administrative and financial management; (vii) social and environmental feasibility criteria for the approval of projects to be financed under the program; (viii) procedures for evaluating the environmental and social impact of projects to be financed by the program; (ix) the Environmental and Social Management Framework ([optional link 11](#)); and (x) monitoring procedures ([optional link 6](#) and [optional link 7](#)).
- 3.5 **Eligibility and prioritization criteria.** The following eligibility criteria will apply to the projects to be financed under the program: (i) a legally established W&S service operator, where indicated; (ii) commitment from the community to make monthly payments to cover the O&M and administrative costs of the W&S systems; (iii) the operational revenues of each service operator must be sufficient to cover its O&M and administrative costs, and, if this is not the case, the MAGs will agree to take necessary steps acceptable to the Bank in order to ensure that the program's works are financially sustainable; (iv) projects must be socioeconomically,²⁸ legally, technically, socially, and environmentally feasible; and (v) projects classified as category "A," in accordance with the Bank's Environment and Safeguards Compliance Policy, or that entail the resettlement of residents or permanent adverse impacts in critically important natural habitats, will not be eligible. The projects will be prioritized on the basis of coverage gaps and poverty levels.
- 3.6 **Multiyear execution plan.** The program's activities will be programmed through the MEP, and the annual revision of that plan will be included in the corresponding annual work plan ([required link 1](#)). The MEP contains detailed information equivalent to the annual work plan for each year of execution. However, it will be revised each year based on the actual progress made in the program. Annual revisions of the MEP must be submitted to the Bank.
- 3.7 **Fiduciary agreements and requirements.** The fiduciary agreements and requirements (Annex III) reflect the financial management and procurement guidelines to be used in the program. They are based on an analysis of the fiduciary context of the country, the executing agency, and the coexecuting agency; an institutional analysis of the executing agency and coexecuting agency; the risk workshop held with personnel from all participating entities;

²⁸ EIRR greater than 12%.

meetings held with personnel of the executing and coexecuting agencies; and meetings held on a continuous basis with the project team and key personnel from participating entities.

- 3.8 **Procurement plan.** The procurement plan ([required link 4](#)) contains detailed information on the program's procurement processes to be carried out in accordance with the Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (document GN-2350-9). It details: (i) the contracts for works, goods, and consulting services needed to carry out the program; (ii) the proposed methods for the contracting of goods and the selection of consultants; and (iii) the procedures used by the Bank in reviewing procurement processes. The borrower will update the procurement plan on an annual basis or as needed for the program. Any proposed revision to the procurement plan must be submitted to the Bank for approval.
- 3.9 **Special contractual conditions precedent to the first disbursement.** In accordance with the terms and conditions previously agreed upon with the Bank, the following will be special contractual conditions precedent to the first disbursement of loan proceeds: (i) approval of the program's Operating Regulations by the Ministry of the Environment and Water, and the Bank's no objection, as well as their entry into effect under the terms previously agreed upon with the FPS; these regulations will include an environmental and social framework annex; and (ii) designation, by the executing and coexecuting agencies, of their key personnel for the program. These conditions are seen as essential to ensuring that the borrower, the executing agency, and the coexecuting agency will be prepared to begin executing the program; an execution team has been formed; and program Operating Regulations are in place, setting forth detailed guidelines on operational and coordination-related matters.
- 3.10 **Special contractual conditions for execution.** Prior to the award of the works contracts, evidence will be submitted of the signature and entry into effect of an intergovernmental agreement for each works project between the corresponding executing agency or coexecuting agency, MAG, DAG, and water and sanitation service operator, in accordance with the terms and conditions previously agreed upon with the Bank, for the operation and maintenance of such works. This condition is needed to ensure that the borrower has formed a channel for dialogue among the entities participating in the program, which will help facilitate coordination among and involvement of these entities, and will also help ensure that the MAG and the appropriate W&S service operator have clearly established their roles and responsibilities in execution as well as in O&M of program-financed works.
- 3.11 **Operation and maintenance.** The borrower, through the executing agency and coexecuting agency, commits to: (i) properly maintaining the works and equipment for the program, in accordance with generally accepted technical standards; and (ii) submitting to the Bank, during the execution period, and within the first quarter of each calendar year, a report on the status of such works and equipment, as well as the annual maintenance plan for that year, including the personnel and

resources to be used for this purpose. If, on the basis of inspections the Bank conducts or reports it receives, maintenance is determined to be below the agreed levels, the borrower, the executing agency, and the coexecuting agency will take the necessary measures to correct all deficiencies.

- 3.12 **Auditing.** During the disbursement period for the loan, and within 120 days after the end of the fiscal period, the program's audited annual financial statements will be submitted to the Bank. The audit will be conducted by independent auditors acceptable to the Bank. The scope and other related aspects will be governed by the Financial Management Guidelines for IDB-financed Projects (document OP-273-6) and the Guidelines for Financial Reports and External Audits. The costs of the audit will be financed with program resources. The PCU will be responsible for hiring the audit firm.

B. Summary of results monitoring arrangements

- 3.13 **Monitoring.** The executing and coexecuting agencies will prepare reports documenting the progress and attainment of outcomes in the activities within their purview. The monitoring system will include the procurement plan, the MEP, the annual work plan, the results matrix, the progress monitoring report, and the risk management plan. The executing and coexecuting agencies will submit, within 60 days after the end of each six-month period, semiannual reports to documenting the progress made and outcomes attained and to set forth an action plan for the next six months ([required link 2](#)).
- 3.14 **Evaluation.** The PCU will commission the following program evaluations: (i) a midterm evaluation, to be submitted within 90 days after 50% of program resources have been disbursed; and (ii) a final evaluation, to be submitted within 90 days after 90% of the program's resources have been disbursed. The proposed evaluation methodology is a before-and-after approach, to consist of measuring outcome indicators for the program baseline and after the interventions have been implemented, and comparing these measurements to verify the fulfillment of targets. An ex post economic evaluation will also be conducted using the methodology used for the ex ante evaluation, comparing costs of investments carried out, O&M costs, and program benefits, estimated in the manner specified in the monitoring and evaluation plan. In addition, the program will use a quasi-experimental differences-in-differences methodology to measure impacts on outcome indicators in the administrative data source of small-community water and sanitation information systems ([required link 2](#)).

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Gender Equality and Diversity -Climate Change and Environmental Sustainability	
Country Development Results Indicators	-Households with new or upgraded access to drinking water (#)* -Households with new or upgraded access to sanitation (#)* -Households with wastewater treatment (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2843	Expand water and sanitation coverage, principally in rural areas
Country Program Results Matrix	GN-2915-2	The intervention is included in the 2018 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution	10.0	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	4.0	
3.3 Results Matrix Quality	3.0	
4. Ex ante Economic Analysis	10.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	3.0	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	1.0	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	1.0	
5. Monitoring and Evaluation	8.5	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	6.0	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Low	
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	
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting. Procurement: Information System, Price Comparison, Contracting Individual Consultant.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
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 through Technical Cooperation BO-T1258.

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

The objective of the Water and Sanitation Program for Intermediate and Small Towns is to improve the living conditions in environmental and health terms of the population of intermediate and small towns in Bolivia. To achieve these objectives, the program supports investments in potable water, sanitation and management support.

The project presents a cost-benefit analysis that supports the economic viability of the proposed activities. The vertical logic presented in the loan proposal is consistent with the indicators presented in the results matrix, and includes indicators for the main outputs, outcomes and impacts. Indicators meet SMART criteria and include baseline and target values as well as the sources and means of verification that will be used to measure them. Although no final impact indicators are proposed, the program will monitor intermediate indicators related to access and use of water and sanitation systems.

The MMAyA, through the UCP and the FPS, will oversee the planning and monitoring of the program. The program proposes a quasi-experimental impact evaluation using a Differences in Differences methodology and administrative data (SIASAR) to measure the impact on intermediate indicators of access, use and quality of water and sanitation systems, although the plan for the impact evaluation is still missing some information at this time.

RESULTS MATRIX

Program objective	The program objective is to improve the environmental and health-related living conditions of residents in Bolivia’s small and medium-sized cities through increased coverage of water and sanitation (W&S) services.									
Outcomes										
Outcome 1: Increased and/or improved access to water in communities with fewer than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Households in communities with fewer than 2,000 inhabitants that have new access to water network	Household	0	2017			200	320	6,780	7,300	<ul style="list-style-type: none">Only Includes the communities targeted by the programNew access: households that currently do not get water from a public networkA household is considered to have access to clean water when it receives water service in the amount (liters/person/day), continuity (hours/day), and quality (minimum parameters in accordance with Bolivian standard 512) specified in the designCorporate Results Framework (CRF) indicatorMeans of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households in communities with fewer than 2,000 inhabitants that have improved access to water network	Household	0	2017			80	140	160	380	<ul style="list-style-type: none">Only Includes the communities targeted by the programImproved access: households in communities that currently have a water system connected to the public networkA household is considered to have access to clean water when it receives water service in the amount (liters/person/day), continuity (hours/day), and quality (minimum parameters in accordance with Bolivian standard 512) specified in the designCRF indicatorMeans of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Average water consumption in communities with fewer than 2,000 inhabitants	Cubic meters per household per month	1.2						4.2-10.5	4.2-10.5	<ul style="list-style-type: none">Baseline of socioeconomic surveyOnly Includes the communities targeted by the programMeans of verification: ex post socioeconomic surveys

Outcome 2: Increased and/or improved access to sanitation in communities with fewer than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Households connected to a new network-based sanitation system in communities with fewer than 2,000 inhabitants	Household	0	2017			160	240	4,800	5,200	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households with improved access ¹ to a network-based sanitation system in communities with fewer than 2,000 inhabitants	Household	0	2017					530	530	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households whose wastewater is treated in communities with fewer than 2,000 inhabitants	Household	0	2017			160	240	5,350	5,750	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households in communities with fewer than 2,000 inhabitants that use the sanitation solution built	Household	0	2017			130	193	2,163	2,486	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)

¹ Includes households actually connected to the network.

Outcome 3: Increased and/or improved access to water in small and medium sized cities with more than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Households in small and medium-sized cities with more than 2,000 inhabitants with new access to water network	Household	0	2017			1,440	2,160	2,900	6,500	<ul style="list-style-type: none"> Only Includes the communities targeted by the program New access: households that currently do not get water from a public network A household is considered to have access to clean water when it receives water service in the amount (liters/person/day), continuity (hours/day), and quality (minimum parameters in accordance with Bolivian standard 512) specified in the design CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households in small and medium-sized cities with more than 2,000 inhabitants with improved access to water network	Household	0	2017			1,600	2,400	2,550	6,550	<ul style="list-style-type: none"> Only Includes the communities targeted by the program Improved access: households in communities that currently have a water system connected to the public network A household is considered to have access to clean water when it receives water service in the amount (liters/person/day), continuity (hours/day), and quality (minimum parameters in accordance with Bolivian standard 512) specified in the design CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Average water consumption in small and medium-sized cities with more than 2,000 inhabitants	Cubic meters per household per month	2.5						4.2 – 10.5	4.2 – 10.5	<ul style="list-style-type: none"> Baseline of socioeconomic survey Means of verification: ex post socioeconomic surveys

Outcome 4: Increased and/or improved access to sanitation in small and medium sized cities with more than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Households connected ² to a new network-based sanitation system in small and medium-sized cities with more than 2,000 inhabitants	Household	0	2017			3,720	5,580	3,100	12,400	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households with improved access ³ to a network-based sanitation system in small and medium-sized cities with more than 2,000 inhabitants	Household	0	2017			1,240	1,860	340	3,440	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Households whose wastewater is treated in small and medium-sized cities with more than 2,000 inhabitants	Household	32,000				4,960	7,440	3,430	15,830	<ul style="list-style-type: none"> Only Includes the communities targeted by the program CRF indicator Means of verification: report upon program completion based on sources of verification for works (final delivery) and community development (registry of users)
Outcome 5: Water and sanitation service operators strengthened in communities with fewer than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Water systems operating according to design specifications in communities with fewer than 2,000 inhabitants targeted by the program	%	0	2017					90	90	Design specifications: quantity (liters/person/day), continuity (hours/day), and quality (minimum parameters in accordance with Bolivian standard 512). All three dimensions of this indicator must be fulfilled; otherwise it is unfulfilled. Means of verification: SIASAR reports
Wastewater treatment plants operating according to design specifications in communities with fewer than 2,000 inhabitants targeted by the program	%	0	2017					90	90	Design specifications: discharge quality in accordance with project design Means of verification: SIASAR reports

² Includes a 90% connection level.

³ Includes households actually connected to the network.

Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
W&S service operators in communities with fewer than 2,000 inhabitants targeted by the program that can cover their administrative and operation and maintenance (O&M) costs with the rates they charge	%	45 ⁴	2017					90	90	Means of verification: SIASAR reports W&S service operators' annual reports on revenues and outlays
Outcome 6: Water and sanitation service operators strengthened in small and medium-sized cities with more than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Water systems operating according to design specifications in small and medium-sized cities with more than 2,000 inhabitants targeted by the program	%	0	2017					90	90	Design specifications: quantity (liters/person/day), continuity (hours/day), and quality (minimum parameters in accordance with Bolivian standard 512). All three dimensions of this indicator must be fulfilled; otherwise it is unfulfilled. Means of verification: SIASAR reports
Wastewater treatment plants operating according to design specifications in small and medium-sized cities with more than 2,000 inhabitants targeted by the program	%	0	2017					90	90	Design specifications: discharge quality in accordance with project design Means of verification: SIASAR reports
W&S service in small and medium-sized cities with more than 2,000 inhabitants targeted by the program that can cover their administrative and O&M costs with the rates they charge	%	85 ⁵	2017					90	90	Means of verification: SIASAR reports W&S service operators' annual reports on revenues and outlays
Outcome 7: Increased women's participation in entities that manage, operate, and maintain water and sanitation services in communities with fewer than 2,000 inhabitants										
Indicator	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Women's participation in entities that manage, operate, and maintain W&S services	(number of women / total number of employees) x 100	10.5	2017					25	25	Means of verification: SIASAR reports W&S service operators' records and founding documents

⁴ The baseline was established on the basis of the project sample and will be recalculated when new projects are added. The target is for all beneficiary service operators in the program.

⁵ Idem.

Outputs											
Component 1. Investments in water and sanitation, and support for management											
Output	Unit of measure	Associated outcomes	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments / Means of verification
Designs for waterworks and/or sanitation works prepared <u>Milestones:</u> Designs prepared for communities with fewer than 2,000 inhabitants Designs prepared for small and medium-sized cities with more than 2,000 inhabitants	Design		996,836	0	0	35	25	0	0	60	Certificate of reception approved by works supervision authority, oversight authority, and PCU-PAAP coordinator
	Design	1 and 2	830,696	0	0	30	20	0	0	50	
	Design	3 and 4	166,140	0	0	5	5	0	0	10	
Water systems built, new, or expanded <u>Milestones:</u> Systems built in communities with fewer than 2,000 inhabitants Systems built in communities of between 2,000 and 20,000 inhabitants	System		17,465,907	0	0	5	1	13	13	32	Certificate of reception approved by works supervision authority, oversight authority, and PCU-PAAP or FPS coordinator
	System	1	9,763,364	0	0	5	0	10	10	25	
	System	3	7,702,542	0	0	0	1	3	3	7	
Water systems rehabilitated⁶ <u>Milestones:</u> Systems rehabilitated/improved in small and medium-sized cities with more than 2,000 inhabitants Systems rehabilitated/improved in small and medium-sized cities with more than 2,000 inhabitants	System		8,562,204	0	0	1	1	2	1	5	Idem
	System	1	1,823,198	0	0	1	0	1	1	3	
	System	3	6,739,006	0	0	0	1	1	0	2	
Sewerage systems built, new, or expanded <u>Milestones:</u> Systems built in communities with fewer than 2,000 inhabitants Systems built in small and medium-sized cities with more than 2,000 inhabitants	System		22,205,711	0	0	5	6	7	6	24	Idem
	System	2	8,384,940	0	0	5	0	7	6	18	
	System	4	13,820,771	0	0	0	6	0	0	6	
Wastewater treatment plants built, new, or expanded <u>Milestones:</u> Wastewater treatment plants built in communities with fewer than 2,000 inhabitants Wastewater treatment plants built in small and medium-sized cities with more than 2,000 inhabitants	Plant		9,516,733	0	0	1	5	9	8	23	Idem
	Plant	2	3,593,546	0	0	1	0	9	8	18	
	Plant	4	5,923,188	0	0	0	5	0	0	5	

⁶ Projects that do not increase coverage.

Outputs											
Component 1. Investments in water and sanitation, and support for management											
Output	Unit of measure	Associated outcomes	Cost (US\$)	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Program end	Comments/means of verification
Sanitation solutions built <u>Milestones:</u>	Solution		5,199,846	0	0	500	0	1,500	1,500	3,500	
Solutions built in communities with fewer than 2,000 inhabitants	Individual solution	2	5,199,846	0	0	500	0	1,500	1,500	3,500	Certificate of reception approved by works supervision authority, oversight authority, and PCU-PAAP coordinator.
Institutional strengthening plans for W&S service operators implemented⁷ <u>Milestones:</u>	Plan		2,601,156	0	0	6	7	36	29	78	
Plans implemented in communities with fewer than 2,000 inhabitants	Plan	5	2,001,515	0	0	6	0	30	24	60	Report by PCU-PAAP or FPS
Plans implemented in small and medium-sized cities with more than 2,000 inhabitants	Plan	6	599,641	0	0	0	7	6	5	18	
Community development plans implemented⁸ <u>Milestones:</u>	Plan		5,287,386	0	0	6	7	36	29	78	
Plans implemented in communities with fewer than 2,000 inhabitants	Plan	1 and 2	3,894,273	0	0	6	0	30	24	60	Idem
Plans implemented in small and medium-sized cities with more than 2,000 inhabitants	Plan	3 and 4	1,393,113	0	0	0	7	6	5	18	
Communities included in the SIASAR	Communities	5 and 6	945,000	0	0	780	0	0	780	1,560	Reports generated by the SIASAR database
Women trained in entities that manage, operate, and maintain W&S services	Women	7	53,000	0	0	0	40	40	40	120	Idem

⁷ The institutional strengthening plans will be considered implemented when at least three of their prioritized activities have been completed.

⁸ Includes the following: for the segment of fewer than 2,000 inhabitants: (i) project dissemination; community organization; awareness-raising about payment for service, level of service, and the corresponding rate; and women's participation in decision-making; (ii) self-construction, use, and maintenance of individual sanitation solutions; (iii) environmental and health education (personal hygiene, menstrual hygiene, household sanitation, appropriate water usage, use and maintenance of eco toilets, garbage and sewage control, and protection and conservation of water sources), with an emphasis on women's participation; (iv) training in system management. For the segment of between 2,000 and 20,000 inhabitants: (i) appropriate use of, and payment for, services; and (ii) connectivity to sewerage networks. W&S service operators will be trained in (i) system management, and (ii) O&M.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Plurinational State of Bolivia
Name:	BO-L1184: Water and Sanitation Program for Small and Medium-sized Cities
Executing agency:	Ministry of the Environment and Water and National Productive and Social Investment Fund (FPS)
Coexecuting agency:	Ministry of Planning and Development through the FPS
Prepared by:	Patricia Toriz Monroy and Shirley Foronda (FMP/CBO)

I. EXECUTIVE SUMMARY

- 1.1 The analysis of the institutional capacity of the Ministry of the Environment and Water, specifically of its program coordination unit (PCU) and the FPS, was performed using the Institutional Capacity Assessment System (ICAS) and on the basis of the outcomes of the first phase of the program.¹
- 1.2 The results of the ICAS found that both executing agencies have satisfactory levels of institutional capacity development, implying low levels of risk for program execution and fiduciary management. It is therefore recommended that the program's financial and procurement areas be strengthened with trained and experienced personnel. The program's coordination mechanisms, procurement and financial procedures, and flow diagrams for each stage of the process will be set forth in the corresponding program Operating Regulations for each executing agency.
- 1.3 Financial management will be carried out through the National Public Management System (SIGEP), which includes accounting, cash management, and budgetary modules that facilitate the timely generation of financial information for decision-making. However, the SIGEP is limited in its ability to issue financial reports in the formats established by the Bank. Consequently, the Bank's Integrated Project Financial Management System (SIAP) will be used in parallel, and as a complementary accounting record for issuing reports, including disbursement requests. The implementation of the SIGMA/SIGEP project accounting management module is expected in 2018, which will allow both executing agencies to issue financial reports in the currency of the loan contract and in accordance with the established budget.
- 1.4 The Bank's standard bidding documents, or those agreed upon with the Office of the Deputy Minister for Public Investment and External Financing and made

¹ Operations 2597/BL-BO and GRT/WS-12956.

- available through the Government Procurement System (SICOES),² will be used in program execution.
- 1.5 The announcement of procurement processes involving international competitive bidding (ICB) and the selection of international consultants (e.g. calls for bids, requests for statements of interest, clarification bulletins, amendments, and results of procurement processes) will be made on the United Nations Development Business website. These and all other processes may also be published on the SICOES website and in national newspapers.
 - 1.6 An agreement between the Bolivian government and the Bank for partial use of the Basic Rules of the Goods and Services Administration System (NB-SABS) on Bank-financed operations in Bolivia is now in the process of being signed. This program may invoke the aforementioned agreement once it enters into force.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

- 2.1 Law 1178 on government administration and control of 20 July 1990, known as the SAFCO law, regulates systems for the administration and control of government resources and their relationship to country systems for public planning and investment, establishing subsystems for planning (programming of operations, administrative organization, and budget), execution (treasury and public debt, integrated government accounting, personnel administration, administration of goods and services), and government control (internal and external control). This law is binding.
- 2.2 Although the systems contribute to transparent and comprehensive public finance execution, there are areas where they need further strengthening, for example:
- 2.3 **Administration of goods and services (procurement).** Except as provided in paragraph 1.5, the NB-SABS system is not acceptable to the Bank. Both entities, in accordance with paragraph 1.3, must have the fiduciary capacity to carry out the activities related to their execution component.
- 2.4 **Budget.** Bolivia does not have a multiyear budgeting system, which means that the program's budget will have to be recorded annually (external and treasury funds).
- 2.5 **Government accounting.** The Integrated Administrative Management and Modernization System (SIGMA) makes safe and reliable information available on budget execution. However, it does not yet have a reporting module for international cooperation that can identify the investment categories established in loan contracts, produce reports that comply with the financial monitoring and evaluation requirements of the IDB and other donors, or accommodate multiple currencies for the purposes of monitoring program budget performance.
- 2.6 **Government control.** Government control is the responsibility of the Office of the Comptroller General (CGE), which currently lacks the necessary technical capacity and staff resources to conduct ongoing and timely reviews of projects financed with funding from multilateral cooperation agencies.

² [Government Procurement System](#). Package of bidding documents authorized by the Bank for use on procurement processes under the threshold for ICB.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The ICAS assessment found that both executing agencies have a low level of risk due to their experience executing projects financed with external resources, including those of the Bank, and in view of their satisfactory performance in that regard. However, both have a considerable volume of projects in their respective portfolios, in terms of monetary amount and number of operations. This new operation represents an additional program for both executing agencies in technical and fiduciary terms. Consequently, the need to strengthen their human resources (technical and fiduciary) for this new operation has been identified.
- 3.2 Aside from the foregoing, the ICAS has identified actions to improve the capacity of both executing agencies by hiring project-dedicated personnel with experience in the Bank's procurement policies. In addition, actions for the FPS were identified to provide timely monitoring of the Bank's procedures, its dashboard, and the operation and maintenance plan for the works.
- 3.3 The SIGEP system will be used for program financial management. Its integrated chart of government accounts allows expenditures to be recorded by budgetary item and provides for an effective expenditure recording and monitoring system for the reporting and monitoring of expenditures, as well as the use of program funds, which are handled in the Single Treasury Account using "passbooks." This system provides a sufficient basis for external auditors to issue opinions on the accounts. However, it does not generate financial execution reports that reflect the investment status of the loan (e.g. investment category, currency, and accounting basis), which means that a complementary system—in this case the Bank's SIAP system—is needed to record expenditures and generate reports that are acceptable to the Bank.

IV. CONSIDERATIONS FOR THE SPECIAL PROVISIONS OF THE CONTRACT

- 4.1 **Program Operating Regulations.** The program Operating Regulations for each executing agency will include, the execution arrangements, information flows, and procedures previously agreed upon by the parties and the Bank.
- 4.2 **Exchange rate for rendering accounts.** In the case of the PCU, the exchange rate prevailing in the country on the date foreign currency resources are converted to local currency will apply. In the case of the FPS, the exchange rate in effect on the actual date of payment will apply.
- 4.3 **Audited financial statements and other audited reports.** Within 120 days after the close of each fiscal year of the executing agency, and during the disbursement period of the loan, financial statements will be produced for the program, duly audited by a firm of independent auditors acceptable to the Bank. The last of these reports will be submitted within 120 days after the date stipulated for the last disbursement of the loan. Separate audited reports will be submitted for each executing agency. The procedures for contracting the firm, the scope of audits, and their format will be governed by the Financial Management Policy for IDB-financed Projects (document OP-273-6) and carried out by the PCU.

- 4.4 **Terms of reference and technical specifications.** The executing agency's short list selection criteria, terms of reference, technical specifications, and requirements related to scoring of bidders or consultants in evaluating proposals will be approved in advance by the Project Team Leader, regardless of the type of procurement review (ex ante or ex post).

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Procurement execution.** The procurement processes are detailed in the procurement plan approved by the Bank and will be executed in accordance with the policies set forth in documents GN-2349-9 and GN-2350-9, for which no exceptions are anticipated. The agreement on the partial use of NB-SABS, as described in paragraph 1.5, may be applicable.
- 5.2 **Goods, works, and nonconsulting services.** Procedures for the contracting of works, goods, and nonconsulting services subject to ICB will be tendered using the standard bidding documents issued by the Bank. For procurement processes below the ICB threshold, the standard documents agreed upon with the Bank and made available on SICOES will apply. Shopping may be used, with the Bank's authorization, to procure simple works and common goods for less than the ICB threshold, in which case the Bank will recommend the document to be used. Amendments to any standard document will require the Bank's prior no objection.
- 5.3 **Selection and contracting of consultants.** Procedures for the selection of consultants will observe the following provisions:
- (i) **Selection of consulting firms.** The Bank's standard request for proposals will be used for the selection of consulting firms.
 - (ii) **Short list of consulting firms.** This list may consist entirely of Bolivian firms³ for contracts of a value below the thresholds for international short lists established by the Bank for the country.
 - (iii) **Selection of individual consultants.** The selection of individual consultants will be made on the basis of their qualifications to perform the work, by comparing the qualifications of at least three qualified candidates. They will not require the support of outside professionals. When the call for bids is issued through SICOES, the evaluation of one candidate will suffice for awarding the contract.
- 5.4 **Operational expenditures.** These are necessary recurring and maintenance expenditures during the life of the program, and include office rental, communications, announcements of procurement processes, translations, bank charges, basic office supplies, and fuel, as agreed upon with the Bank. Recurrent expenditures will be contracted following the administrative procedures of each executing agency referenced in the Operating Regulations. The Bank may dispute and refuse to finance such expenditures if it finds that the fundamental principles of competition, efficiency, and economy have been violated.
- 5.5 **Procurement planning.** Each executing agency will post the procurement plan on the Procurement Plan Execution System and update it as necessary or, at a

³ Participation by foreign firms is not precluded.

minimum, on an annual basis. A procurement process may move forward provided it is listed in the procurement plan previously approved by the Bank.

5.6 National preference. No national preference is anticipated in the contracts.

Table 1. Thresholds (US\$)

International competitive bidding		National competitive bidding (NCB)		Shopping		International short list	National short list
Works	Goods	Works	Goods	Works	Goods	Consultants	Consultants
More than 3,000,000	More than 200,000	More than 250,000 up to 3,000,000	More than 50,000 up to 200,000	Up to 250,000	Up to 50,000	More than 200,000	Up to 200,000

* Shopping may be used to procure simple works and common goods that are within the NCB threshold range.

Table 2. Major procurement processes

Description	Selection method	Estimated amount (US\$000)
Procurement of works		
Construction of infrastructure works in water and sanitation (W&S) and community development in the municipios of Colquechaca and San Pedro de Buena Vista	NCB	929.2
Construction of infrastructure works in W&S and community development in the municipio of Tupiza	NCB	1,302.5
Construction of infrastructure works in W&S and community development in the municipio of Machacamarca	Shopping	328.6
Construction of water system and community development for the towns of Marquiviri, Cañuma, and Suruzaya in the municipio of Achocalla	NCB	1,499.3
Sewerage system, wastewater treatment plant, and community development for the town of Huacullani	NCB	826.8
Construction of W&S system, wastewater treatment plant, and community development in the municipio of Villa Serrano	NCB	2,859.2
Adaptation and redesign of technical study of W&S system, wastewater treatment plant, and community development in the municipio of Pailón Centro	NCB	2,213.5
Construction of sewerage system, wastewater treatment plant, and community development in the municipio of Huanuni	NCB	1,930.2
Construction of sewerage system, wastewater treatment plant, and community development in the municipio of Colquenchaca	ICB	3,245.0
Upgrading and expansion of sewerage system, wastewater treatment plant, community development, and institutional strengthening in the municipio of Achacachi	ICB	3,702.6
Construction of sanitary sewer system in Laja District 2 and community development	ICB	3,212.7
Expansion and upgrading of primary water system and community development in Mallasa-Mecapaca Phase II Colquiri	ICB	3,245.0

Consulting services		
Supervision of works for W&S system and community development in the municipios of Colquechaca and San Pedro de Buena Vista	CQS	81.3
Supervision of works for W&S system and community development in the municipio of Tupiza	QCBS	114.0
Supervision of works for W&S system and community development in the municipio of Machacamarca	CQS	28.8
Supervision of works for the water system and community development for the towns of Marquiviri, Cañuma, and Suruzaya in the municipio of Achocalla	QCBS	131.3
Sewerage system, wastewater treatment plant, and community development for town of Huacullani	CQS	72.4
Gathering of information in approximately 1,570 towns	QCBS-ICB	761.3
Supervision of implementation of SIASAR	CQS	38.1
External account auditing firm	CQS	50.00
Supervision of work for W&S system, wastewater treatment plant, and community development for municipio of Villa Serrano	QCBS-ICB	231.4
Supervision of adaptation and redesign of technical study of W&S system, sewerage, wastewater treatment plant, and community development in municipio of Pailón Centro	QCBS	179.1
Supervision of work for sewerage system, wastewater treatment plant, and community development in municipio of Huanuni	QCBS	163.7
Construction of sewerage system, wastewater treatment plant, and community development in municipio of Colquenchaca	QCBS	163.7
Upgrade and expansion of sewerage system, wastewater treatment plant, community development, and institutional strengthening in municipio of Achacachi	QCBS-ICB	319.9
Construction of sewerage system in Laja District 2 and community development	QCBS-ICB	277.6
Expansion and upgrading of primary water system and community development in Mallasa-Mecapaca Phase II Colquiri	QCBS-ICB	280.4
Individual consultants		
Key consultants (7) (coordinator, specialists: environmental, social, technical, procurement, financial, and institutional strengthening)	NICQ	913.2

* Click [here](#) to see the procurement plan for the first 18 months.

- 5.7 **Procurement supervision.** The program will use the ex ante review modality for all international procurement processes and exceptions such as direct contracting, single-source selection, and processes outside the established thresholds.
- 5.8 The external auditing firm will perform ex post reviews of procurement processes as requested by the Bank.
- 5.9 The Bank may conduct periodic visits to update the levels of procurement management capacity and fiduciary risk associated with the operation.
- 5.10 **Records and files.** Each executing agency will be responsible for establishing the controls needed to protect the integrity of ex ante and ex post documentation generated in program execution. The Bank may, at any time, verify the standards used to organize, control, and safeguard files.

VI. FINANCIAL MANAGEMENT

- 6.1 **Programming and budget.** The executing agencies will program and plan program activities on the basis of the works approved in agreement with the Bank and set forth in the annual work plan. To that end, each executing agency will ensure that the necessary amounts are included in the budget. The budget of each executing agency will be prepared, approved, executed, monitored, and evaluated in accordance with the guidelines set forth in the specific regulations of the Ministry of the Environment and Water's and the FPS's budget systems.
- 6.2 **Accounting and information systems.** Each executing agency will manage these areas independently, each of them using SIGEP, which combines in a single registry the following accounting records: budgetary record (budget execution), asset registry (assets, liabilities, capital, and profit and loss), and treasury registry (cash transfer). Accounting will be on an accrual basis and will follow international accounting standards and government standards, in parallel, given that execution in SIGEP is governed by the latter. With respect to accounting records for the financing, the Ministry of the Environment and Water's PCU will make complementary use of the SIAP-IDB to produce the reports required by the Bank, including disbursement requests. The FPS will use SIGEP, which has an interface with its own system (SAP) to produce the reports required by the Bank. A chart of accounts will be prepared to identify expenditures by matching investment categories with the corresponding budget items and accounts.
- 6.3 **Disbursements and cash flow.** The loan will be disbursed primarily in the form of advances of funds and direct payments, the frequency of which will be determined by the program's financial programming, as periodically updated by each executing agency. For advances of funds, the loan proceeds will be deposited in a specific account at the Central Bank of Bolivia and subsequently transferred to an operating account in local currency, both of which are in the Single Treasury Account and operate with "passbooks." The Bank may advance further funds only when at least 80% of the previously disbursed advance payment has been justified. Both executing agencies are responsible for managing the resources while complying with institutional internal-control systems. Reimbursement may be provided for recognition of expenditures incurred by an executing agency prior to eligibility.
- 6.4 **Internal control and internal audit.** Both executing agencies have an internal control system that includes prior and post control instruments incorporated into each entity's organizational plan, regulations, and procedural manuals. Both also have an internal auditing unit that reports directly to the highest executive authority and performs independent evaluations to determine the degree of compliance and effectiveness of the entity's management systems and internal control instruments. The internal auditing reports that result from this review contain recommendations to be implemented by management. The program is expected to be included in this type of review, and these reports should aid in planning the external auditor's work. The Bank will invite the internal auditing units to participate in the fiduciary workshops on financial execution of projects.
- 6.5 **External control and reports.** Since the funds will be managed independently, external audits will also be independent for each executing agency. However, a

single auditing firm is expected to be hired for the Ministry of the Environment and Water's PCU as the lead entity in the sector. A multiyear contract will be used to (i) avoid transaction costs, (ii) achieve continuity in the auditors' work, and (iii) ensure preliminary reviews at semiannual cutoff points.

- 6.6 **Financial supervision plan.** Financial supervision will be performed ex post for both executing agencies. The supervision activities will include the following, at least once a year: (i) a comprehensive visit (procurement and financial) by the Bank; (ii) an onsite visit to the investment sites; and (iii) a desk review of the program's external auditing.
- 6.7 **Execution arrangements.** Both executing agencies will be strengthened with supplementary staff in financial accounting and procurement so that they can assume the additional fiduciary responsibilities entailed in this operation. The program Operating Regulations will govern, *inter alia*, the contracting of auditors, financial management of the execution of program resources, global financial programming, and the flow of information between the two executing agencies.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/18

Bolivia. Loan ____/BL-BO to the Plurinational State of Bolivia
Water and Sanitation Program for Small and Medium-Sized Cities

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, to enter into such contract or contracts as may be necessary with the Plurinational State of Bolivia, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Water and Sanitation Program for Small and Medium-Sized Cities. Such financing will be chargeable to the Bank's Ordinary Capital (OC) resources in the following manner: (i) up to the amount of US\$11,850,000, subject to concessional financial terms and conditions ("Concessional OC"); and (ii) up to the amount of US\$67,150,000, subject to financial terms and conditions applicable to loan operations financed from the Bank's regular program of OC resources ("Regular OC"), as indicated in the Project Summary of the Loan Proposal, and subject to the Special Contractual Conditions of said Project Summary.

(Adopted on _____)