

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**BOLIVIA**

**POLICY REFORM PROGRAM FOR THE WATER, SANITATION, SOLID WASTE,  
AND WATER RESOURCES SECTORS IN BOLIVIA**

**(BO-L1200)**

**LOAN PROPOSAL**

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## ABBREVIATIONS

AAPS	Autoridad de Fiscalización y Control Social de Agua Potable y Saneamiento Básico [Water and Basic Sanitation Inspection and Social Oversight Authority]
AECID	Spanish Agency for International Development Cooperation
AFD	French Development Agency
CAF	Development Bank of Latin America
CIIDAR	Centro Internacional para la Investigación y Desarrollo de Aguas Residuales [International Center for Wastewater Research and Development]
DGGIRS	Dirección General de Gestión Integral de Residuos Sólidos [Department of Integrated Solid Waste Management]
EPSA	Empresas Públicas Sociales de Agua y Saneamiento [Public Water and Sanitation Utilities]
GIZ	German Agency for International Cooperation
HRWS	Human right to water and sanitation
ISWM	Integrated solid waste management
IWM	Integrated watershed management
IWRM	Integrated water resources management
KfW	German Reconstruction Credit Institute
MMAyA	Ministry of Environment and Water
OECD	Organization for Economic Cooperation and Development
PBP	Programmatic policy-based loan
PDES	Plan de Desarrollo Económico y Social 2016-2020 [2016-2020 Economic and Social Development Plan]
PSDSB	Plan Sectorial de Desarrollo de Saneamiento Básico 2016-2020 [2016-2020 Basic Sanitation Sector Development Plan]
SENASBA	Servicio Nacional para la Sostenibilidad de Servicios en Saneamiento Básico [National Service for the Sustainability of Basic Sanitation Services]
VAPSB	Viceministerio de Agua Potable y Saneamiento Básico [Office of the Deputy Minister for Potable Water and Basic Sanitation]
VRHR	Viceministerio de Recursos Hídricos y Riego [Office of the Deputy Minister for Water Resources and Irrigation]

**PROJECT SUMMARY**  
**BOLIVIA**  
**POLICY REFORM PROGRAM FOR THE WATER,**  
**SANITATION, SOLID WASTE, AND WATER RESOURCES SECTORS IN BOLIVIA**  
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Financial Terms and Conditions						
Borrower			Flexible Financing Facility <sup>(a)</sup>			
Plurinational State of Bolivia			Amortization period:		20 years	
Executing agency			Disbursement period:		1 year	
Ministry of Environment and Water (MMAyA)			Grace period:		5 years <sup>(b)</sup>	
Source	Amount (US\$)	%	Interest rate:		LIBOR-based	
IDB (Ordinary Capital):	100,000,000	100	Credit fee:		<sup>(c)</sup>	
			Inspection and supervision fee:		<sup>(c)</sup>	
Total:	100,000,000	100	Weighted average life:		12.75 years	
			Approval currency:		U.S. dollar	
Project at a Glance						
<b>Project objective/description:</b> This is the first loan in a series of two consecutive single-tranche operations that are independent of one another but technically related and structured as a programmatic policy-based loan. Its objective is to promote the sustainability of the sector through reforms that improve sector governance and the management of water and basic sanitation services, including urban solid waste and water resources, in a context of climate change and with a view to achieving water security. The specific objectives are to: (i) ensure a macroeconomic context that is consistent with program objectives; (ii) help update and strengthen sector policies and regulations, including financial instruments; (iii) build sector entities’ capacities for adequate planning; and (iv) update sector performance evaluation tools to permit better policy decisions.						
<b>Special contractual conditions precedent to the sole disbursement of the loan:</b> The sole disbursement of the Bank loan is subject to fulfillment by the borrower, to the Bank’s satisfaction, of policy reform commitments, once the loan contract has been signed and the general and special conditions precedent specified in the loan contract for such disbursement have been met, pursuant to the policy matrix (Annex II), means of verification matrix, and policy letter (paragraph 3.3).						
<b>Exceptions to Bank policies:</b> None.						
Strategic Alignment						
<b>Challenges:</b> <sup>(d)</sup>	SI	✓	PI	✓	EI	
<b>Crosscutting themes:</b> <sup>(e)</sup>	GD	✓	CC	✓	IC	✓

<sup>(a)</sup> 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, interest rate, and commodity conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

<sup>(b)</sup> 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.

<sup>(c)</sup> The credit fee and 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 relevant policies.

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

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

## I. DESCRIPTION AND RESULTS MONITORING

### A. Background, problem addressed, and rationale

- 1.1 This program is the first in a series of two programmatic policy-based loans (PBPs) that are technically linked and independently financed under that modality.
- 1.2 The proposed policy reforms for the first operation will support efforts to supplement and adapt sector policies and regulations; develop strategies and tools for planning, increasing investment, and improving services; establish guidelines for preparing and executing priority projects and programs; strengthen service monitoring and regulation mechanisms; update the strategic planning of sector entities; and strengthen the development and implementation of monitoring and evaluation mechanisms. These actions will permit progress in addressing the sector challenges set out in the 2016-2020 Basic Sanitation Sector Development Plan (PSDSB) of the Ministry of Environment and Water (MMAyA) ([optional link 4](#)), which incorporates water security, social management, and improvement in service quality and efficiency and is associated with the targets and outcomes of the Economic and Social Development Plan (PDES) in the framework of Comprehensive Development for Living Well in Bolivia (2016-2020) ([optional link 3](#)) and with the Sustainable Development Goals,<sup>1</sup> making headway in upholding the human right to water and sanitation (HRWS).<sup>2</sup>
- 1.3 **Macroeconomic conditions.** Until 2014, the Bolivian economy grew steadily at rates above 4%, fueled by hydrocarbon exports. After the drop in raw material prices, economic growth from 2014 forward continued at a similar pace, followed by a countercyclical economic policy targeting greater public investment. This economic performance coupled with income redistribution policies has substantially reduced the country's poverty levels. For example, moderate poverty indicators fell from 51.3% of the population in 2009 to 36.4% in 2017, while extreme poverty indicators declined nine percentage points, from 26.1% to 17.1% during the same period. The government's efforts to maintain the pace of growth have been made in a context of fewer buffers than during the boom years, with corresponding increases in the fiscal deficit and public debt. In general, the economy continues to demonstrate macroeconomic stability with low inflation, increasing its growth rate to 4.5%<sup>3</sup> in 2018 compared to 2016 and 2017 (4.3% and 4.2%, respectively).
- 1.4 The economic policy in effect since 2014 has strengthened domestic demand through greater public investment, which averaged 13% of gross domestic product (GDP) in recent years, one of the highest rates in the region. Nonetheless, despite maintaining a growth rate topping 4%, this measure has also given way to increases in both the fiscal deficit (-7.8% of GDP in 2017) and the current account deficit (-6.3% of GDP in 2017) owing to a rise in capital goods imports. In addition, the country has had a fixed exchange rate since 2011, which has played a part in the decline in reserves. Reserves fell from a height of US\$15.477 billion in November 2014 (nearly 50% of GDP) to US\$8.955 billion in December 2018 (22% of GDP).

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<sup>1</sup> Goal 6 of the Sustainable Development Goals: <https://www.un.org/sustainabledevelopment/water-and-sanitation/>.

<sup>2</sup> Resolution 64/292 adopted by the United Nations General Assembly in 2010. [https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/64/292&Lang=E](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/64/292&Lang=E).

<sup>3</sup> Preliminary data from the Government of Bolivia.

- 1.5 As a result of its expansionary fiscal policy, the government has increased its debt in recent years, albeit maintaining levels regarded as sustainable in analyses conducted by the International Monetary Fund. Bolivia's public debt rose from US\$11 billion in 2014 (33% of GDP) to approximately US\$15.265 billion in November 2018 (37% of GDP). The majority of the debt is multilateral (43%) and for terms longer than 10 years, with the Inter-American Development Bank (IDB) as the primary lender (43% of the total).
- 1.6 Economic growth prospects are favorable. For example, organizations such as the International Monetary Fund and World Bank raised their growth forecasts to around 4.3% for 2019. The recovery of oil prices since 2017 has given rise to higher tax revenue, which could help reduce the fiscal deficit and improve external indicators. Despite the decline in international reserves in recent years, Bolivia continues to boast one of the highest levels in the region (approximately 22% of GDP), corresponding to approximately 11 months of imports and safeguarding against external shocks.
- 1.7 **Institutional and regulatory framework.** The 2009 Constitution defines access to safe drinking water and sanitation as a human right, not subject to concession or privatization, and establishes the State's responsibility, at all levels of government, to provide those services, based on criteria of universality, responsibility, accessibility, continuity, quality, efficiency, equitable rates, and coverage, with societal participation and social oversight. Likewise, it is the State's duty to manage, regulate, protect, and plan for the appropriate and sustainable use of water resources, guaranteeing access to water by the country's inhabitants, as well as the conservation, protection, preservation, restoration, sustainable use, and integrated management of those resources.
- 1.8 Bolivia is restructuring its institutional framework under this mandate. The sectors are governed by the MMAyA,<sup>4</sup> which is responsible for formulating, implementing, evaluating, and monitoring policies, regulations, and plans. The Office of the Deputy Minister for Potable Water and Basic Sanitation (VAPSB) is responsible for formulating and implementing policies, plans, and regulations to develop, provide, and improve basic sanitation services (drinking water, sanitary sewerage, solid waste, and storm drainage) and for obtaining financing to expand coverage. The Office of the Deputy Minister for Water Resources and Irrigation (VRHR) supports the development and implementation of plans, policies, and regulations for integrated watershed management (IWM) and designs strategies for the conservation, use, and development of water resources. The VAPSB develops and governs the regulatory framework for the urban solid waste subsector through the Dirección General de Gestión Integral de Residuos Sólidos [Department of Integrated Solid Waste Management] (DGGIRS) at the central level. The autonomous municipal governments, in conjunction with the autonomous departmental governments, regulate, execute, and implement integrated solid waste management (ISWM) projects.
- 1.9 The Water and Basic Sanitation Inspection and Social Oversight Authority (AAPS)<sup>5</sup> is responsible for regulating and monitoring the delivery of water and sanitation

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<sup>4</sup> Supreme Decree 29894 of 7 February 2009 defines the powers of the MMAyA, VAPSB, and VRHR.

<sup>5</sup> Supreme Decree 0071 of 9 April 2009.

services with a comprehensive approach, regulating the management and sustainable use of water resources for human consumption and guaranteeing the rights of users of water and sanitation services. The National Service for the Sustainability of Basic Sanitation Services (SENASBA)<sup>6</sup> is responsible for developing and building the capacities of operators to ensure the sustainability of water and sanitation services. It has its own autonomous and/or decentralized execution units to implement sector projects and programs.

- 1.10 The autonomous municipal governments<sup>7</sup> are responsible for providing water and sanitation services through public, semipublic, community, or cooperative entities known as Public Water and Sanitation Utilities (EPSAs). They also approve the rates charged for services and are responsible for the management (including storage, collection, and transport), recycling, and treatment (in agreement with the central government) and final disposal of urban solid waste and are to incorporate storm water management into their urban planning. The central government and the autonomous departmental governments are required to help the autonomous municipal governments fulfill their duties.
- 1.11 **Current status of water resources management.** Basic water and sanitation, urban solid waste, and urban drainage services require effective IWM and integrated water resources management (IWRM) to ensure their availability, quality, and resilience in the face of climate change. The country has been affected by extreme hydrometeorological phenomena such as flooding and droughts, mainly due to the El Niño and La Niña phenomena, the former associated with positive precipitation in the east and negative anomalies (drought) in the west,<sup>8</sup> and their intensity is expected to increase due to the effects of climate change.<sup>9</sup> The particular geographical, climatic, and hydrological conditions of the Bolivian Altiplano region (an endoreic basin), combined with its high population concentration, leave the region highly vulnerable to climate change, as evidenced in a recent study on projections for water and water resource availability in Bolivia by 2030<sup>10</sup> ([optional link 8](#)). Specifically, the high dependence on water in this low precipitation region coupled with limited water storage capacity threatens water security, understood as uninterrupted and reliable water and sanitation services. This situation negatively impacts the quality of life and living conditions of inhabitants and harms the environment.<sup>11</sup> A national state of emergency<sup>12</sup> was declared in Bolivia in the wake of its 2016 water crisis, evidencing limitations in the capacities and tools for efficient management by the EPSAs to achieve water security. This situation gave rise to prolonged service outages in a number of cities lacking both appropriate planning and established mitigation measures, affecting more than 50% of Bolivia's municipios.

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<sup>6</sup> Supreme Decree 29741 of 15 October 2008.

<sup>7</sup> Law 31 of 19 July 2010 defines the duties of the autonomous departmental governments and autonomous municipal government.

<sup>8</sup> Hoffmann (2014).

<sup>9</sup> Cai et al. (2014).

<sup>10</sup> Copana (2018).

<sup>11</sup> IDB (2018-1).

<sup>12</sup> Supreme Decree 2987 of 2016.



- 1.12 Considerable economic impacts have been caused by flood events with distinct characteristics and degrees of severity depending on the geographic region affected (pluvial and fluvial flooding, flooding of plains, and torrential flooding). In 2015, the Government of Bolivia estimated flood losses at US\$450 million, with more than 300,000 people affected.<sup>13</sup> Bolivia does not have estimates of micro- and macro-drainage coverage, a diagnostic assessment to facilitate the design of effective policies, or master plans for drainage and/or flood mitigation at the national level. The drainage master plans drawn up for the cities of La Paz and El Alto did not include sufficiently far-reaching actions related to IWRM in urban areas, multisectoral considerations for environmental regulation of urban solid waste management and development of green areas in urban centers connected to storm drains, or the incorporation of water-sensitive urban drainage systems.<sup>14</sup>
- 1.13 Management of risks related to hydroclimatic events requires knowledge of the current and future availability of water resources at the watershed level under different climate change scenarios. Projecting this variable makes it possible to set operation thresholds and to effectively implement IWM and plan water resource distribution. The Program to Update Water Surveys was implemented in 2017 through Bolivia's Surface Water Survey<sup>15</sup> and determined the water supply in 104 watersheds. However, institutional challenges remain for its use in formulating IWRM policies and watershed management plans. Moreover, the study does not include existing demand or available groundwater, which limits its applicability for planning and integrated water resource management.
- 1.14 **Challenges in service coverage, quality, and management.** Coverage of drinking water services is 94.3% in urban areas and 67.3% in rural areas, while sanitation coverage is 67.4% and 44.0%, respectively.<sup>16</sup> Just 33.4% of the population in towns larger than 1,000 inhabitants is connected to some type of wastewater treatment system, which means 5.2 million people are without wastewater treatment in those towns.<sup>17</sup> This poses a health risk and is a significant source of both soil and water contamination. These figures reveal existing gaps in urban vs. rural access (27 percentage points for water and more than 23 for sanitation), and a lag in access to sanitation (more than 20 points behind water) and wastewater treatment. Factors contributing to those gaps include: (i) geographic conditions, given that more than 19,000 rural communities have less than 2,000 inhabitants, are dispersed, and are remote; (ii) lack of specific regulatory and planning tools to define and implement sanitation programs (including wastewater treatment) and to address rural areas with consideration for their unique characteristics, which results in a failure to prioritize investments in those areas, traditionally perceived as having a higher cost,

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<sup>13</sup> World Bank (2017).

<sup>14</sup> Suárez et al. (2014) and (IDB 2018-1).

<sup>15</sup> The Water Survey Program is headed by the MMAyA. It is based on the survey and was financed by the German Agency for International Cooperation (GIZ) and conducted in collaboration with the Stockholm Environmental Institute, the National Meteorology and Hydrology Service, the University of San Andrés, and the University of San Simón.

<sup>16</sup> VAPSB data based on 2017 coverage estimates.

<sup>17</sup> VAPSB (2017).

- being less sustainable, and having lower demand;<sup>18</sup> and (iii) lack of specific technical expertise, e.g. understanding the efficiency of wastewater treatment systems at high altitude (28% of the national territory sits above 3,000 m.a.s.l., accounting for 51% of the total population).<sup>19</sup>
- 1.15 The lack of sanitation services, including the absence of wastewater treatment, generated economic losses in 2014 of approximately US\$1.278 billion,<sup>20</sup> which corresponds to 4.0% of Bolivia's GDP. It also resulted in 5.35 million cases of treated illnesses caused by a lack of sanitation, and 249 deaths were reported of children under 5—Bolivia's most vulnerable population.<sup>21</sup> Failure to treat wastewater has a negative impact on tourism, recreational spaces, and the wellbeing of families in general. It also affects the ecological balance of species that live in the ground and water. Existing facilities also have operational deficiencies that can affect up to 20% of the population served, which reduces the effective coverage of those services.<sup>22</sup>
- 1.16 Estimates indicate that the country generates 5,170 tons of urban solid waste per day, comprised of 55.2% organic matter and 22.1% recyclable waste. Only 59.4% of the population has adequate collection services, 4% of urban solid waste is recovered, and about 30% of total urban solid waste is safely disposed of in sanitary landfills.<sup>23</sup> The remainder goes to municipal dumps, with the resulting social and environmental impacts. These levels are below the average for urban solid waste in Latin America.<sup>24</sup> At the local level, at the beginning of the decade only 9% of municipios had decentralized agencies and/or specific technical units for integrated solid waste management, and just 2.4% had regulations on waste collection.<sup>25</sup> This situation stems from a failure to prioritize investments for the urban solid waste subsector at the central, departmental, and municipal levels,<sup>26</sup> together with a failure to apply them effectively due to incipient institutional and regulatory development. This has only recently begun to change with enactment of a law and specific regulations ([optional link 5](#)) (paragraph 1.23).
- 1.17 Sizable investments in the last 15 years have produced greater access to water and sanitation, resulting in a nearly 1% annual increase in coverage of those services. Sustainability of water and sanitation services is one of the main sector challenges, characterized by a significant increase in EPSA operating expenses derived from investments that prioritize an increase in system productivity in the absence of comparable actions to improve operational efficiency. According to the EPSA Operating and Financial Indicators Report ([optional link 6](#)), less than 10% achieve

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<sup>18</sup> IDB (2017), IDB (2018), CAF (2017), PSDSB 2016-2020. These documents highlight the absence of specific instruments as the cause of the gap (IDB) and identify these specific needs in Bolivia (CAF and PSDSB).

<sup>19</sup> Food and Agriculture Organization (2013).

<sup>20</sup> World Bank (2015).

<sup>21</sup> Idem.

<sup>22</sup> VAPSB (2017).

<sup>23</sup> VAPSB (2018).

<sup>24</sup> IDB (2015).

<sup>25</sup> MMAyA (2011).

<sup>26</sup> From 2001-2007, only 0.9% of investment in sanitation was earmarked for solid waste (MMAyA, 2011). This situation has recently begun to turn around through external financing agreements (loans 2880/BL-BO and 3730/BL-BO) and local initiatives.

suitable levels of operational sustainability<sup>27</sup> that would enable them to also cover a portion of their investments and to face possible contingencies. The remaining EPSAs (90%) have a limited ability to cover their operating costs, adequately maintain their facilities, and contend with contingencies. Consequently, they must resort to subsidies and credits from other levels of government. Three factors have a negative impact on their performance: (i) revenue: high rates of nonrevenue water, long billing delays, low macro and micrometering, rate structures that do not give adequate consideration to sanitation or user classification; (ii) costs: high and unjustified administrative expenses, and a failure to optimize and innovate processes and economies of scale; and (iii) inadequate governance and social management models. In this context, where investments to increase the coverage of services weaken the financial position (and, consequently, the sustainability) of the EPSAs, the MMAyA highlighted the importance of revising the governance models, developing participatory social management plans, and implementing management improvement plans in which the EPSAs become the agents of change rather than the beneficiaries of the assets (as was the case in previous institutional strengthening frameworks).

- 1.18 Only 28% of the country's municipios have successfully implemented an urban solid waste collection fee (72% of all autonomous municipal governments cover the cost of the services with own resources), which is not to say that they are able to cover the operating and administrative costs of municipal waste collection.<sup>28</sup> This situation puts the municipal waste collection enterprises and/or the corresponding municipal offices (paragraph 1.16) in a financial deficit. Contributing factors are inadequate application of municipal fees and lack of knowledge of rate-setting tools, combined with the absence of effective collection mechanisms and the population's limited awareness of the services provided.<sup>29</sup>
- 1.19 **Gender.** While some studies have shown that water and sanitation projects that are designed and run with active female participation tend to be more sustainable and effective than those without their participation,<sup>30</sup> and despite progress made in recent decades in Bolivia to improve the quality of life of its inhabitants (women in particular),<sup>31</sup> Bolivian women face the same challenges as women across the region ([optional link 7](#)). Barriers to their participation persist in decision-making associated with water management: perpetuation of traditional roles, undervaluation of women in public arenas, and cultural resistance by men to sharing household chores and duties. Bolivia has various documents for the water and sanitation and urban solid waste subsectors that incorporate a gender focus to a certain extent.<sup>32</sup> However, there is not a specific policy for its application. As a result, implementation of the interventions revealed that a gender focus is not being effectively applied by the executing agencies, which do not have operational tools to define profiles,

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<sup>27</sup> Operating efficiency ratio (operating costs / operating income from the service).

<sup>28</sup> MMAyA (2011-2012).

<sup>29</sup> MMAyA and Ministry of Economy and Public Finance (2016).

<sup>30</sup> Narayan (1995), UNWater (2006), and Van Wijk-Sijbesma (1998).

<sup>31</sup> 2009 Constitution, Comprehensive Law to Guarantee Women a Life Free from Violence (Law 348/2013), and sector policies that promote gender equality.

<sup>32</sup> "Guide for Implementation of a Gender Equity Approach in Sector Projects" and the "Guide for Men and Women Waste Pickers of Urban Solid Waste."

methodologies, or materials, or to measure disaggregated results with a gender focus.

- 1.20 **Progress in sector reforms and goals.** In 2015, the country approved the PDES, which is the strategic framework and framework for prioritization of goals, outcomes, and actions to be taken by sector entities based on the pillars established in Bolivia's Patriotic Agenda 2025 ([optional link 2](#)). Those pillars include: (i) universal access to services, with the goal of expanding coverage of water and sanitation, developing strategies for environmental management and control of the quality of water for human consumption, and renovating wastewater treatment plants; (ii) environmental sovereignty with comprehensive development to implement the watershed approach and perform IWRM that considers water supply, development alternatives, and externalities resulting from its use, including the prevention of climate change risks, increasing wastewater treatment, and ISWM; and (iii) scientific and technological sovereignty, such that Bolivia has the capacity to develop knowledge and technology in strategic, productive, and service areas, establishing that all entities associated with the productive, water, environment, health, and other sectors are to invest in scientific research and technological development.
- 1.21 The MMAyA approved the PSDSB in 2015, which includes strategic actions that dovetail with the PDES in order to uphold the HRWS. In order to meet the targets set out in the PSDSB, the following are included among the specific sector strategies: (i) expand and improve the coverage and quality of drinking water services through efficient use, a climate change and environmental management approach, sustainability, loss control, equitable rates, and societal participation and social oversight; (ii) expand and improve sewerage coverage, ensuring wastewater treatment; (iii) promote the participation and empowerment of the population through social management and build the management capacities of operators to improve service delivery; (iv) monitor, supervise, oversee, and regulate drinking water activities; (v) establish legal certainty through an updated set of regulations; and (vi) build capacities in subnational institutions to implement ISWM in the regulatory, planning, administrative, operating-logistical, environmental, and social arenas, with a view to improving the rates of waste collection, recycling, and safe final disposal. The urban drainage component remained outside the utilization scope of the PSDSB due to insufficient information to complete a diagnostic assessment. The goal of establishing a baseline was set in order to draft a National Storm Drainage Plan. The MMAyA has been promoting, planning, and supporting implementation of IWM and IWRM initiatives through the National Watershed Plan, with support from international cooperation operations (paragraph 1.33). That plan is a dynamic initiative that is being updated based on new IWRM experiences, as well as new challenges for water security in a context of climate change.
- 1.22 In order to speed up progress in attaining targets and addressing sector challenges, the government approved the Reform Program for the Water, Sanitation, and Water Resources Sectors in Bolivia (loans 2771/BL-BO and 3667/BL-BO).<sup>33</sup> Its objective was to help expand coverage and improve management of water and sanitation and water resources through development of an institutional and policy framework. The program supported achievement of the impacts associated with water and sanitation

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<sup>33</sup> Loan 2771/BL-BO was approved in 2012 and the second operation (loan 3667/BL-BO) in 2016.

coverage and irrigated farmland, exceeding the targets.<sup>34</sup> In some EPSAs, progress was also made in meeting targets set for bill collection efficiency and operating efficiency.<sup>35</sup> Some EPSAs exceeded the targets for reducing nonrevenue water.<sup>36</sup> The sector planning component supported development of planning, supervision, and monitoring instruments, such as the PSDSB, Water and Sanitation Master Plans for La Paz-El Alto, Santa Cruz, Cochabamba, and Tarija (where application has been key for new investments), and the sector-wide approach for rural areas, among others. Under the organizational development component, organizational development and institutional strengthening plans were prepared for the VAPSB, SENASBA, the Environment and Water Executing Agency (EMAGUA), and the water and sanitation units of the autonomous departmental governments. Various regulatory instruments were also developed, such as the Social Regulations for Community Development, contributing to the sustainability of investments; Departmental Irrigation Services were strengthened in seven departments; and the National Dam Registry was created. Sector capacities were also developed, and the Plurinational Water School and the National Irrigation School were implemented. The financial policy component played a part in improving investment allocation, the cofinancing of water and sanitation projects by the central government and autonomous municipal governments based on poverty levels in the municipios, and developing the rate policy to promote the sustainability of the EPSAs. Lastly, the monitoring and evaluation component supported development of information systems for timely decision-making, such as the Performance Evaluation Framework for Water and Sanitation, the Performance Evaluation Framework for the National Watershed Plan, the National Information and Irrigation System, the Integrated Regulatory Information System for Water and Sanitation, and the Information System for Water and the Environment. Overall, the program satisfactorily met the criteria of relevance, effectiveness, and sustainability in the program completion report ([optional link 10](#)).

- 1.23 Law 755 on ISWM was enacted in 2015, which is the first specific law for appropriate management and treatment of urban solid waste. The Regulations to that law were passed in 2016 ([optional link 5](#)). This has made it possible to begin to reverse the limited progress in development and application of regulatory and planning instruments for ISWM. The DGGIRS also drafted the Implementation Plan for Law 755 with the purpose of planning and incorporating the required actions, with specific strategies supporting achievement of the goals set out in those regulations, in accordance with the national and sector planning system. That plan defines eight key pillars, including institutional development and capacity-building, and proposes a series of tasks, such as the development of guides, technical guidelines, and regulatory guidelines. The plan poses a significant challenge for the urban solid waste subsector, with an implementation horizon of 2025.

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<sup>34</sup> It achieved water coverage of 84.7% (82.6% projected) and sanitation coverage of 57.1% (56.0% projected); irrigated farmland increased to 12.2% (11.2% projected).

<sup>35</sup> Average bill collection efficiency was only 79.12% (target 85%) owing to the perception of poor quality service and the limited ability of most EPSAs to improve their processes. Average operating efficiency was 93.9% (target 63%), evidencing limitations in revenue generation to finance operating expenses, together with a failure to revise rates and optimize costs.

<sup>36</sup> The established target (30%) was exceeded, with average nonrevenue water of 21.3%, mainly due to increased micrometering.

- 1.24 The regulatory framework for the provision of water and sanitation services<sup>37</sup> requires technical sector consensus in order to move forward with modernization. Although the PBP BO-L1199 seeks to make progress in establishing the national regulatory framework for ISWM, it needs to be implemented by the relevant agencies by formulating, updating, and applying the legal, regulatory, and planning instruments and financial mechanisms at the subnational level. Underserved areas with a lack of investment (such as rural areas), wastewater treatment, and urban drainage require a regulatory framework that categorizes and guides specific programs, ensuring their technical, social, and environmental sustainability in the specific context of Bolivia, by developing operating instruments to enforce application of a gender focus.
- 1.25 Notwithstanding the EPSA limitations for efficient management of services (paragraph 1.17), some EPSAs<sup>38</sup> began processes to improve their performance indicators in various management areas, led by the MMAY and supported by the Bank and the AAPS (regulator). Those processes have generated experiences and recommendations for inclusion in the regulatory and policy framework for those services. The groundwork needs to be laid for steady improvements in technical, operational, social, and financial management through regulations, guides, and specific guidelines, with an emphasis on the inclusion and recovery of sanitation costs and the updating of development plans for EPSAs. This new regulatory framework to improve the quality of services will make it possible to turn the situation around, changing the focus from managing supply to managing demand, controlling consumption, and reducing losses. These actions combined with timely monitoring measures, a new rate structure, and incentives for best practices in governance and management will permit the financial equilibrium of the EPSAs and also postpone costly investments to increase production that bring a corresponding increase in operating expenses and put greater pressure on water resources. The need to consider hydroclimatic risk management with a climate change focus in EPSA planning requires the incorporation of regulatory elements into service regulation and monitoring that promote and ensure the planning and implementation of investments geared toward the protection and sustainability of water sources, as well as actions by the EPSAs to prepare and react.
- 1.26 The sectors need to develop and implement specific guidelines, strategies, plans, and programs for priority areas, advancing in the implementation of planning, monitoring, and evaluation tools that respond to the new challenges; promoting the alignment and commitment of the sector entities through institutional strategic planning; and placing special emphasis on the definition and application of planning instruments for risk management that incorporate the climate change component for watershed management with a view to achieving water security.
- 1.27 **Lessons learned.** The Bank has financed a number of policy-based programs in the region.<sup>39</sup> Lesson learned include the need to: (i) strengthen coordination between

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<sup>37</sup> Law 2066 of 2000 on the Provision and Use of Drinking Water and Sanitary Sewerage Services is intended to regulate the delivery and use of these services.

<sup>38</sup> EPSAs in La Paz and El Alto, SAGUAPAC.

<sup>39</sup> Bolivia: (2771/BL-BO and 3667/BL-BO); Brazil: (3138/OC-BR); Colombia: (2064/OC-CO, 2158/OC-CO); Haiti: (3176/GR-HA); and Peru: (1878/OC-PE, 1878/OC-PE-1, 2157/OC-PE, 2455/OC-PE); (1920/OC-PE, 2049/OC-PE, 2218/OC-PE); (2449/OC-PE, 2604/OC-PE, 3292/OC-PE).



sector and civil society stakeholders; (ii) partner with and finance the institutions in developing new regulatory instruments, with programs for dissemination, training, and improving performance; (iii) create loan programs for the reform programs to undergird the impacts and outcomes of the interventions; and (iv) strengthen information systems and define monitoring indicators. Specifically, the following lessons are noteworthy from previously approved sector reform operations in Bolivia (loans 2771/BL-BO and 3667/BL-BO): (i) technical cooperation operations financed for the MMAyA to support development of the operations drove sector institutions to fulfill the reform commitments; (ii) some institutions have maintained low turnover of personnel in the last five years as a result of program continuity and training; (iii) continual updating of sources of information for program monitoring and evaluation is key to facilitating their planning and ensuring that decision-making is aligned with conditions on the ground in the sectors; and (iv) achieving financial sustainability is a medium- and long-term process, and it is important to continue supporting these strengthening processes. Although sector capacities have been strengthened, the program completion report recommended ongoing building of the institutional framework and capacities at all levels of government. These lessons learned were used as inputs for this operation.

- 1.28 **Conceptualization of the program and summary of reforms.** In order to address the problems identified, this operation was conceived as a PBP comprised of two independent but technically related operations. As presented in the diagnostic assessment, the sector is made up of four subsectors: (i) water and sanitation, differentiating between urban and rural, with an emphasis on the efficiency of operator management and wastewater treatment; (ii) urban solid waste, with an emphasis on implementation of ISWM; (iii) storm drainage; and (iv) IWRM, with an emphasis on water security. As explained, these subsectors present challenges in terms of regulations, planning, and monitoring. In order to address each of these challenges in a comprehensive and crosscutting manner, this program is divided into four components: (i) macroeconomic sustainability; (ii) sector policies and regulations; (iii) sector planning; and (iv) monitoring and evaluation.
- 1.29 The policy actions under the first tranche give priority to designing regulatory frameworks (national and subnational plans, policies, guidelines, guides, regulations, and technical standards approved by relevant sector entities) and to initial implementation of information systems. Table 1 details the first operation's structure and its response to the subsector challenges ([optional link 11](#)). The actions under the second tranche give priority to consolidating and implementing the reforms approved in the first tranche, ensuring that there are robust means of verification for the second tranche, that they are balanced with the first, and that they can be met in the planned two-year execution period. Together, both tranches will help close the gaps in rural areas in wastewater treatment and final disposal of urban solid waste, make management of the services more efficient by promoting a demand-based approach, and reduce vulnerability to the effects of climate change through better management of risk, urban drainage, and water resources. As a policy-based loan, this operation is expected to benefit the entire population through its various components. Once existing gaps have been overcome, the country is expected in the future to be able to move forward with strategic planning focused on fulfilling the SDGs for universal provision of safe services.

**Table 1. Conceptualization of the program**

<b>Diagnostic assessment</b>		<b>Components II, III, and IV</b>		
<b>Subsectors</b>	<b>Problems addressed</b>	<b>Policies and regulations</b>	<b>Sector planning</b>	<b>Monitoring and evaluation</b>
<b>Sector governance</b>	Outdated legal and regulatory framework or with gaps vis-à-vis new challenges	HRWS policy Draft legislation on provision of water and sanitation Regulations for projects, gender, water quality	Institutional strategic plans and organizational redesign	Sector Performance Evaluation Framework. Rural Information System.
<b>Rural - Sanitation (wastewater treatment)</b>	Low coverage and gaps between urban and rural and between water and sanitation, particularly wastewater treatment	Basic parameters for wastewater treatment by altitudinal ecoregion	National strategies for rural areas and wastewater treatment. Pilot initiative for fecal sludge.	National inventory and information system for wastewater treatment. Research Center.
<b>Efficient management of services</b>	Inefficient delivery of water and sanitation services Financial sustainability of EPSAs	Guidelines to improve EPSA management, wastewater treatment and sewerage cost recovery arrangements, and nonrevenue water. Guidelines and guides for social management. Certification of capacities and competencies		Information system for EPSA regulation and evaluation
<b>Urban solid waste</b>	Low coverage for adequate urban solid waste disposal Financial sustainability of urban environmental sustainability	Subnational regulation models. Guidelines for design and management of urban environmental sustainability. Methodology for setting the waste collection rate		
<b>Water resources and storm drainage</b>	Vulnerability to extreme hydrometeorological events and effects of climate change	Manuals and guides on the quality of water for human consumption in the event of contingencies	Water resource planning. Diagnostic assessment of the National Drainage Plan. National Watershed Plan	



- 1.30 Justification of need for a second series of programmatic policy reforms for the water and sanitation and water resources sectors.** The water and sanitation sectors play a key role in economic development, competitiveness, and inclusive growth in Latin America and the Caribbean<sup>40</sup> due to their positive impacts on health,<sup>41</sup> education,<sup>42</sup> and workforce productivity.<sup>43</sup> Closing the gaps in access and service quality requires both greater investment and a transformation of the planning, development, and operation of infrastructure.<sup>44</sup> Despite efforts made by the country, sector policy reforms still need to be strengthened and expanded to other subsectors not included in the previous program (namely urban solid waste, wastewater treatment, and hydroclimatic risk management) to ensure systematic, lasting changes and thus permit achievement of the goals set by the Government of Bolivia. Added to the above is enforcement of the HRWS and fulfillment of the sustainable development goals, which require safe management of water and sanitation services,<sup>45</sup> equitable universal access for all with consideration for quality and continuity, proper consideration in planning of the impacts of climate change on the availability of water at the source (particularly glacial watersheds), improvement in water quality by reducing pollution and protecting water sources, halving the proportion of untreated wastewater, implementation of IWRM at all levels, reduction in the number of deaths caused by disasters, and adequate ISWM. In order to achieve these objectives and goals, the policy reforms started in prior operations (paragraph 1.22) need to be strengthened and deepened. Combined with the country's other initiatives and efforts (paragraphs 1.20 and 1.21), this action will permit establishment of effective regulations and strategic planning for the sectors, accompanied by effective tracking, monitoring, and evaluation processes.<sup>46</sup>
- 1.31 Effectiveness of sector policy reforms.** According to the Organization for Economic Cooperation and Development (OECD),<sup>47</sup> the water and sanitation sectors are highly sensitive to and dependent on multi-level governance in a country. Water connects across sectors, places, and people, and in most cases geographic boundaries and administrative perimeters do not coincide. These sectors are capital intensive and monopolistic, with market failures where planning, coordination, governance, and monitoring are required. The OECD establishes three principles for effective water governance: (i) effectiveness, through public policies and regulations that define goals, roles, and responsibilities; (ii) efficiency, through

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<sup>40</sup> IDB (2018).

<sup>41</sup> According to the United Nations Children's Fund (UNICEF, 2006), the lack of water and sanitation is the leading cause of illnesses in the world, particularly for children.

<sup>42</sup> The high incidence of diarrhea goes hand in hand with high rates of malnutrition, which can give rise to high levels of anemia and low levels of early cognitive development, psychomotor development, and growth in children, negatively affecting their ability to learn (Humphrey (2009), Fewtrell et al. (2005)).

<sup>43</sup> According to the World Health Organization (WHO) (2012), worldwide the profits would represent up to 1.5% of GDP and for each dollar invested in water in Latin America and the Caribbean, the return would be US\$2.40, compared to a cost-benefit ratio of US\$7.30 for sanitation.

<sup>44</sup> IDB (2018).

<sup>45</sup> Access to safely managed water means access to a better source of drinking water within the dwelling, available on demand, and free from fecal contamination and priority chemical contaminants. Access to safely managed sanitation means that the upgraded facilities are not shared with other households and excreta is safely disposed of on site or transported and treated away from the dwelling.

<sup>46</sup> MMAyA (2017).

<sup>47</sup> OECD (2015).

instruments that help maximize the benefits of access to water and sanitation at the lowest possible cost, achieved as a result of sound sector planning; and (iii) trust and engagement, through tools that promote transparency and involve the different stakeholders (monitoring and evaluation tools). According to the OECD (2010), regulatory reforms complement fiscal and monetary policies by creating ideal conditions for sustainable development. Without an effective institutional framework, regulation, and management, the impacts of these sectors on health, education, and economic development are limited. The challenges posed by climate change for the water sector also create the need to advance in building adaptive capacity, measured by the determinants of governance, knowledge, and community and intersectoral cooperation networks, according to the methodology developed by the University of Geneva. Applying this methodology to Bolivia indicates that while significant steps have been taken in building adaptive capacity in the country's water sector, work remains to be done to transform the sector.<sup>48</sup>

- 1.32 **Country strategy in the sectors.** As mentioned (paragraph 1.20), the PSDSB updates the water and sanitation goals set in the PDES to improve and expand water and sanitation services, upholding the HRWS and prioritizing strategic actions. It calls for: (i) improvement in the operational and financial sustainability indicators of the EPSAs, optimization of management, operation, and maintenance of services with an IWRM focus, efficient use of water, and shared responsibility of the population; (ii) urban drainage interventions; (iii) risk management; (iv) expansion of sustainable wastewater treatment coverage; and (v) formulation and application of legal, regulatory, planning, and financing instruments for ISWM.
- 1.33 **Consistency of the program with other initiatives.** Since adoption of the 2009 Constitution, the Government of Bolivia has been introducing policy reforms to bring the sectors into line with its mandates, with notable contributions from the Bank, European Union and, recently, the French Development Agency (AFD). The various cooperation agencies play an important role by supporting the sectors in developing and implementing reforms and policies through the financing of investments and technical assistance. The policy matrix highlights the Bank's contribution as well as the coordinated contribution from the Spanish Agency for International Development Cooperation (AECID), AFD, GIZ, the German Reconstruction Credit Institute (KfW), the World Bank, European Union, and the Development Bank of Latin America (CAF). Noteworthy synergies are generated with other cooperation operations for crafting national strategies for rural wastewater treatment (AECID, World Bank, and GIZ), the HRWS (AECID), actions to advance in the regulation and strengthening of operator management with the AAPS and SENASBA (KfW, AFD, AECID, GIZ), application of the Rural Water and Sanitation Information System in Bolivia (World Bank and AECID), and implementation of the National Watershed Plan with the European Union. The conceptualization and preparation of this PBP are aligned with the PBP BO-L1199. Both reform programs complement one another insofar as they share the goals of improving environmental management in order to control pollution.
- 1.34 **Strategic alignment of the program.** The program is aligned with the Bank's Country Strategy 2016-2020 (document GN-2843) in that it includes: (i) the promotion of innovation in research and development; (ii) a reduction in vulnerability

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<sup>48</sup> IDB-University of Geneva (2019, in progress).

to climate change and natural disasters; (iii) expansion of access and quality of social services; and (iv) improvement in the effectiveness of public governance. The program is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is aligned with the development challenges of: (i) social inclusion and equality by strengthening governance and management and building capacities to expand and improve access to water and sanitation, especially in the most underserved areas, formalization and social inclusion of waste pickers (of urban solid waste), and the HRWS; and (ii) productivity and innovation by promoting reforms that increase wastewater treatment and the conceptual design of the International Center for Wastewater Research and Development (CIIDAR). It is also consistent with the following crosscutting themes: (i) climate change and environmental sustainability, through an institutional, regulatory, and policy framework that helps build adaptive institutional capacity at different levels to respond to the impacts of climate change on water resources, such as the contingency plans of EPSAs, the national plan for IWM, the wastewater treatment strategy, and the urban drainage strategy; access to new tools to support water use planning (HydroBID); (ii) institutional capacities and rule of law through creation and strengthening of regulatory frameworks for better water and sanitation and urban solid waste operations, water resource planning, and an increase in wastewater treatment; and (iii) gender equity and diversity through a diagnostic assessment of gender focus in sector policies and identification of the operating instruments for its implementation.

- 1.35 In all, 58% of the IDB's resources in the operation are invested in climate change adaptation activities, [according to the multilateral development banks' joint methodology for estimating climate finance](#). Those resources contribute to the IDB Group's goal of increasing financing for climate change projects to 30% of all operation approvals by the end of 2020. The program is consistent with the Water and Sanitation Sector Framework Document (document GN-2781-8) insofar as it aligns with all of the dimensions of success: promotion of universal access to water and sanitation services, strengthening of sector governance and management, and inclusion of climate change, water security, and risk management considerations. The program is also included in the 2019 Operational Program Report (document GN-2948).
- 1.36 **Innovation.** The commitments agreed upon with the Government of Bolivia included innovative tools such as HydroBID,<sup>49</sup> which performs water survey simulations to support water resources management and planning, and AquaRating,<sup>50</sup> which can deliver a performance evaluation and action plan for water and sanitation operators, thereby establishing an international standard based on information verified by independent auditors. The Bank developed both tools. A commitment was also agreed on for the CIIDAR's conceptual design, which will both stimulate research

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<sup>49</sup> HydroBID, designed by the IDB, is a quantitative, integrated system for simulating hydrology and water resource management in Latin America and the Caribbean. It is an innovative, effective tool for identifying infrastructure needs and serves as input for designing adaptation projects and strategies. <http://hydrobidlac.org/>

<sup>50</sup> AquaRating is a system designed by the IDB and the International Water Association that is being implemented worldwide, based on an international standard for evaluating water and sanitation companies. <http://aquarating.org/>

and development in the country and generate knowledge of wastewater treatment at altitude at the regional level.

- 1.37 **Gender.** In response to the challenges of gender inclusion (paragraph 1.19) in Bolivia's regulatory framework, this first operation includes identification of gender gaps in sector documents to define operating instrument needs. This mapping and proposal will be finalized in the first tranche and the operating instruments identified will be drawn up in the second tranche.
- 1.38 **Sustainable infrastructure.** The program includes measures consistent with the General Framework for Sustainable Infrastructure<sup>51</sup> in particular regarding the following pillars: (i) economic and financial sustainability by promoting efficient management of the public utility companies; (ii) environmental sustainability, by promoting the sustainable use of water resources, limiting pollution through increased wastewater treatment, and improving watershed planning; (iii) social sustainability, by including effective social management that involves the community for the full life cycle of the project, increasing coverage, particularly in underserved areas, and promoting the HRWS and gender equality; and (iv) institutional sustainability by contributing to the formulation of national and local strategies that strengthen sector governance.
- 1.39 **Consistency with the Bank's Public Utilities Policy.** The reforms proposed by the program and the national sector objectives are aligned with the principles set out in the Bank's Public Utilities Policy (document GN-2716-6) inasmuch as they promote transparency and accountability by improving mechanisms for sector monitoring and evaluation (paragraph 1.46), support development of a more effective regulatory framework for activities carried out for the AAPS (paragraphs 1.43, 1.45, and 1.46), build sector capacities (MMAyA, VAPSB, VRHR, AAPS, SENASBA, and DGGIRS) to enhance the efficiency of service delivery (paragraphs 1.43 and 1.45), and promote the financial sustainability of service operators (paragraph 1.43), among other actions. The program also supports fulfillment of the financial sustainability conditions indicated in the above policy by promoting the financial sustainability of the operators (paragraph 1.43). In order to adhere to the conditions specifically laid out in the Public Utilities Policy (document GN-2716-6, Section IV), a cost-benefit estimate has been made for the key reforms of the proposed program ([optional link 1](#)).
- 1.40 **Bank support for the sectors involved.** The Bank has been supporting the sector reforms in this PBP from 2016 to the present,<sup>52</sup> as continuation of implementation of the sector reforms made under the previous PBP (paragraph 1.21) approved in March 2016, to support meeting the targets and sector challenges identified in the new 2016-2020 national and sectoral planning cycle, as enshrined in the PDES and the PSDSB, which, among other things, made it possible to update the Institutional Strategic Plan for the AAPS in 2017, maintaining continuity in Bank support for the institutional strengthening of the regulatory entity through the operations under way. Since 2016, it has also supported preparation of the Guide for Determining the Waste Collection Rate through loan 2880/BL-BO, and in 2017 the preparation and

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<sup>51</sup> [Technical note IDB-TN-01388](#).

<sup>52</sup> Through technical cooperation operations ATN/OC-16592-BO, ATN/MA-15888-BO, ATN/OC-16304-BO, ATN/OC-16305-BO, and ATN/LA-15449-BO.

dissemination of the National Policy on HRWS and the water and sanitation Performance Evaluation Framework through the Bank's active participation and advice in the International Cooperation Group on Water and Sanitation; likewise the 2017-2020 Multiyear Program on IWRM and IWM has support from the Bank through loans 3730/BL-BO and 3731/BL-BO and the associated technical cooperation operations. Likewise, in 2018 and 2019, through financing for consulting services and technical assistance, the Bank supported sector institutions for attaining its sector reform commitments. In the framework of the Bank's support for the sectors, eight loans are being satisfactorily executed for implementation of investment projects, which contributes to achieving the targets for the outcome indicators of the reform program and 11 technical cooperation operations for a total of US\$554.6 million in the sectors of water and sanitation, urban drainage, urban solid waste, comprehensive watershed cleanup, multipurpose projects for water and irrigation, and management of services, among others, which demonstrates the value added of the Bank's support for these sectors in Bolivia. A breakdown of the projects and technical cooperation operations is provided in the following [link](#).

## **B. Objectives, components, and cost**

- 1.41 This is the first loan in a series of two consecutive single-tranche operations that are independent of one another but technically related and structured as PBPs. Its objective is to promote the sustainability of the sector through reforms that improve sector governance and the management of water and basic sanitation services, including urban solid waste and water resources, in a context of climate change and with a view to achieving water security. The specific objectives are to: (i) ensure a macroeconomic context that is consistent with the program objectives; (ii) help update and strengthen sector policies and regulations, including financial instruments; (iii) build sector entities' planning capacities for adequate planning; and (iv) update sector performance evaluation tools to permit better policy decisions. The program is divided into four components.
- 1.42 **Component I. Macroeconomic sustainability.** The objective of this component is to help promote a macroeconomic context that is consistent with program objectives and with the guidelines set out in the sector policy letter.
- 1.43 **Component II. Sector policies and regulations.** The objective of this component is to supplement, update, and adapt sector policies and regulations to harmonize them with the framework of the new national and human rights policies, thereby facilitating more effective development of the sector and its sustainability at all regional levels, and of institutional management by defining policies, regulations, guides, and guidelines with a systemic sector focus. The above will be achieved through the following commitments: (i) adoption of the HRWS; (ii) preparation of the Law on Provision of Water and Sanitation Services (draft legislation); (iii) approval of project classification; (iv) approval of regulations for controlling water quality; (v) approval of information and design parameters for wastewater treatment projects by altitudinal ecoregion; and (vi) approval of the manual for preparing the Five-year Development Plans. This component also supports the efficient management of services with a focus on social considerations, including gender, water security, and control of the quality of water for human consumption, through the following commitments: (i) approval of methodological guidelines to incentivize sanitary sewerage connectivity and periurban and urban areas; (ii) approval of the diagnostic

- assessment/evaluation and identification of lessons learned on implementing the social strategy for community development and institutional strengthening in water and sanitation projects; (iii) approval of guidelines for reducing nonrevenue water in EPSAs; (iv) approval of guidelines for preparing the national strategy for improving EPSA management; (v) approval of national program guidelines for capacity-building and certification of occupational skills in water and sanitation; (vi) approval of guidelines for the calculation and recovery of costs associated with sewerage and wastewater treatment services; (vii) approval of the diagnostic assessment of existing documents and instruments that put into place and implement the gender approach in sector policies; (viii) issuance of guides for formulating contingency plans by category of EPSA; and (ix) approval of the manual for developing strategic plans for the sustainability of EPSA water sources. The second PBP operation will support implementation of the sector commitments at the different levels of government, sector entities, and projects and interventions to be designed, as well as approval of guidelines and programs based on the guidelines established in this first tranche.
- 1.44 This component also targets the formulation, updating, and application of legal, regulatory, and administrative instruments and economic mechanisms that strengthen implementation of ISWM through the following commitments: (i) approval of the municipal regulations model for ISWM; (ii) approval of the departmental regulations model for ISWM; (iii) approval of guidelines for the formalization and social inclusion of men and women waste pickers; (iv) approval of guidelines for the design of urban waste collection services; and (v) approval of guidelines for municipal management of ISWM. Lastly, this component supports the financial sustainability of municipal waste collection services through recovery of the costs of providing the service. To that end, a methodology guide for determining the rate for municipal waste collection services will be approved. The second tranche of the PBP will support its implementation at the subnational levels for implementing IWRM.
- 1.45 **Component III. Sector planning.** The objective of this component is to strengthen planning for investments in water and sanitation and urban drainage and to establish policy guidelines that ensure their sustainability, prioritizing strategies and programs to accelerate fulfillment of the sector targets in underserved areas and ensuring that those investments are made based on efficiency and sustainability criteria, with a climate change and risk focus. The following commitments under the first tranche have been prioritized: (i) approve the National Water and Sanitation Strategy for Rural Areas and Small Towns (ENRAS); (ii) approve the Conceptual Framework and guidelines for the National Wastewater Treatment Strategy; and (iii) approve the national diagnostic assessment and guidelines for the National Storm Drainage Strategy. This component also helps strengthen institutional strategic planning so that the stakeholder institutions can achieve the sector goals, through the following commitments: (i) approve the Institutional Strategic Plan for the AAPS; (ii) approve the Institutional Strategic Plan for SENASBA; and (iii) approve and implement the organizational, operational, and functional re-engineering for SENASBA. This component also plays a part in defining management and planning models in priority areas with a focus on environmental sustainability, risk management, gender, and diversity by: (i) designing a pilot initiative for managing residential fecal sludge in periurban areas in the city of Santa Cruz; and (ii) formulating at least 19 contingency plans for the EPSAs. Lastly, this component helps develop and implement water

resource planning at the national level, incorporating the effects of climate change, risk management, and focusing on urban water security. The above will be achieved by: (i) preparing the HydroBID implementation plan and a pilot project; and (ii) approving the 2017-2020 Multiyear Program for Integrated Water Resources Management and Integrated Watershed Management. The second operation will support the sectors in preparing and approving the National Wastewater Treatment Strategy and the National Storm Drainage Plan, and in implementing and evaluating the strategies, plans, and initiatives prepared in the first tranche.

- 1.46 **Component IV. Monitoring and evaluation.** The objective of this component is to update sector performance evaluation tools through approval of the Sector Performance Evaluation Framework 2016-2020 and develop and strengthen implementation and updating of the monitoring and evaluation systems required for tracking, regulating, monitoring, and making decisions in implementation of the PSDSB using reliable and timely information. These actions will be achieved through the following commitments: (i) implement the Rural Water and Sanitation Information System; (ii) implement the National Inventory of Wastewater Treatment Systems with GeoPTAR; (iii) implement the Regulatory Monitoring System of the Integrated Regulatory Information System for Water and Basic Sanitation; and (iv) implement AquaRating. Lastly, this component promotes advancement in wastewater treatment experimentation and research for high altitude cities through approval of the conceptualization, design, and predimensioning of CIIDAR. The second operation will support the sectors in initial implementation of the systems nationwide in programs and EPSA and will begin construction of CIIDAR.

**C. Key results indicators**

- 1.47 In order to measure the expected results of the reform measures in the medium term, a results matrix was developed with the borrower indicating the outputs, outcomes, and expected impacts of the program. The policy included in the operation are expected to: (i) help update and strengthen sector policies and regulations; (ii) build sound planning capacities in sector entities; and (iii) update sector performance evaluation tools for better policy decision-making. To achieve these outcomes, it is assumed that the government will disseminate the policy outputs defined in this operation and that those outputs will be adopted by the service providers and sector and subnational entities. The program impacts are expected to include increased access to water and sanitation (including wastewater treatment), an increase in proper disposal of urban solid waste, and improved management of EPSAs.

**Table 2. Expected Impacts and Outcomes**

<b>Impact</b>	<b>Indicator</b>
Increased access to drinking water and sanitation (including wastewater treatment)	Households with access to drinking water at the national level
	Households with access to improved sanitation facilities at the national level
	Percentage of households with treated wastewater in towns having more than 1,000 inhabitants
Increase in properly disposed urban solid waste	Urban solid waste that is disposed in sanitary landfills
Improved management of EPSAs	Savings in volume of nonrevenue water in five priority EPSAs
<b>Outcome</b>	<b>Indicator</b>
Sector regulatory policies are updated and strengthened	Number of EPSAs strengthened in the delivery of high-quality water and sanitation services
	Number of municipios strengthened in ISWM
Strengthened sector planning	Number of prioritized watersheds with a water governance focus
Number of watersheds that have implemented a risk management and climate change focus	Number of EPSAs reporting updated wastewater treatment data to the VAPSB/AAPS

## **II. FINANCING STRUCTURE AND MAIN RISKS**

### **A. Financing instruments**

- 2.1 This operation, the first in a series of two consecutive operations that are independent but technically linked, has been designed as a PBP, based on the guidelines and directives set out in the lending framework (document GN-2200-13) and on “Policy-based Loans: Guidelines for Preparation and Implementation” (document CS-3633-2). The programmatic modality is justified by: (i) the complex and progressive nature of the reforms; (ii) different timing for implementing the reforms; (iii) coordination among the institutions involved; (iv) support for policy dialogue in the country; and (v) a track record in implementing reform, as well as monitoring and feedback of the outcomes.
- 2.2 **Dimensioning of the operation.** Under paragraph 3.27(b) of the “Policy-based loans: Guidelines for Preparation and Implementation (New Version, document CS-3633-2),” the operation is dimensioned based on the financing needs of the country. Up to US\$100 million in financing for this first PBP will be charged to the regular Ordinary Capital, to be released in a single tranche in 2019. This amount represents 2.7% of Bolivia’s total financing needs for 2019 (US\$3.691 billion, or 8.4% of GDP).

### **B. Environmental and social risks**

- 2.3 Under Directive B.13 of the Environment and Safeguards Compliance Policy (document GN-2208-20 and operational policy OP-703), an environmental impact classification is not required. The proposed reforms will not have adverse social or environmental impacts.



### C. Fiduciary risks

- 2.4 The operation does not present fiduciary risks since it provides unrestricted funds for budgetary support within a framework of sound fiscal policy. Bolivia has a long history of managing funds from foreign loans, and financial management risks are not anticipated.

### D. Other risks

- 2.5 The following medium- and high-level risks were identified along with the corresponding mitigation measures:

**Table 3. Other risks**

Type of risk	Description of risk	Mitigation measure
Macroeconomic and fiscal sustainability	Reduction in mineral and gas prices, which would affect the central government's revenue and, therefore, the availability of resources for the sectors.	Cofinancing of sector investment projects by the different levels of government: central, departmental, and local.
Public administration and governance	Turnover of technical personnel in the entities involved could adversely affect achievement of outputs/outcomes.	Maintain and/or improve professional job requirements.
Public administration and governance	Delayed implementation of reforms due to difficulties with interagency coordination between the various sector entities.	The MMAyA will hire a consultant to support coordination between the various sector stakeholders.
Monitoring and accountability	The multiplicity of stakeholders in the program makes it difficult to collect results data and to monitor the operation.	The Planning Department of the MMAyA is responsible for interagency monitoring and coordination for implementing the reforms and collecting results data.
Public administration and governance	The policies/reforms that encompass the Ministry of Health do not comply with agreements with the MMAyA.	Ongoing coordination of VAPSB with the Ministry of Health.

### E. Sustainability of reforms

- 2.6 The sustainability of the policy actions carried out in the programmatic series is based on: (i) the commitment of the Government of Bolivia to the reforms and the priority given to the sector, as reflected in the government plans and agendas (paragraph 1.20); (ii) the MMAyA's request to move forward with a new programmatic series comprised of two operations in order to continue and deepen sector reforms; and (iii) the policy instruments developed have been approved at the required levels, and they will remain in effect in the medium and long term.

## III. IMPLEMENTATION AND MANAGEMENT PLAN

### A. Summary of implementation arrangements

- 3.1 The borrower is the Plurinational State of Bolivia, represented by the Ministry of Planning and Development. The executing agency will be the MMAyA, which will be responsible for monitoring compliance with the commitments assumed by the various government institutions and set out in the policy matrix (Annex II). The MMAyA will be responsible for coordinating with the VAPSB, VRHR, SENASBA, the Ministry of Economy and Public Finance, and the AAPS to ensure compliance with

their respective commitments in the policy matrix and the timely presentation of the means of verification.

- 3.2 The MMAyA will be the technical body in charge of activities such as: (i) coordinating with the various government entities responsible for adopting measures or for technical execution of activities; (ii) monitoring progress and promoting fulfillment of the program activities to ensure execution; (iii) serving as official interlocutor with the Bank regarding technical issues; (iv) preparing the requisite reports by the corresponding due dates and with the expected quality; and (v) anticipating and resolving strategic, technical, and coordination risks and problems relating to program execution.
- 3.3 **Special contractual conditions precedent to the sole disbursement of the loan. The sole disbursement of the Bank loan is subject to fulfillment by the borrower, to the Bank's satisfaction, of policy reform commitments, once the loan contract has been signed and the general and special conditions precedent specified in the loan contract for such disbursement have been met, in accordance with the Policy Matrix (Annex II), the Means of Verification Matrix, and the Policy Letter.**

**B. Summary of arrangements for monitoring results**

- 3.4 The MMAyA will coordinate timely fulfillment of commitments corresponding to this first operation, in addition to all other commitments and the scope of the reform. It will be responsible for reporting on progress against the policy matrix and the results matrix and for delivering to the Bank the supporting evidence for the means of verification. The results matrix indicators will guide the evaluation of program implementation progress and will be used for the final evaluation to be conducted upon completion of the last programmatic operation. The borrower and the Bank have agreed to monitor program execution through monitoring meetings on dates to be set by the MMAyA and the Bank. The monitoring and the agreed-upon trigger mechanisms will help determine when it is time to prepare the second programmatic operation. The MMAyA will ensure timely compliance with the indicators for the Second Generation of the Programmatic Policy-based Loan (PBP) and with the commitments and scope of the reform. It will also be responsible for providing information on progress and evidence relating to the policy matrix and results matrix. The Bank has formed an internal team to permanently monitor fulfillment of commitments and their means of verification. The policy matrix and means of verification are presented to monitor and evaluate the scope of the PBP objectives. The aforementioned instruments and the results matrix will be used to monitor progress in program implementation and for the final evaluation.
- 3.5 The program completion report will be prepared at the end of the second operation within six months after the date of the last disbursement. It will evaluate the impact achieved by the two programmatic operations and the extent to which the proposed objectives were met. The borrower has agreed with the Bank on the indicators and baseline for the final evaluation (results matrix) and will gather all the information needed for program monitoring and evaluation. It will also compile all information, indicators, and parameters needed to assist the Bank in preparing the program completion report.

#### **IV. POLICY LETTER**

- 4.1 The Bank has agreed with the government on the policy letter ([required link 1](#)), which describes the objectives and actions to be carried out during the programmatic series, reaffirming the government's commitment to the reforms and activities agreed upon with the Bank. The Bank has also agreed with the government on the policy matrix (Annex II) describing the policy commitments assumed under this program and on the results matrix ([required link 3](#)) and means of verification matrix ([required link 2](#)).

Development Effectiveness Matrix		
Summary		BO-L1200
I. Corporate and Country Priorities		
1. IDB Development Objectives		Yes
Development Challenges & Cross-cutting Themes	-Social Inclusion and Equality -Productivity and Innovation -Gender Equality and Diversity -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law	
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	incrementar el acceso equitativo a servicios básicos de calidad
Country Program Results Matrix	GN-2948	The intervention is included in the 2019 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		9.4
3.1 Program Diagnosis		2.4
3.2 Proposed Interventions or Solutions		4.0
3.3 Results Matrix Quality		3.0
4. Ex ante Economic Analysis		N/A
5. Monitoring and Evaluation		7.0
5.1 Monitoring Mechanisms		2.5
5.2 Evaluation Plan		4.5
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.13
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, External Control, Internal Audit.
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	ATN/OC-16592-BO y ATN/MA-15888-BO

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

The proposal is the first of a series of two operations under the modality of Programmatic policy-based loans whose objective is to contribute to the sustainability of the water, sanitation, solid waste and water resources sectors in Bolivia. The specific development objectives are: (i) to ensure a macroeconomic context congruent with the objectives of the program; (ii) contribute to update and consolidate sectoral policy and regulations, including financial instruments; (iii) strengthen the capacity of sectoral agencies for appropriate planning; and (iv) update the sectoral performance evaluation instruments that allow for better policy decisions.

The proposal presents a good diagnosis of the problems and development needs of the country, including the identification of the factors that contribute to the problems. The diagnosis presents sufficient empirical evidence and takes into account the local context and key institutional actors.

The specific development objectives are clearly defined and are aligned with the problems and priorities of the country in the sectors involved. The Results Matrix is congruent with the vertical logic of the operation, presenting adequate indicators at the level of expected results and impacts. Given this is a Policy-based loan (PBL), the result indicators are adequately defined to measure the degree of implementation or adoption of the proposed policy reforms, whereas service coverage indicators are presented as impact indicators.

For monitoring, the proposal identifies means of verification for policy commitments and MR indicators. For the final performance evaluation, a Before and After comparison is proposed. This analysis will be complemented with a qualitative evaluation of beneficiaries (service providers) that provide information for the attribution analysis.

## POLICY MATRIX

**Objective:** The objective of this operation, which is the first loan in a series of two consecutive single-tranche operations that are independent of one another but technically related and is structured as a programmatic policy-based loan (PBP), is to promote sustainability of the sector through reforms that improve sector governance and the management of water and basic sanitation services, including urban solid waste and water resources, in a context of climate change and with a view to achieving water security. The specific objectives are to: (i) ensure a macroeconomic context that is consistent with program objectives; (ii) help update and strengthen sector policies and regulations, including financial instruments; (iii) build sector entities' capacities for adequate planning; and (iv) update sector performance evaluation tools to permit better policy decisions.

Components/Policy objectives	Policy conditions Programmatic loan I	Status of fulfillment of conditions for programmatic loan I*	Triggers for programmatic loan II
<b>1. MACROECONOMIC SUSTAINABILITY COMPONENT: Macroeconomic conditions in Bolivia consistent with the program objectives</b>			
1.1 The macroeconomic environment is favorable for implementing the program reforms.	1.1.1 Maintenance of an appropriate macroeconomic context consistent with program objectives.	Fulfilled	Maintenance of an appropriate macroeconomic context consistent with program objectives.
<b>2. SECTOR POLICIES AND REGULATIONS COMPONENT: Update the legal framework and strengthen sector regulations</b>			
2.1 Supplement, update, and adapt sector policies and regulations to align them with the framework of the new national and human rights policies, thereby facilitating more effective development of the sector and its sustainability at all territorial levels, and development of institutional management by establishing policies, regulations, guidelines, and technical and methodological guides with a systemic sector focus.	2.1.1 National Policy for the Exercise of the Human Right to Water and Sanitation (HRWS) in Bolivia is approved by MMAyA.	Fulfilled (fourth quarter 2017)	Evaluation Report on Implementation of the HRWS Policy is approved.
	2.1.2 Draft legislation on "Provision of Water and Sanitary Sewerage Services" is prepared by VAPSB.	Fulfilled (first quarter 2019)	Law on the Provision of Water and Sanitary Sewerage Services is submitted to the Plurinational Assembly of Bolivia for consideration.
	2.1.3 Sector classification of water and sanitation projects and scope and content of technical design studies for preinvestment in social development projects (Type III) <sup>1</sup> are approved by MMAyA.	Fulfilled (first quarter 2018)	Projects submitted to the Ministry of Environment and Water (MMAyA) comply with the Classification Regulations.

<sup>1</sup> The Basic Regulations for Preinvestment identify the Technical Design Studies by type of project. Type III corresponds to social development projects (drinking water, sewerage, etc.).

Components/Policy objectives	Policy conditions Programmatic loan I	Status of fulfillment of conditions for programmatic loan I*	Triggers for programmatic loan II
	2.1.4. National Regulations for Controlling the Quality of Water for Human Consumption (NB-512) are approved by the MMAyA.	Fulfilled (first quarter 2018)	Category A and B <sup>2</sup> Public Water and Sanitation Utilities (EPSAs) report water quality indicators to the Water and Basic Sanitation Inspection and Social Oversight Authority (AAPS) pursuant to NB-512.
	2.1.5 Information and Basic Parameters for the Design of Wastewater Treatment Projects Based on Altitudinal Ecoregion are approved by VAPSB.	Fulfilled (first quarter 2019)	Technical guide for the selection and design of WWT guidelines according to altitudinal ecoregion is approved and applied in at least three projects.
	2.1.6 Manual for preparing the Five-year Development Plan is approved by AAPS.	Fulfilled (first quarter 2019)	At least five regulated EPSAs have a Five-year Development Plan drafted using the updated guide and approved by the AAPS.
2.2 Supplement current policies with regulations, guides, and methodological guidelines for efficient management of services, with a focus on social considerations, including gender, water security, and control of the quality of water for human consumption.	2.2.1 Methodological Guide to incentivize sewer connectivity in urban and periurban areas is approved by MMAyA.	Fulfilled (first quarter 2019)	At least three sewerage projects apply the MICAS guide.
	2.2.2 Diagnostic Assessment/Evaluation and identification of lessons learned on implementation of the community development sector social strategy and institutional strengthening in water and sanitation projects are approved by VAPSB.	Fulfilled (first quarter 2019)	Social Management Regulations for Water and Sanitation with a comprehensive approach are approved.
	2.2.3 Technical guidelines for reducing nonrevenue water in EPSAs are approved.	Fulfilled (first quarter 2019)	Technical guide for managing drinking water demand is approved and being implemented in at least one EPSA.
	2.2.4 Guidelines for formulating the national strategy to improve EPSA management are approved by VAPSB.	Fulfilled (first quarter 2019)	National strategy to improve EPSA management is approved.

<sup>2</sup> The AAPS classifies EPSAs based on the population served: Class A: populations larger than 500,000 inhabitants, Class B: populations between 50,000 and 500,000 inhabitants, Class C: populations between 10,000 and 50,000 inhabitants, and Class D: populations between 2,000 and 10,000 inhabitants.

Components/Policy objectives	Policy conditions Programmatic loan I	Status of fulfillment of conditions for programmatic loan I*	Triggers for programmatic loan II
	2.2.5 Guidelines for the National Program for Capacity-building and Certification of Occupational Skills in the Water and Sanitation Sector are approved by VAPSB.	Fulfilled (first quarter 2019)	Plurinational Program for Capacity-building and Certification of Occupational Skills in the Water and Sanitation sector is approved.
	2.2.6 Methodological Guidelines for the Calculation and Recovery of Costs Associated with Sewerage and Wastewater Treatment Services in Metropolitan Areas are approved by VAPSB.	Fulfilled (first quarter 2019)	Implementation of the methodological guide in at least one metropolitan area.
	2.2.7 Diagnostic assessment of existing documents and instruments that put into place and implement the gender focus in executing projects and managing services, approved by the VAPSB.	Fulfilled (first quarter 2019)	At least two operating instruments approved for implementing the gender focus in interventions in the sector.
	2.2.8 Guide for formulating contingency plans for Category A and B EPSAs and Guide for formulating contingency plans for Category C and D EPSAs are issued by the AAPS for implementation in EPSAs regulated by AAPS.	Fulfilled (first quarter 2019)	At least three contingency plans to promote water security have a recommendation by the AAPS for continued application and a budget for gradual implementation.
	2.2.9 Manual for development and evaluation of the "Strategic Plan for the Sustainability of Water Sources" (PESFA) of EPSAs is approved by AAPS.	Fulfilled (fourth quarter 2018)	At least three PESFAs are approved by the AAPS for implementation.
2.3 Formulation, updating, and application of legal, regulatory, and administrative instruments and of economic mechanisms that strengthen implementation of integrated solid waste management (ISWM).	2.3.1 Model municipal regulations for integrated waste management are approved by MMAyA.	Fulfilled (fourth quarter 2018)	At least two municipios have passed municipal laws for enforcement of Law 755.
	2.3.2 Model departmental regulations for ISWM are approved by MMAyA.	Fulfilled (fourth quarter 2018)	At least one department is in the process of implementing the regulations.
	2.3.3 Guide for formalization and social inclusion of men and women waste pickers of recyclable urban waste is approved by MMAyA.	Fulfilled (fourth quarter 2018)	At least two projects apply the guide, and regulations for registering and authorizing waste pickers to recover and collect recyclable waste are approved.
	2.3.4 Guide for the design of urban waste collection services is approved by MMAyA.	Fulfilled (fourth quarter 2018)	At least two municipal waste collection enterprises (EMAs) apply the guide.
	2.3.5 Guide for Implementation of ISWM in EMAs is approved by MMAyA.	Fulfilled (fourth quarter 2018)	At least two EMAs apply the guide.

Components/Policy objectives	Policy conditions Programmatic loan I	Status of fulfillment of conditions for programmatic loan I*	Triggers for programmatic loan II
2.4 Promote the financial sustainability of Municipal Waste Collection Services through recovery of the costs of providing service.	2.4.1 Methodological guide on "Determination of Municipal Waste Collection Rates" is approved by MMAyA and MEFP.	Fulfilled (fourth quarter 2016)	Two EMAs have updated their waste collection rates.
<b>3. SECTOR PLANNING COMPONENT: Build the planning capacities of sector entities with consideration for efficiency and sustainability criteria</b>			
3.1 Planning of investments in water, sanitation, and storm drainage and establishment of policy guidelines to ensure their sustainability, prioritizing strategies and programs to accelerate fulfillment of the sector goals in underserved areas and ensuring that those investments are made based on efficiency and sustainability criteria, with a climate change and risk focus.	3.1.1 National Water and Sanitation Strategy for Rural Areas and Small Towns (ENRAS) and Action Plan are approved by MMAyA.	Fulfilled (fourth quarter 2018)	ENRAS is being implemented.
	3.1.2 Conceptual Framework and Guidelines for the National Wastewater Treatment Strategy are approved by VAPSB.	Fulfilled (first quarter 2019)	National Wastewater Treatment Strategy is approved.
	3.1.3 Sector diagnostic assessment and formulation of guidelines for the National Storm Drainage Strategy for Cities with Populations over 10,000 is approved by VAPSB.	Fulfilled (first quarter 2019)	National Storm Drainage Strategy is approved.
3.2 Institutional strategic planning for fulfillment of the sector objectives in the stakeholder institutions.	3.2.1 2016-2020 Institutional Strategic Plan (ISP) for the AAPS is approved by MMAyA.	Fulfilled (second quarter 2017)	Evaluation of compliance with the ISP by the AAPS is approved and disseminated.
	3.2.2 2019-2020 ISP and its projection through 2025 for the National Service for the Sustainability of Basic Sanitation Services (SENASBA) is approved by SENASBA.	Fulfilled (first quarter 2019)	Evaluation of compliance with the SENASBA ISP is approved and disseminated.
	3.2.3 Operational and functional organizational redesign of SENASBA is approved and being implemented by SENASBA.	Fulfilled (first quarter 2019)	
3.3 Establishment of management and planning models in priority areas with a focus on environmental sustainability, risk management, gender, and diversity.	3.3.1 Design of a pilot initiative for management of residential fecal sludge in periurban areas of the city of Santa Cruz, Bolivia is approved by VAPSB.	Fulfilled (first quarter 2019)	Technical guide for managing residential fecal sludge is approved and being implemented.
	3.3.2 Nineteen contingency plans for EPSAs are prepared and have a recommendation from the AAPS for their continued use.	Fulfilled (fourth quarter 2018)	Ten contingency plans are implemented and monitored by the AAPS.



Components/Policy objectives	Policy conditions Programmatic loan I	Status of fulfillment of conditions for programmatic loan I*	Triggers for programmatic loan II
3.4 Development and implementation of water resources planning at the national level, incorporating the effects of climate change, risk management, and a focus on urban water security (contingency plans, drought management).	3.4.1 Plan to Implement HydroBID in Bolivia is approved and a pilot project is being implemented by the MMAyA's DGP.	Fulfilled (first quarter 2019)	Water Survey Program is implemented in priority watersheds.
	3.4.2 2017-2020 Multiyear Program for Integrated Water Resources Management and Integrated Watershed Management is approved by MMAyA.	Fulfilled (third quarter 2017)	Performance Evaluation Framework (PEF) for the 2017-2020 Multiyear Program for Integrated Water Resources Management and Integrated Watershed Management (National Watershed Plan) is applied.
<b>4. MONITORING AND EVALUATION COMPONENT: Update sector performance evaluation instruments and develop and strengthen the implementation and updating of monitoring and evaluation systems</b>			
4.1 Performance evaluation. Update the PEF for the sector based on the targets defined in the 2016-2020 Sector Development Plan.	4.1.1. 2016-2020 Sector Performance Evaluation Framework (for water and sanitation) is approved by MMAyA.	Fulfilled (first quarter 2018)	The 2016-2020 PEF for Drinking Water and Basic Sanitation is applied by the MMAyA.
4.2 Sector Information. Develop and strengthen implementation and updating of the monitoring and evaluation systems required for tracking, regulating, monitoring, and making decisions in implementation of the Basic Sanitation Sector Development Plan (PSDSB) using reliable and timely information.	4.2.1 The Rural Water and Sanitation Information System (SIASAR) in Bolivia is being implemented by MMAyA.	Fulfilled (first quarter 2019)	SIASAR is incorporated into new rural intervention programs.
	4.2.2 National Inventory of Wastewater Treatment Systems is linked with GeoPTAR and implemented in the Office of the Deputy Minister for Potable Water and Basic Sanitation (VAPSB).	Fulfilled (first quarter 2019)	At least 10 Category A and B EPSAs report to GeoPTAR.
	4.2.3 The Regulatory Monitoring System of the Integrated Regulatory Information System for Water and Basic Sanitation (SIIRaYS) is implemented in three EPSAs, with performance and management indicators for 2017 by AAPS.	Fulfilled (first quarter 2019)	SIIRaYS is implemented in EPSAs with regulatory monitoring (Category A, B, and C).
	4.2.4 System for measuring indicators and management practices (AquaRating) is being implemented in Bolivia.	Fulfilled (fourth quarter 2018)	At least two EPSAs implement AquaRating.
4.3 Research. Progress in wastewater treatment experimentation and research.	4.3.1 Conceptualization, design, and predimensioning of the International Center for Wastewater Research and Development (CIIDAR) is approved by VAPSB.	Fulfilled (first quarter 2019)	CIIDAR under construction.

\* This information is merely indicative as of the date of this document. Pursuant to document CS-3633-2 (Policy-based Loans: Guidelines for Preparation and Implementation), compliance with any specified disbursement conditions, including maintenance of an appropriate macroeconomic policy framework, will be verified by the Bank when the borrower makes the corresponding disbursement request and will be reflected in a timely manner in the disbursement eligibility memorandum.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-\_\_\_/19

Bolivia. Loan \_\_\_\_/OC-BO to the Plurinational State of Bolivia  
Policy Reform Program for the Water, Sanitation, Solid Waste,  
and Water Resource Sectors in Bolivia

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 Policy Reform Program for the Water, Sanitation, Solid Waste, and Water Resource Sectors in Bolivia. Such financing will be for the amount of up to US\$100,000,000 from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on \_\_\_\_ 2019)