

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BELIZE

WATER SUPPLY AND MODERNIZATION PROGRAM

(BL-L1043, BL-J0005)

**LOAN AND
NONREIMBURSABLE FINANCING PROPOSAL**

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REQUIRED ELECTRONIC LINKS (REL)	
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REL#2	Monitoring and Evaluation Arrangements
REL#3	Environmental and Social Review Summary (ESRS)
REL#4	Procurement Plan

OPTIONAL ELECTRONIC LINKS (OEL)	
OEL#1	Technical Analysis (Options and Design)
OEL#2	Economic Analysis
OEL#3	Financial Analysis
OEL#4	Compliance Analysis with the Public Utilities Policy (PUP)
OEL#5	Climate Change Analysis
OEL#6	Operations Manual
OEL#7	Environmental and Social Management Framework
OEL#8	Migration Analysis
OEL#9	Operation Monitoring Tool

ABBREVIATIONS	
BWSL	Belize Water Services Limited
CAPEX	Capital Expenditures
CBA	Cost Benefit Analysis
EA	Executing Agency
EBITDA	Earnings before Interest, Taxes, Depreciation, and Amortization
EE	Energy Efficiency
EIRR	Economic Internal Rate of Return
ESAP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
ESMR	Environmental and Social Management Report
ESMS	Environmental and Social Management System
ESS	Environmental and Social Strategy
FY	Fiscal Year
GDP	Gross Domestic Product
GoB	Government of Belize
GRF	Grant Facility to Support Countries with Large and Sudden Intraregional Migration Inflows
ICAP	Institutional Capacity Assessment Platform
IDB	Inter-American Development Bank
Ips	Indigenous People
kWh	Kilowatt-hour
LAC	Latin America and the Caribbean
MFAFTI	Ministry of Foreign Affairs, Foreign Trade & Immigration
NCCO	National Climate Change Office
NRW	Non-Revenue Water
OC	Ordinary Capital
OM	Operations Manual
O&M	Operation and Maintenance
OPEX	Operational Expenditures
PA	Procurement Plan
PEP	Multiannual Execution Plan
PMR	Project Monitoring Report
POA	Annual Work Plan
PP	Procurement Plan
PPU	Project Planning Unit
PUC	Public Utilities Commission
PWD	Persons with Disabilities
SCADA	Supervisory Control and Data Acquisition
SIB	Statistical Institute of Belize
SOP	Strategic Operational Plan
SPF	Safeguard Policy Filter
VWB	Village Water Boards
WASA	Water and Sewerage Authority
W&S	Water and Sanitation

PROJECT SUMMARY
BELIZE
WATER SUPPLY AND MODERNIZATION PROGRAM
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Financial Terms and Conditions						
Borrower			Item	Flexible Financing Facility ^(a)	GRF	
Belize Water Services Limited (BWSL)			Amortization Period:	25 Years	N/A	
Guarantor						
Belize			Disbursement Period:	4 Years	4 Years	
Executing Agency (EA)						
Belize Water Services Limited (BWSL)			Grace Period:	5.5 Years ^(b)	N/A	
Source	Amount (US\$)	%	Interest rate:	SOFR Based		
IDB (OC) (BL-L1043)	5,000,000	83	Credit Fee:	(c)		
IDB (GRF) (BL-J0005) ^(f)	1,000,000	17	Inspection and supervision fee:	(c)		
			Weighted Average Life (WAL):	15.25 Years		
Total		6,000,000	100	Currency of Approval:	Dollars of the United States of America	
Project at a Glance						
Project Objective/Description. The general objective of this program is to contribute to reduce service gaps between urban and peri-urban/rural areas and to strengthen the institutional capacity of BWSL through the following specific objectives: (a) increase access to water services in peri-urban and rural areas; and (b) improve the operational and financial performance of BWSL in selected service areas with a focus on climate change adaptation and mitigation.						
Special Contractual Clauses prior to the first disbursement. The conditions precedent to the first disbursement will be as follows: (a) the Executing Agency (EA) has appointed or contracted at least: (i) one technical specialist; (ii) one procurement specialist; (iii) one financial specialist; and (iv) one environmental and social specialist; and (b) the Operating Manual (OM) has been approved and is in effect in the terms and conditions agreed with the Bank, which shall have, among other elements, the environmental and social requirements and include as Annexes: the Environmental and Social Management System (ESMS), Environmental and Social Management Framework (ESMF), and the Environmental and Social Management Plan (ESAP) (¶13.4). See other environmental conditions in Annex B of the Environmental and Social Review Summary (REL#3).						
Exceptions to Bank Policies. None.						
Strategic Alignment						
Challenges ^(d) :		SI	<input checked="" type="checkbox"/>	PI	<input checked="" type="checkbox"/>	EI <input type="checkbox"/>
Cross-Cutting Issues ^(e) :		GE <input checked="" type="checkbox"/>	and	DI <input checked="" type="checkbox"/>	CC <input checked="" type="checkbox"/>	and
				ES <input checked="" type="checkbox"/>	IC	<input checked="" type="checkbox"/>

^(a) Under the Flexible Financing Facility (document FN-655-1), the borrower has the option to request modifications to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. In considering such requests, the Bank will take into account operational and risk management considerations.

^(b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long as the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded.

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

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

^(e) GE (Gender Equality) and DI (Diversity); CC (Climate Change) and ES (Environmental Sustainability); and IC (Institutional Capacity and Rule of Law).

^(f) Non-reimbursable financing. The GRF, or IDB Grant Facility, is the IDB's Non-Refundable Facility. In accordance with document GN- 2947-20, the IDB financing structure for this operation includes a combination of 17% of non-reimbursable resources (GRF) and 83% of reimbursable resources (Ordinary Capital). The GRF proceeds will be disbursed proportionally with the Ordinary Capital loan proceeds, which cannot be disbursed before the Ordinary Capital disbursements.

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and justification

- 1.1 **Background.** Belize has been one of the most highly impacted economies by the COVID-19 pandemic. Its Gross Domestic Product (GDP) contracted by 16.7% in 2020, unemployment increased from 7.7% to 13.7% and labor force participation deteriorated from 70.1% to 55.1% in 2020 and 2021.¹ This economic contraction affected the country's capacity to invest in basic services such as Water and Sanitation (W&S). In Fiscal Year (FY) 2020/2021, the main W&S utility in the country, Belize Water Services Limited (BWSL), which provides W&S services to major urban areas and nearby rural villages, was forced to reduce its capital investments from an average of more than US\$10 million per year to about US\$4.4 million. This reduction was basically due to lower sales revenues as collection rates decreased from 98% in FY 2019/2020 to a little over 90% in FY 2020/2021. Consequently, water coverage in its service areas decreased from 98% (FY 2019/2020) to 95% (FY 2020/2021). The Belizean economy has begun to recover following the devastating impact of the pandemic. GDP growth was 12.5% for 2021 and forecasted at 6.5% for 2022.² Collection rates for BWSL are also expected to regain their pre-pandemic levels in FY 2022/2023 (98%), opening the door for new capital investments that could compensate for some of the access gaps triggered by the pandemic.
- 1.2 **Problem addressed.** In Belize, access to improved water services varies significantly between urban (97%) and rural areas (88%), generating a service gap between these two geographic zones.³ In rural areas, more than 10% of the households still extract water from wells and open sources such as rivers, creeks, or springs. In urban areas, most of the access gap is concentrated in peri-urban areas, that is, the outskirts of the country's major cities, especially Belmopan and San Ignacio. Immigration flows are contributing to deepening these service gaps. Belize's population is currently growing at a rate of 1.8% a year, driven mostly by migrants from neighboring countries, which represent about 15% of the country's population.⁴ By 2025, the total population of Belize is expected to reach about 450,000 from today's 428,000 inhabitants.⁵ This population growth is putting pressure on BWSL to attend an increasing demand for basic services such as water, mainly in peri-urban areas and rural villages that surround urban centers where most immigrants tend to locate. It is estimated that each dollar invested in drinking water in Latin America and the Caribbean (LAC) yields returns of US\$3 in urban areas and US\$8.2 in rural areas.⁶ Globally, access to drinking water reduces

¹ Statistical Institute of Belize (SIB), 2022.

² International Monetary Fund, 2022.

³ [Abstract of Statistics 2021](#); Statistical Institute of Belize.

⁴ Idem footnote 3.

⁵ Idem footnote 3.

⁶ Agénor, Pierre Richard (2013): *Public Capital, Growth and Welfare*. Analytical Foundations for Public Policy. Princeton University Press.

episodes of diarrhea by 75%.⁷ High incidence of diarrhea in children hinders absorption of nutrients they need to grow and could lead to malnutrition.⁸ There is also a correlation between the availability of water services and productivity and incomes. Lack of access to water leads to lost labor productivity due to sickness-related absenteeism and/or the need to care for sick children. Time spent obtaining water from sources far from home also affects the potential for income generation. In rural areas, the greatest economic benefit of water availability is the time saved fetching water, which can be used instead for productive activities that generate household income.⁹

- 1.3 **Institutional and financial framework for the sector.** BWSL is the national W&S utility vested with the assets and liabilities of the Water and Sewerage Authority (WASA) in March 2001. BWSL was originally incorporated as a private company. In 2005, following the withdrawal of BWSL's private majority-owner and operator¹⁰, the Government of Belize (GoB) became the majority shareholder, owning approximately 82.6% of the total shares, the Belize Social Security Board holding 10%, and minority shareholders the remaining shares. BWSL is a regulated utility. Its regulatory control includes a statutory regulator, the Public Utilities Commission (PUC), a Water Industry Act (2001), an operating license issued by the PUC, and a Code of Practice which is agreed by the Regulator and BWSL. In Belize, tariffs are set by the PUC, which was established in 1999 to regulate the electricity, W&S, and telecommunications sectors. It is an autonomous entity, funded by licensing fees paid by providers. In the water sector, the PUC only regulates BWSL, as it is the sole licensed water provider in the country. Under the Water Industry Act, PUC can issue licenses to other water providers. However, the regulatory agency has not received any applications yet (for example, none of the Village Water Boards (VWB) that provide services in rural areas is licensed by the PUC). According to the Water and Sewerage Tariff Bylaws (Statutory Instrument No.67 of 2002), BWSL's tariffs may be set at a level that ensures a 12% rate of return. BWSL must submit its proposed tariffs to the PUC to review and approve on a five-yearly basis. The PUC generally calculates tariffs on a cost-plus basis, but also claims to take customer affordability into consideration. In between review periods, BWSL may also apply annually to the PUC to increase its tariffs in line with inflation and other indexation factors.
- 1.4 **Service provision in urban areas.** BWSL is Belize's major W&S utility. It provides water services to all major urban areas, including the cities of Belize City, Belmopan City, San Ignacio, Santa Elena, Benque Viejo Del Carmen, Caye Caulker, San Pedro, Dangriga, Placencia, Punta Gorda Town, Corozal and Orange Walk, which account for approximately 70% of Belize's population. As of April 2022, BWSL had an active customer base of 64,000 water connections and 11,654 sewer connections. Service continuity (the average hours of service

⁷ Wolf, Jennyfer & Hunter, Paul & Freeman, Matthew & Cumming, Oliver & Clasen, Thomas & Bartram, Jamie & Higgins, Julian & Johnston, Richard & Medlicott, Kate & Boisson, Sophie & Prüss-Ustün, Annette. (2018). Impact of Drinking Water, Sanitation and Hand Washing with Soap on Childhood Diarrhoeal Disease: Updated Meta-Analysis and –Regression. *Tropical Medicine & International Health*. 23. 10.1111/tmi.13051.

⁸ UNICEF (2021). Reimagining WASH. Water Security for all.

⁹ Pickering, A.J. and Davis, J. (2012) Freshwater Availability and Water Fetching Distance Affect Child Health in Sub-Saharan Africa. *Environ. Sci. Technol.*, 2012, 46 (4), pp 2391–2397.

¹⁰ The private majority owner and operator was Cascal BV, a Dutch company that acquired about 82% of the shares in BWSL from GoB under a share purchase agreement.

per day) was estimated at 23.98 hours, showing the capacity of the company to provide quality services. BWSL reports that 100% of its users have metered water consumption. In FY 2021/2022, BWSL registered Non-Revenue Water (NWR) levels at 25.4% across the company's 12 major water distribution systems (significantly below the 46% regional average).¹¹ Staff productivity registered 4.4 employees per 1,000 connections, below the regional average of 6.8. The company also reported gross accounts receivable of 49 days (generally, anything above 60 days is concerning) and an Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) margin of approximately 38% (FY 2021/2022), also way above the 12% regional average.¹² Access gaps in Belize's major cities are concentrated in peri-urban areas, representing a challenge for the company.

- 1.5 **Service provision in rural areas.** BWSL also provides water services in 44 rural villages that neighbor its (urban) service areas. BWSL, however, is not the only water service provider in rural areas. Village Water Boards (VWB) manage and operate water supply systems in approximately 194 villages, each with less than 4,000 inhabitants, representing about one-third of the country's population. Water service provision in rural areas faces significant challenges such as the lack of water disinfection equipment and/or practices, lack of resources to operate and maintain the infrastructure, lack of staff capabilities and standard procedures to properly operate water systems, and, very importantly, rapid, and premature infrastructure deterioration. Due to the challenges faced by VWB and the investments needed to upgrade or expand existing rural water systems, BWSL, per request of the GoB, is increasingly assuming the responsibility of providing water services in rural villages, especially those around the company's major service areas such as Belmopan and San Ignacio.
- 1.6 **Access to water services among migrants.** In Belize, migrants account for more than 15% of the total population. Its impact is higher when it comes to the labor market. Immigrants from El Salvador, Guatemala, and Honduras, for example, represent 17.4% of Belize's labor force.¹³ Women represent about 51% of all migrants.¹⁴ According to the International Organization for Migration (IOM), in 2021 Belize had a net migration rate of [1.4 migrants/1,000 people](#). Most immigrants have located in peri-urban areas or rural villages bordering big urban centers, which often lack basic services. This rapid influx of migrant population challenges the provision of services such as W&S, creating pressure on BWSL's existing water infrastructure and additional demand for services. Even though there is an information gap about migrants' access to basic services, surveys conducted by CID-Gallup in 2010, point out that access to water services by migrants is about 64%, significantly lower than the national average. According to the Ministry of Immigration, most of the migrants who have settled in Belize come from neighboring countries such as Guatemala, El Salvador and Honduras, with increasing numbers from Haiti, China, and African countries.¹⁵ Although some

¹¹ Janson, et al., [Caribbean Water Study](#), IDB, 2021.

¹² Idem footnote 11.

¹³ [Abstract of Statistics 2021](#); Statistical Institute of Belize.

¹⁴ Idem footnote 13.

¹⁵ Migrants from Central American countries go to Belize to flee gang-related violence and seek employment opportunities. Migrants from Haiti are fleeing political-related violence and seeking economic opportunities, while those from China are primarily seeking economic opportunities.

of these migrants have regularized their status since 2010, many still have an irregular migration status.¹⁶ The Ministry of Foreign Affairs, Foreign Trade and Immigration (MFAFTI) estimates that the number of irregular migrants in Belize is between 40,000 to 60,000. Considering this background, the GoB has decided to implement a historic amnesty process, which will allow the regularization of up to 40,000 immigrants by 2023,¹⁷ and that it is expected to facilitate their access to government services.

- 1.7 **BWSL's financial challenges.** Population growth, mostly driven by immigration¹⁸ (¶1.6), is putting pressure on BWSL to attend new demand and to maintain service quality among existing customers. To address these challenges, BWSL needs to improve its operational and financial performance to be able to finance new capital (CAPEX) and operational expenditures (OPEX) and sustain service coverage. BWSL's investments and expenditures are financed by the company's net profits or by debt issuance as it does not receive any type of government subsidy to finance capital investments or cover operating expenses. In FY 2020/2021, BWS reported CAPEX for US\$4.4 million. If measured relative to the number of water connections, it represented one of the lowest in the region at US\$69,000 per connection. CAPEX is expected to grow in the upcoming fiscal years, but given the lack of subsidies from GoB, the company needs to innovate to improve its financial and operational performance and generate higher net profits that enable the financing of the needed new investments through free cashflow or the issuance of new debt at reasonable financial conditions.
- 1.8 **BWSL's operational challenges.** Despite its good performance (¶1.4), the company's mostly antiquated infrastructure and operational equipment generate inefficiencies that increase the company's OPEX. BWSL faces particular challenges around energy and disinfection costs, high production costs and water losses due to the lack of smart metering.
- 1.9 **Energy Efficiency (EE) challenges.** In 2021, the global electricity cost represented 12.6% of the company's OPEX (about US\$1.9 million per year) with not much room for improvement given the mostly outdated electromechanical equipment across its pumping systems. The operation of the company's water infrastructure represents about 85% of total energy costs (the remaining 15% being distributed between offices and sewer systems). An EE audit conducted by the Inter-American Development Bank (IDB) in five water systems (Belize City, Belmopan, Caye Caulker, San Pedro and Dandriga that account for over 70% of BWSL's energy consumption), identified that the repair or replacement of existing equipment, mostly pumps and motors, and the optimization of the network management would lead to an OPEX reduction of about US\$260,000 per year (34.9% savings), equivalent to more than 1.2 million kWh per year (or 1.2 GWh / year).
- 1.10 **Disinfection challenges.** An IDB-led assessment conducted in 2021 identified that the company is spending almost US\$390,000 per year in the purchase of

¹⁶ Dependency from the Ministry of Foreign Affairs, Foreign Trade & Immigration (MFAFTI).

¹⁷ Ministry of Immigration, 2022.

¹⁸ Most studies recommend increasing drinking water supply capacity. For example, in Bolivia, progress is being made in upgrading supply networks to counter population growth that includes a significant proportion of rural-urban migrants (Kinouchia, Nakajimab, Mendozac, Fuchsc, & Asaokad, 2019).

calcium hypochlorite to feed its water disinfection systems (about 3% of its OPEX), and that supply chain issues are making these purchases challenging. The assessment suggested the use of innovative water disinfection technologies, based on the on-site production of disinfectants, to reduce the dependence on calcium hypochlorite, an expensive and hazardous substance. The deployment of innovative onsite generation technologies, based on sodium hypochlorite or mixed oxidants, could reduce OPEX in roughly US\$225,000 per year (about 64%). In addition, these technologies could yield benefits in terms of improved organoleptic properties (water's odor and taste), which could lead to an increase in tap water consumption and lower the risks of managing hazardous substances (calcium hypochlorite) for BWSL staff.

- 1.11 **Production cost challenges.** BWSL provides potable water to the municipalities of Caye Caulker and San Pedro by means of a reverse osmosis desalination plant located on each island. Compared to the rest of the country, BWSL estimates that the OPEX of these plants is seven times higher, with an average cost of production estimated at \$14.00 BZ dollars for every 1,000 gallons of water produced. This is mainly driven by the high energy demand of these types of systems. The replacement of current analog meters by innovative smart metering technology (across the islands' distribution networks) could increase revenue collection capacity by improving meter reading accuracy and reducing NRW. BWSL expect that the deployment of smart meters could lead to an increase of up to 15% of the current revenue collected from both residential and commercial customers. The company expects another 5% cost savings from reduced operations, work orders, and liabilities, which would otherwise require dispatching of personnel (meter readings, disconnections, reconnections, and leak detections). Other direct and indirect benefits include reduction in overall operational expenses, reduction in meter maintenance, improved stakeholder relationship, and increased resilience to climate change driven water scarcity. These revenue increases and savings generated by the installation of the new meters are expected to reduce average production costs per user for the two desalination plants.
- 1.12 **BWSL's climate resilience challenges.** Belize's Water Supply Services Climate Change Adaptation Plan¹⁹ highlights that in recent years, due to the country's exposure to extreme weather events, water sources have recurrently faced climate related challenges. In Belize, water supply systems are at risk from a variety of climate hazards including hurricanes, floods, and droughts which can lead to the damage of water supply infrastructure, water quality issues, and thus water shortages. Climate change presents an additional risk as it exacerbates existing hazards. Systems relying on surface water, such as Belmopan, San Ignacio, Benque Viejo and Dangriga, are considered highly vulnerable to the impacts of contaminated runoff on water sources and of river flooding on assets. Water source contamination can occur because of mining, agricultural chemicals, and industrial processes and is typically exacerbated by heavy rainfall events which wash contaminants into watercourses. Coastal and Cayes systems, such as San Pedro or Caye Caulker, are particularly vulnerable to the impacts of extreme weather events and associated wind, waves, and flooding damage. To address climate-related hazards, in 2021 BWSL developed, in coordination with Belize's

¹⁹ Supply Services Climate Change Adaptation Plan, Belize Water Services Limited (BWS) and Belize National Climate Change Office (NCCO), 2021.

National Climate Change Office (NCCO), a Water Supply Services Adaptation Plan as a mechanism for achieving long term sustainability and resilience of its water supply services. The goal of the Plan is to ensure that quality water services can be provided in the face of existing climate variability and future climate change, and its implementation cost is estimated at US\$3.5 million.

- 1.13 **BWSL's gender and diversity challenges.** BWSL currently has a total staff of 309 employees. The company has 32 management positions distributed in eight technical, operational, and administrative departments. Among company managers there is a balanced gender distribution, with 14 women (44%) and 18 men (56%) occupying those positions. However, when non-management employees are analyzed and disaggregated by sex, significant gender disparities are observed. Of the 277 non-management positions, 203 are male (73%) and 74 female employees (27%). Gender pay-gaps also come to light when analyzing non-management employees. Non-management pay grades move between P01 (entry level) and P10 (highest level). P01 is the entry level for unskilled employees and P02 is entry level for clerical/semiskilled employees. P06-P10 are the supervisory levels. Males dominated all pay grade levels, except at P7 and P8 where the numbers are equal. As pay grades get higher the number of females decline, with zero representation at P10. Addressing the matter of salary disparities between men and women, particularly for non-management employees, is a key area of concern for the company. Recruiting is another area for improvement. Even though women represent 41% of all graduates from Science, Technology, Engineering and Mathematics (STEM) programs,²⁰ an analysis of job applications for the 2018-2020 period showed that BWSL received significantly more applications from males (64%) than from females (36%), and that only 11 of the 751 female applications were interested in being considered for field positions as the majority preferred working in administrative positions at the company's headquarters in Belize City.²¹ Finally, BWSL does not currently have a sexual harassment policy. The organization is guided by Belize Protection Against Sexual Harassment Act, Chapter 107 (2000) and the United Nations Women Handbook on Sexual Violence (2012). When it comes to diversity, the company does not currently have any active policy or program to attract minorities or Persons with Disabilities (PWD) and has no data about these groups. The company reports that PWD are hired from time to time, but these hirings are not the result of a proactive policy or program. The company reports a similar (non) approach with minority groups (Indigenous people). To address these challenges, BWSL is in the process of approving a Gender and Diversity Policy to strengthen and enhance the gender and diversity responsiveness of the company's Human Resource Management (HRM). The policy, which is being analyzed by BWSL's Board of Directors, includes priority actions areas that are expected to address current imbalances. These are: (i) leading with transparency in gender and decision-making; (ii) addressing gender and diversity imbalances; (iii) creating a gender equitable and a diverse and inclusive workplace environment; (iv) advancing gender responsive customer service and satisfaction; (v) examining gender and diversity neutrality in human resource documents; (vi) training for gender equality and inclusivity; and (vii) developing appropriate methodologies for

²⁰ [Gender Data Portal](#), the World Bank.

²¹ All information was collected from an Institutional Analysis Report developed in 2022 by a consultancy firm (Shidaa Sustainable Development Solutions) per request of BWSL.

data collection, monitoring, and evaluation. A strategic operational plan has also been developed outlining the process and critical activities for implementing the policy within five years (2023-2027).

- 1.14 **Program strategy to address service gaps between urban and peri-urban/rural areas.** To contribute to reduce these service gaps, all water network expansion projects financed under the program will be located in peri-urban areas or rural areas (villages) close to BWSL service areas with no current access to piped water services. Eligibility criteria has been defined in coordination with BWSL to guarantee that all investments are located in these geographic areas (¶2.6).
- 1.15 **Program strategy to address financial and operational challenges.** The proposed activities under this operation will seek to improve the balance sheet of the company by reducing OPEX or increasing revenues, and to boost its operational efficiency. Water network expansion projects will increase the revenue base. EE investments will focus on those sites with the lower financial recovery period (triggered by OPEX reduction), but also on aspects related to improving the security of the system and the O&M of motors and pumps. Similarly, disinfection investments will focus on those water systems where the recovery period is lower, but also on improving the security of the disinfection process, avoiding the use of hazardous substances (i.e., calcium hypochlorite) and improving the organoleptic properties of supplied water, something that is expected to have a positive impact on water consumption. The proposed investments also include all elements needed to allow BWSL full use of its current SCADA system to improve the management of the infrastructure as well as to monitor the status of motors and pumps to reduce damage and failure through preventive maintenance. The deployment of innovative smart metering technology in island systems (San Pedro and Caye Caulker) will lead to OPEX reduction and additional revenue for the company, and the new operational equipment will help BWSL reduce OPEX and not depend on scarce and monopolistic local suppliers ([OEL#1](#)). By increasing access to water and adding new users, the program will also contribute to increase the company's staff productivity (employees per 1,000 connections) as the number of employees is expected to stay constant.
- 1.16 **Program strategy to address migrant access challenges.** One of the program's prioritization criteria is the percentage of immigrants living in the peri-urban or rural area, following the criteria established by the Non-Refundable Facility (GRF) that supports countries facing migration flow challenges (GN-2947-20). BWSL has identified areas in the peri-urban areas of Belmopan (Cayo District), which have experienced rapid population growth due to migration and where a high percentage of households still lack access to basic services. In the village of Harmonyville, one of the sample projects with no access to piped water services, more than 30% of the population comes from neighboring countries. The company has also identified three neighborhoods located in southern Belmopan (Las Flores, San Martin and Salvapan)²² where approximately 30% of the total population (of 4,700 people) are migrants without access to water services. [According to SIB](#), the Cayo District is home to 11,000 immigrants (21% of the district's population).

²² BWSL is in the process of designing a water network expansion project that will benefit this peri-urban area with new access to potable water.

The water network expansion project that BWSL is planning in Harmonyville and in these three Belmopan neighborhoods, all located in Cayo, would benefit about 450 immigrants (111 households), more than 4% of the district's immigrants ([OEL#8](#)). The installation of smart metering in Caye Caulker, San Pedro and Placencia is expected to reduce water consumption in about 10%, creating financial savings in these migrant households located in these areas.

- 1.17 **Program strategy to address climate resilience challenges.** One of the recommendations of the water supply services adaptation plan is for BWSL to promote the reduction in per capita water consumption. To support this recommendation, the program will finance the installation of smart (micro)meters in three localities (San Pedro, Caye Caulker and Placencia) and the implementation of an information and awareness campaign at the household level to promote reductions in water consumption. Residential water consumption in these three localities is in the order of 4,700 gallons per customer per month, which is 28% higher than the design parameter. ([OEL#5](#)).
- 1.18 **Program strategy to address gender and diversity challenges.** To address gender and diversity disparities, BWSL is in the process of approving a gender and diversity policy, which contains a Strategic Operational Plan (SOP) that sets priority actions and expected policy outputs and outcomes. The policy and plan are expected to institute formal priorities and practices to improve gender equality and diversity inclusion outcomes in the workplace, covering areas such as recruitment, retention, performance management, promotions, talent identification, succession planning, training and development, resignations, remunerations, and anti-sexual harassment practices. The program will finance the implementation of the SOP, including activities to avoid gender and diversity biases in recruitment, ensure equal access to all jobs available in BWSL, and the coordination with the education sector to produce cadre of qualified women and minority groups to undertake a range of jobs in the company.²³ The plan will also include the development of guidelines to address gender and other diverse needs in the workplace such as unisex uniforms, portable bathrooms in field work sites, and accessible lifts for PWD. It will also include the hiring of a gender and diversity focal point for the company for an initial 12-month period.
- 1.19 **Bank experience in the sector and country.** The Bank's involvement in Belize's W&S sector includes several loans, technical cooperation, and investment grant operations. In 2010, the Bank, through its Water and Sanitation Division (INE/WSA) approved loan operation "Integrated Water and Sanitation Program in Placencia" ([2486/OC-BL](#)) to support the economic development of the Placencia Peninsula by the construction of a new sewerage collection and treatment system. In 2008 and 2016, respectively, the Bank approved loan operations "Solid Waste Management Project" ([1270/OP-BL](#)), and "Solid Waste Management Project II" ([3684/OC-BL](#)) to support the country's efforts to reduce environmental pollution

²³ The draft policy being reviewed by BWSL's Board states that gender equality and equity foregrounds issues of diversity and inclusivity of ethnicity, geographical divisions among a population, age differences, other physical disabilities, and the distinctions between gender and sexual orientation. When it comes to ethnicity, the policy aims to promote the inclusion of indigenous Mayans in the company's workforce. The policy plans to establish measurable goals to erode gender and diversity biases in occupations, tasks, and leadership positions in BWSL, and set gender and other inclusive diversity targets and quotas to decrease current and future biases in different occupations and in leadership positions.

and enhance the image of Belize in the ecotourism market by improving the management of its municipal solid wastes. The Bank recently approved three technical cooperation operations to support the urban and rural W&S sectors. Namely: Innovation in the Solid Waste Management Sector in Belize ([ATN/JF-17360-BL](#)), which is supporting the executing of loan operation [3684/OC-BL](#) and piloting recycling projects in tourist destinations; “Design of Wastewater Treatment Solutions in Coastal Areas” ([ATN/OC-18380-BL](#)), which is financing the design of Caye Caulker’s sewerage systems (wastewater collection and treatment); and “Support to Integrated Water Resources Management to strengthen water resources management countrywide” ([ATN/OC-19027-BL](#)). In 2022, the Bank approved investment grant [GRT/CF-19538-BL](#) to finance the piloting of new water disinfection technologies in urban and rural areas. This operation will provide useful inputs for Component 2, specifically for the deployment of new water disinfection equipment in selected distribution systems.

- 1.20 **Lessons learned applicable to the program.** Past projects in Belize indicate that to ensure successful project implementation, the following variables must be considered: (i) timely supervision of the civil works; and (ii) capacity building within BWSL to ensure the financial and operational sustainability of all capital investments. Loan operation [2486/OC-BL](#) ended up being cancelled due to the opposition of local stakeholders to the location of the proposed wastewater treatment plant. Alternative locations were analyzed, but the higher costs of these other locations made the project not financially feasible for BWSL. This experience highlights the importance of conducting, following national and IDB regulations, meaningful public consultation processes for all public works projects. Additionally, since 2018 the entire IDB loan portfolio in Belize has transitioned to use of the Advance of Funds as the main disbursement method with the Direct Payment method only used on exceptional basis and on few occasions. This arrangement has provided the executing agencies with greater flexibility to manage their cash flow and process both foreign and local payments in a timely manner. A lesson learned from similar projects with mostly foreign currency payments is the need for BWSL to adopt the Advance of Funds modality and establish and maintain close coordination with the Central Bank of Belize, through the Ministry of Finance, for the timely processing of foreign currency transactions.
- 1.21 **Strategic Alignment.** This loan operation is aligned with the Bank’s Update to the Institutional Strategy (UIS) (AB3190-2). Namely, with the development challenge of: (i) Social Inclusion and Equality, by increasing access to safe water in peri-urban and rural areas and by promoting equal access to basic services for migrant populations; and (ii) Productivity and Innovation challenge as it will finance the deployment of innovative technologies in BWSL that will improve the operational and financial performance of the country’s main W&S utility. Also, it is aligned with the crosscutting topics of: (i) Gender Equality and Diversity, as it will promote the recruiting and professional development of women in the company; (ii) Climate Change, by promoting EE in the provision of water services and the deployment of smart meters to reduce consumption; and (iii) Institutional Capacity and Rule of Law by modernizing BWSL’s assets and increasing its capacity to operate and maintain them. Additionally, the program will contribute to the Corporate Results Framework (CRF) 2020-2023 (GN-2727-12) by supporting migrant and host populations. The Program is also consistent with IDB’s Country Strategy with Belize 2022-2025 (GN-3086) as it will contribute to the country’s

sustainable economic growth by providing access to basic services in both urban and rural areas and to its climate change adaptation goals by financing investments in resilient infrastructure.

1.22 **Compliance with climate change targets.** The water network expansions projects that will be financed under this operation will increase climate resilience associated with extreme weather events such as floods and droughts. Additionally, the activities of the operation will contribute to reduce the pressure on water resources, allowing the communities to be more resilient to extreme weather events such as droughts, especially since the probability of scarcity and depletion of the resource is reduced. In total, 73.01% of the operation's resources will be invested in climate change activities (mitigation and adaptation), according to the [Joint Methodology of the Multilateral Development Banks](#) for tracking climate change adaptation finance. These resources contribute to the IDB Group target of allocating financing for climate-related projects of up to 30% of approvals. The operation also contributes to Belize's compliance with its Nationally Determined Contribution (NDC 2021) in both its mitigation and adaptation components. In terms of mitigation, it contributes to the goal of reducing Green House Gas emissions for the energy sector and, in terms of adaptation, it is articulated with the prioritized activities for the "Water Resources" and "Land use, human settlements, and infrastructure" sectors. According to IDB's Green Finance Tracking methodology, the program was labeled as 100% green finance as it will contribute to the environmental sustainability objective of "Sustainable use and protection of water and marine resources" ([OEL#5](#)).²⁴

1.23 **Compliance with Public Utilities Policy (GN-2716-6).** The operation complies with the Bank's Public Utilities Policy (PUP) goal of improving the sustainability and efficiency of service providers through the development of financially sustainable schemes that combine cost-efficiency and the most appropriate technological solutions to meet the population's need to access basic services. The financial evaluation conducted showed that BWSL has the financial capacity to meet the commitments arising from the proposed investments and to properly operate and maintain the equipment and infrastructure that will be financed under the operation ([OEL#4](#)).

B. Objective, components, and cost

1.24 **Objectives.** The general objective of this program is to contribute to reduce service gaps between urban and peri-urban/rural areas, and to strengthen the institutional capacity of BWSL through the following specific objectives: (a) increase access to water services in peri-urban and rural areas; and (b) improve the operational and financial performance of BWSL in selected service areas with a focus on climate change adaptation and mitigation.

1.25 **Component 1. Access to water services (IDB-Ordinary Capital (OC): US\$600,000; IDB-GRF: US\$450,000).** This component will finance expansion projects aimed at increasing access to water services in peri-urban areas and rural

²⁴ The Paris Alignment Implementation Approach does not apply retroactively to operations that reached eligibility before January 01, 2023, such as this operation.

villages located near BWSL service areas²⁵, including project design, the installation of pipes and water meters, and project supervision. Most projects are expected to benefit peri-urban and rural areas with a high presence of migrant populations (about 30% of total population).

- 1.26 **Component 2. Innovation for improved operational and financial performance (IDB-OC: US\$4,010,000; IDB-GRF: US\$490,000).** This component will finance different types of innovative equipment aimed at improving the company's operational and financial performance. This component will be structured in three main subcomponents: (i) Water disinfection, which will finance, in selected service areas, the deployment of innovative water disinfection technologies based on the on-site production of disinfectants; (ii) EE, which will finance the repair and replacement of electromechanical equipment in prioritized service areas; and (iii) Smart metering, which will finance the piloting of smart metering technologies in three island water systems (San Pedro, Caye Caulker and Placencia). An information campaign will be financed under this component to support the deployment of the new disinfection technologies and the installation of the smart meters. This component will also finance the implementation of the company's gender and diversity operational strategic plan, including the hiring of a gender focal point for the company.
- 1.27 **Project management, audit, and evaluation (IDB-OC: US\$390,000; IDB-GRF: US\$60,000).** Remaining resources will cover management costs as well as the operation's external financial audits and the intermediate and final evaluations, which will identify the specific benefits of the program's interventions on migrant populations.

C. Key results indicators

- 1.28 The program is expected to directly benefit at least 369 households with no current access to piped water services. Of those, about 111 will be households headed by migrants (30% of total benefited households). The program is also expected to reduce BWSL's OPEX and improve the company's operational and financial performance indicators and increase the percentage of women working in the organization. The program is also expected to contribute to reduce residential water consumption, including migrant households, by the installation of smart meter (in about 10%), and to indirectly benefit 52,934 households through the EE and disinfection interventions. Key outcome indicators and targets are included in the table below. More details in Annex II.

²⁵ In rural villages benefited by the Program water service provision will fall under BWSL.

Table 1. Key Outcome Indicators

Outcome Indicator	Unit	Target
Households with new access to potable water	Households	369
Households with new access to potable water headed by migrants	Households	111
Energy consumption in selected service areas	Index base 100	35
GHG Emissions mitigated (CO ₂ -e)	tonCO ₂ -e /GWh	410.4
Residential water consumption per customer	Gal/month	4,231
Women working in BWSL	Percentage	35

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing Instruments

- 2.1 **Financing structure and modality.** The operation is structured as an Investment Loan under the Multiple Works Program modality, as it will finance technically similar but mutually independent works whose feasibility does not depend on the execution of a particular number of projects and their individual size does not call for the Bank's direct management of the operation. The execution and disbursement period will be four years. The threshold to physically start the program's works will be two years after the effective date of the loan contract.
- 2.2 **Cost and financing.** The total cost of the program is US\$6,000,000, financed with resources from the Bank's OC for US\$5,000,000 and US\$1,000,000 from IDB's Grant Facility to Support Countries with Large and Sudden Intraregional Migration Inflows (GRF). A consolidated budget is shown in Table 2.

Table 2. Summary of Program's Costs (in US\$)

Component	OC	GRF*	Total	%
C1. Access to Water Services	600,000	450,000	1,050,000	17.5%
1.1. Water Expansion Investments	600,000	450,000	1,050,000	17.5%
C2. Innovation for Improved Operational and Financial Performance	4,010,000	490,000	4,500,000	75.0%
2.1. Water Disinfection	1,410,000	0	1,410,000	23.5%
2.2. Energy Efficiency	1,500,000	0	1,500,000	25.0%
2.3. Smart Metering	1,100,000	400,000	1,500,000	25.0%
2.4. Information Awareness Campaign	0	50,000	50,000	0.8%
2.5. Gender & Diversity Strategic Plan	0	40,000	40,000	0.7%
Program Management, Audit & Evaluation	390,000	60,000	450,000	7.5%
3.1. Program Management	310,000	0	310,000	5.2%
3.2. Evaluations	0	60,000	60,000	1.0%
3.3. External Audits	80,000	0	80,000	1.3%
TOTAL	5,000,000	1,000,000	6,000,000	100%

*The values in Table 2 are indicative at the activities level.

- 2.3 **Use of GRF resources.** The program meets one of the three eligibility criteria for the use of resources from the GRF (GN-2947-20 and AB-3332). Belize's migration increased its population by 1.4% between 2015 and 2018, almost triple the level required to qualify under Criteria 1 (0.5%), and therefore, Belize is eligible under Criteria 2 (permanence). It also complies with the design criteria as:

(i) the program identifies water access challenges and defines appropriate solutions to tackle it; (ii) it is aligned with one of the strategic thematic area of the GRF: access to basic services and housing; (iii) it defines migrant and non-migrant beneficiaries as well as geographical areas with high concentration of migrants (¶1.6) and the results matrix sets targets for expanding access to migrant households and defines targeting criteria to ensure that they are met; and (iv) the operation is considered in the country's programming. Accordingly, the US\$5 million from OC will leverage the US\$1 million in GRF resources, consistent with a combination of a maximum of 83% of IDB reimbursable resources and 17% of non-reimbursable resources ([OEL#8](#)).

- 2.4 **Disbursement schedule.** The execution and disbursement periods are four years. The disbursement schedule is shown in Table 3.

Table 3. Disbursement Schedule (US\$)

Source	Year 1	Year 2	Year 3	Year 4	Total
IDB	146,842	1,546,562	2,656,243	650,353	5,000,000
GRF	0	389,467	430,269	180,264	1,000,000
Total	146,842	1,936,029	3,086,512	830,617	6,000,000
%	2.4%	32.3%	51.4%	13.8%	100%

- 2.5 **Representative sample.** A representative sample was analyzed as part of the program design, which accounts for 68% of the total program amount. The sample included one water expansion project: (i) Harmonyville Water Expansion for a total of US\$0.342 million, which is fully prepared at the feasibility level. The sample also included water disinfection investments in five BWSL service areas (Belize City, Belmopan, Orange Walk, San Ignacio, and San Pedro for a total of approximately US\$1.4 million, which are also fully prepared). In addition, EE investments were identified for five service areas (Belize City, Belmopan, San Pedro, Caye Caulker and Dangriga) for a total of US\$1.3 million. Finally, a pilot project for the installation of smart meters in San Pedro, Caye Caulker and Placencia, which will replace existing analog meters, was designed for little over US\$1 million. All projects and investments under the sample followed the eligibility criteria defined in ¶2.6. BWSL is in the process of defining additional new water expansion projects to be financed under Component 1.²⁶

- 2.6 **Eligibility and prioritization criteria.** For the identification of new projects and investments the following eligibility criteria have been defined with BWSL and are included in the Program's Operations Manual (OM) ([EOL#6](#)): (i) technical, financial, environmental, and socioeconomic feasibility²⁷; and (ii) not classified as Category "A" operations under the environmental and social classification of the Bank's Environmental and Social Policy Framework and the guidelines set out in the program's Environmental and Social Management Framework (ESMF) (¶2.11).

²⁶ BWSL has pre-identified a potential project, which would absorb 100% of the non-allocated resources under Component 1, located in greater Belmopan, which would benefit about 280 households, including 30% of migrant households. Final projects will follow the eligibility and prioritization criteria defined for the program.

²⁷ Works are socioeconomically feasible if they have an EIRR greater than 12% under a CBA or if the most cost-efficient alternative was selected using a cost-effectiveness analysis following IDB guidelines and the considerations defined in the program operating regulations.

For Component 1, the project must be located in peri-urban areas or rural areas (villages) close to BWSL service areas with no current access to piped water services; and for Component 2, they need to be located in a BWSL service area. For Component 1, one prioritization criterion has been identified: the percentage of immigrants living in the peri-urban or rural area; and for Component 2, investments in locations with more saving costs opportunities for the company.

- 2.7 **Technical feasibility.** The proposed technical solutions will contribute to expanding water supply service provided by BWSL and to improving its operational performance. The interventions, based on a technical analysis by experienced consultants in the areas of disinfection and EE, together with the engineering department of BWSL, are feasible, and are the outcome of an analysis that contemplated different technical alternatives and configurations. The costs of these alternatives were estimated and compared to make an economic feasibility appraisal considering local unit prices, technologies, and services. The sizing criteria and parameters are fully compatible with local and international design standards. BWSL is familiar with the O&M of the assets that will be financed but will receive additional support from the specialized firms that will carry out the supply and installation of the proposed equipment. The general approach, the materials, and the technology that will be used are known in Belize and have been successfully used in other projects elsewhere. Overall, the proposed interventions are technically viable, adequate for the defined capacity and quality objectives, and correspond to the minimal cost solution under the framework of such objectives. [OEL#1](#) includes a description of the proposed investments and related costs.
- 2.8 **Socioeconomic feasibility.** An economic analysis was conducted for each of the projects of the sample. For the expansion project, a Cost-Benefit Analysis (CBA) was developed, the main benefits are the increase in consumption and a decrease in the price the households without the project are paying to get water from alternative solutions. The costs considered were the investment costs and the incremental operational and maintenance costs. Using a 12% discount rate, the Harmonyville is economically feasible with an Economic Internal Rate of Return (EIRR) of 14%. For the EE, a CBA was also conducted. The benefits of the project are the energy savings and the maintenance savings per year. The costs included are the investment costs. The project is feasible with an EIRR of 18%. For the disinfection interventions, as well as for the smart meters, cost-effectiveness analyses were conducted where the most cost-effective interventions were selected ([OEL#2](#)).
- 2.9 **Financial Analysis.** The financial analysis conducted, which included the elaboration of a financial model of BWSL' cash flow projection for the next 15 years, indicates that the project generates a positive impact on the profitability of BWS, considering the increase in the number of connections, savings on energy and chemical costs and revenue increase due to the implementation of smart metering technology. The EBITDA margin will increase to levels superior to 41% in the next 3 years, from the current 38% (March 2022). Currently (FY 2022/2021) the company presents a sound EBITDA (US\$9 million) and net profit (US\$2.9 million). Also, the financial projections indicate that BWS will generate enough cash flows to finance investment levels of US\$5 million/year, keeping its gearing at adequate levels (LT liabilities/Equity) ([OEL#3](#)).

- 2.10 **Institutional feasibility.** An Institutional assessment of BWSL was conducted during the design phase of the program following the Bank's Institutional Capacity Assessment Platform (ICAP) methodology. The assessment led to satisfactory results with respect to BWSL's institutional capacity to execute the program. This satisfactory categorization was based on the presence of: (a) solid legal and corporate governance frameworks, accompanied by ample human resources management capacities; (b) effective integration of the planning, administration, and financial management functions, and supported by the necessary information systems and internal and external controls; and (c) adequate project implementation and management capacities under a dedicated technical/operations department. Specific institutional strengthening actions have been recommended and will be put in place to enhance program execution as well as BWSL capacities. These include the implementation of specific internal and organizational manuals, the consolidation of procurement responsibilities under single and fully staffed department, and the consolidation of functions and procedures for environmental and social management.

B. Environmental and social safeguard risks

- 2.11 In accordance with the Bank's Environmental and Social Policy Framework (ESPF), this operation was classified as Category "B" due to the expected local and short-term environmental and social impacts for which effective mitigation measures are available and will be implemented. A detailed Environmental and Social Assessment Plan (ESAP) and an Environmental and Social Management Plan (ESMP) were prepared for the sample expansion project: Harmonyville, looking at both the construction and operation phases. An Environmental and Social Framework has also been developed. The operation will generate moderate direct impacts generated by solid waste (hazardous and/or non-hazardous), including those related to chemical storage, noise, localized gas emissions, and potential sediment discharge in nearby streams and canals and lagoons (due to increase of run-off); the generation of traditional and hazardous waste, temporary impacts related to vehicle and pedestrian access during construction. The operation will not finance any resettlement, physical or economic displacement or land acquisitions as such, and will not finance interventions that could lead to negative impacts on cultural heritage.
- 2.12 The Disaster Risk and Climate Change Risk (DRCCR) of the operation was classified as Moderate as natural phenomena such as droughts, landslides, floods, could moderately impact the program's execution, especially investments financed under Component 1. The operation received a preliminary Environmental and Social Risk Rating (ESRR) of Moderate driven by potential direct, indirect, and cumulative impacts associated with accidents, injury, and disease arising from, associated with, or occurring during construction activities. The operation will cause moderate direct impacts associated with solid waste, noise, and reduced community access during construction. The project will not generate any resettlement, physical or economic displacement or land acquisitions. The ESA verified that there is no presence of indigenous peoples and afro-descendants in the program's area, nor negative impacts on cultural heritage. Eligibility criteria have been established to exclude Category A projects, defined as those works that generate significant, irreversible adverse impacts, and those that generate physical or economic displacement, land acquisition, or interventions that produce

impacts on Indigenous Peoples, or Afro-descendent populations, and will be added to the Project Operating Manual (POM). More details in [REL#3](#).

- 2.13 BWSL has adequate capacity to manage environmental and social issues and has developed an Environmental and Social Management System (ESMS) with specific elements related to Labor and Working Conditions under ESPS 2. BWSL will prepare and operate a Grievance Redress Mechanism for all workers (direct and contracted).
- 2.14 Meaningful, culturally appropriate, and gender sensitive public consultations for the Harmonyville project were held on December 15th. Consultations were organized by BWSL following an in-person format with 54 people participating in Harmonyville. Different stakeholders such as future users and business owners participated. During the consultations, the main characteristics of the projects and their respective ESAP and ESMP were presented highlighting potential impacts and main mitigation measures. In Harmonyville, questions from participants, mostly potential users, focused on the requirements to connect to the water network and whether residents need to have their land documents finalized to apply for water. BWSL clarified that presenting proof that documents are in process is sufficient. A local representative from the Ministry of Infrastructure Development & Housing also participated and addressed concerns about the status of some landownership requests. Existing landowners asked whether BWSL would install service connections in empty lots. BWSL clarified that the company is only considering existing residents and will not install service connections in empty lots unless there is proof of intention to construct. In general terms, the project was positively valued by all parties present, highlighting their importance and necessity for the environmental and social health of the community (§2.11).

C. Fiduciary risks

- 2.15 BWSL has a solid performance history executing projects financed by the Bank and otherwise. Additionally, the ICAP assessment indicates that the fiduciary systems and structures are satisfactory with most of the identified fiduciary risks qualified as low, except for the following which were qualified as medium-high: (i) considering that BWSL is currently implementing other projects, there is a risk of work overload should the existing staff assume the responsibility of carrying out all the fiduciary tasks for the project, which could lead to overall execution delays in the first two years. This risk will be mitigated by strengthening the institutional capacity of the Project Planning Unit (PPU) within BWSL, and (ii) considering that BWSL is required to follow the processes under the foreign exchange control regulations of Belize for foreign currency transactions, there is a risk of delays with payments to international suppliers, which accounts for most of the payments envisaged. To mitigate this risk, BWSL will agree with the Ministry of Finance, Economic Development, and Investment to adopt the arrangement used by other IDB-financed projects whereby foreign currency payments are processed by the Central Bank of Belize. In addition, the execution of the program requires the strengthening of the procurement function. To mitigate this risk a Program Procurement Specialist with full dedication to the program will be hired as part of the company's PPU (§3.2).

D. Other risks and key issues

- 2.16 **Execution risks.** The following execution risks have been identified: (i) cost overruns due to rapid inflation and the location of some civil works and equipment installation (small islands such as Caye Caulker or San Pedro); and (ii) post-pandemic disruptions in the global supply chain for goods and services, coupled with the complexity and limited availability of the equipment to be procured under the program. To mitigate these risks: (a) all activities/items included in the budget incorporate contingency factors in their cost structures; (b) budget estimations for equipment and infrastructure established and updated based on actual cost references by source and professional designs; and (c) the program's Procurement Plan (PP) has been prepared taking into consideration contingency times.

Operation and maintenance risks. BWSL will take the necessary measures to ensure that the program's works and assets are properly maintained in accordance with generally accepted technical and environmental standards. All supply and installation contracts (for the provision of goods and connected services) will include technical assistance to BWSL, which will be provided by the equipment supplier. During the disbursement period and as part of the semiannual progress reports, BWSL will submit a report on the status of such works and goods. If Bank inspections or reports received by the Bank determine that maintenance is being performed below the agreed service levels, BWSL, as EA, will adopt the necessary measures to fully correct the deficiencies.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Borrower and Executing Agency (EA).** The borrower and EA will be BWSL. The GoB will provide the sovereign guarantee (guarantor). As EA, BWSL will be responsible for the administration of the loan resources and the fulfillment of the operation's objectives. BWSL has experience in executing resources from Multilateral Financial Institutions, including several IDB funded operations. Most recently, the Belmopan Sewerage Expansion Project under a Global Environmental Facility GEF-IDB project (Establishment of a Revolving Fund for Financing Water Projects in Belize [GRT/FM-12724-RG](#)) as well as [ATN/OC-19183-BL](#) (Detailed Design of a Wastewater Collection and Treatment System in Placencia). BWSL is also successfully executing Technical Cooperation [ATN/OC-18380-BL](#) (Design of Wastewater Treatment Solutions in Coastal Areas) for US\$250,000; and Investment Grant [GRT/CF-19538-BL](#) (Advancing Water Disinfection in Urban and Rural Areas) for US\$250,000. BWSL was also the executing agency for loan operation [2486/OC-BL](#) (Integrated Water and Sanitation Program in Placencia) for a total of US\$5 million. The company is also completing the execution of an investment loan from the Caribbean Development Bank for US\$8.7 million. The loan was approved in 2018 and resources were invested in the acquisition of San Pedro's former water utility, Consolidated Water Belize Limited, and the expansion of water services on the island. In FY 2022/2023, BWSL is expected to invest about US\$10 million from its own resources for capital investments, including water expansion projects, similar to the ones that will be

financed under the operation, showcasing the company's capacity to carry on these types of investments.

- 3.2 **Project Planning Unit (PPU).** BWSL's PPU, which belongs to the Technical Services and Operations Department, will be responsible for the implementation of the program. Following the results of the ICAP, the PPU will be supported by four national consulting positions to be fully funded with resources from the loan: (i) a technical specialist that will support the technical and engineering aspects, along with monitoring and evaluation responsibilities; (ii) a financial specialist with direct responsibilities for budgetary, accounting and treasury management of the program, and in direct coordination with BWSL's finance department; (iii) a procurement specialist supporting the overall purchasing, contracting, and contract management functions; and (iv) an environmental and social management specialist in charge of the ESMS.
- 3.3 **Operations Manual (OM).** The program will be managed following an OM, which will regulate the needs and specifications established for the program. The OM details the project cycle, institutional coordination mechanisms and instruments, and technical, environmental, and social, fiduciary, and other criteria and specifications ([OEL#6](#)).
- 3.4 **Special contractual conditions precedent to first disbursement.** The conditions precedent to the first disbursement will be as follows: (a) the EA has by appointed or contracted at least: (i) one technical specialist; (ii) one procurement specialist; (iii) one financial specialist; and (iv) one environmental and social specialist; and (b) the [Operating Manual](#) has been approved and is in effect in the terms and conditions agreed with the Bank, which shall have, among other elements, the environmental and social requirements and include as Annexes: the Environmental and Social Management System (ESMS), Environmental and Social Management Framework (ESMF), and the Environmental and Social Management Plan (ESAP). See other environmental conditions in Annex B of the Environmental and Social Review Summary ([REL#3](#)). These conditions are necessary to start the execution of the program in a timely manner and to provide guidance to the EA.
- 3.5 **Procurement of works, goods, services, and consulting services.** The procurement of works, goods and services will be executed in accordance with the Procurement Policies (GN-2349-15), subject to International Competitive Bidding (ICB), the Bank's Standard Bidding Documents (SBDs) or those agreed between EA and the Bank will be used for the specific procurement. The selection and contracting of consulting services will be carried out in accordance with the Policies for the Selection and Contracting of Consultants (GN-2350-15) and the Standard Request for Proposals (SRP) issued by the Bank or agreed between the EA and the Bank. The revision of the technical specifications, as well as the terms of reference of the procurements during the preparation of selection processes, will be the responsibility of the program's sector specialist. This technical review will be ex ante and independent of the procurement review method. See Annex III.
- 3.6 **Retroactive financing.** The Bank may retroactively finance, as a charge against the Bank's loan, up to US\$100,000 (1.7% of the program total) in eligible

expenditures made by the executing agency prior to the loan approval date, provided that requirements substantially similar to those established in the loan contract have been met. Such expenditures must have been made no earlier than November 30th, 2022 (the Project Profile approval date), but under no circumstances may expenditures incurred more than 18 months prior to the loan approval date be included. The OM describe the category of eligible expenditures which shall be made in accordance with the core procurement principles established in the Policies for the Procurement of Goods and Works financed by IDB (GN-2349-15), and the Policies for Selecting and Contracting Consultants financed by IDB (GN-2350-15). The following type of expenditure has been identified: contracting of key personnel for BWSL's PPU.

- 3.7 **Financial auditing.** Throughout the loan disbursement period, the EA will submit to the Bank annual audited financial statements within 120 days after the close of the fiscal year (March 31st). The audit will be conducted by a Bank-eligible independent audit firm. The audit's scope and related considerations will be governed by the Financial Management Guidelines (OP-273-12) and the Guide for Financial Reports and Management of External Audit. Audit costs will be financed with project resources.

B. Summary of arrangements for monitoring results

- 3.8 **Program monitoring.** The monitoring structure will include the Procurement Plan (PA), the Multiannual Execution Plan (PEP), the Annual Work Plan (POA), the Results Matrix, the Progress Monitoring Report (PMR), and the Risk Management Plan. The EA will submit, within 60 days of the end of each six-month period, semiannual reports to the Bank that will systematize the progress made and outcomes achieved during that period as well as an action plan for the following six-month period ([REL#2](#)).
- 3.9 **Program evaluation.** The EA will contract: (i) a midterm evaluation, which will be submitted 90 days after the date on which 50% of the program resources have been disbursed; and (ii) a final evaluation, which will be submitted 90 days after the date of the final disbursement of program resources. The methodology for the final evaluation will use a before and after comparison, which will consist of measuring the outcome indicators after the interventions have been implemented and comparing the measurements to verify achievement of the targets. As part of the final evaluation, an ex post economic evaluation will be conducted, the methodology of which is detailed in the monitoring and evaluation plan ([REL#2](#)). The mid-term and final evaluation will be developed under IDB's Project Completion Report (PCR) format. Both evaluations will identify specific benefits of the program on migrant populations.

Development Effectiveness Matrix		
Summary BL-L1043 - BL-J0005		
I. Corporate and Country Priorities		
Section 1. IDB Group Strategic Priorities and CRF Indicators		
Development Challenges & Cross-cutting Issues	-Social Inclusion and Equality -Productivity and Innovation -Gender Equality and Diversity -Climate Change -Institutional Capacity and the Rule of Law	
CRF Level 2 Indicators: IDB Group Contributions to Development Results	-Households with improved access to water and sanitation (#) -Beneficiaries of initiatives that support migrants and their host communities (#)	
2. Country Development Objectives		
Country Strategy Results Matrix	GN-3086	Support the reactivation of key economic sectors through the continued provision of services, improving their resilience to natural hazards and climate change
Country Program Results Matrix	GN-3154-1	The intervention is included in the 2023 Operational Program
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		10.0
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		3.5
3.3 Results Matrix Quality		4.0
4. Ex ante Economic Analysis		10.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		2.0
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.0
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		9.5
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		Medium Low
Environmental & social risk classification		B
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Treasury.
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	RG-T3722; BL-T1105

Evaluability Assessment Note:

The general objective of this investment operation under the multiple works modality is to contribute to reduce service gaps between urban and peri-urban/rural areas and to strengthen the institutional capacity of BWSL. The specific objectives are: (i) increase access to water services in peri-urban and rural areas; and (ii) improve the operational and financial performance of BWSL in selected service areas with a focus on climate change adaptation and mitigation.

The proposal has a good diagnosis of the gaps in access to drinking water in rural and peri-urban areas of the country where there is a high concentration of migrant population. In addition, a detailed description of BWSL's main financial and operational challenges is presented, which include high production costs due to energy inefficiencies and high disinfection costs.

To address these problems, the intervention is structured into two components: I) Access to water services; II) Innovation for improved financial and operational performance. The proposal has a clear theory of change that relates the products with the expected results. The results matrix is consistent with the diagnosis and the proposed solutions, and adequately reflects the vertical logic of the project. The result indicators have baseline values, targets, and means of verification.

The socioeconomic evaluation included an analysis of 4 types of projects in the sample equivalent to 68% of the total amount of the project. For the coverage expansion project and the energy efficiency investments, cost-benefit analyses were carried out, which yielded rates of return of 14% and 18%, respectively. For the disinfection and smart meters projects, cost-effectiveness analyses were carried out in which the lowest cost solutions were selected. All the analyses included an appropriate sensitivity analysis.

The monitoring and evaluation plan proposes a retrospective evaluation based on a "before and after" analysis of the RM outcome indicators, as well as an ex post economic

Results Matrix

Project Objective	The general objective of this program is to contribute to reduce service gaps between urban and peri-urban/rural areas, and to strengthen the institutional capacity of BWSL through the following specific objectives: (a) increase access to water services in peri-urban and rural areas; and (b) improve the operational and financial performance of BWSL in selected service areas with a focus on climate change adaptation and mitigation.
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Indicators	Unit of measure.	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of Project	Means of Verification	Comments
Specific Development Objective 1: Increase access to water services in peri-urban and rural areas										
Households with new access to potable water in peri-urban and rural targeted areas	Households	0	2022		86		283	369	Semi-annual reports based on BWSL commercial records	It includes all households benefited with the program.
Households with new access to potable water headed by migrants in peri-urban and rural targeted areas	Households	0	2022		26		85	111	Semi-annual reports based on BWSL commercial records	These households represent a breakdown from the previous indicator.
Specific Development Objective 2: Improve the operational and financial performance of BWSL in selected service areas with a focus on climate change adaptation and mitigation										
Disinfection cost in selected service areas	Normalized Index	100	2022				35	35	BWSL financial records	Cost savings are calculated based on current OPEX for calcium hypochlorite and estimated OPEX of the most cost-effective on-site alternative. The index is normalized to base 2022=100. To obtain the normalized series each annual cost value is divided by the value for 2022/100. ¹

¹ The normalized aggregated index to monitor the program, will be constructed as a weighted average of individual service areas' indices.

Energy consumption in selected service areas	Normalized Index	100	2022			65		65	BWSL financial records	Energy savings are based on energy consumption for drinking water services with and without the project. The preliminary areas selected are: Belize City, Belmopan, Caye Caulker, San Pedro, Dangriga. The index is normalized to base 2022=100. To obtain the normalized series each annual energy consumption value is divided by the value for 2022/100. ²
GHG Emissions mitigated (CO ² -e)	tonCO ² -e / GWh	0				410.4		410.4	Semi-annual reports, based on BWSL financial records	CO ² -e emissions mitigated (tonCO ² -e). Emission factor = 342 tCO ² e/GWh.
Monthly revenue in selected service areas	Normalized Index	100	2022				115	115	BWSL financial records	Selected service areas are the ones benefited with smart meters (San Pedro, Caye Caulker, and Placencia). The index is normalized to base 2022=100. To obtain the normalized series each average revenue value is divided by the value for 2022/100. ³

² The normalized aggregated index to monitor the program, will be constructed as a weighted average of individual service areas' indices.

³ The normalized aggregated index to monitor the program, will be constructed as a weighted average of individual service areas' indices.

Residential water consumption per customer in selected service areas	Gallons per residential customer per month	4,701	2022				4,231	4,231	BWSL administrative records	Selected service areas are the ones benefited with smart meters (San Pedro, Caye Caulker and Placencia). It quantifies consumption for residential users only.
Women working in BWSL (all levels)	%	28%	2022				35%	35%	BWSL administrative records	

PRODUCTS

Indicators	Unit of measure	Baseline value	Baseline year	Year 1	Year 2	Year 3	Year 4	End of Project	Means of Verification	Comments
Component 1: Access to Water Services										
Water networks constructed in selected service areas	Feet	0	2022		13,680		20,000	33,680	Semi-annual reports based on works audit	The networks include all the equipment needed to be installed and different network diameters (3", 4", 6").
Meters installed in selected service areas	Meters	0	2022		86		283	369	Semi-annual reports based on works audit	It includes the installation of the meters and all the other accessories needed for installation.
Component 2: Innovation for Improved Operational and Financial Performance										
Water disinfection equipment installed in selected service areas	Equipment	0	2022			5	1	6	Installation Certificate	It includes equipment and storage infrastructure.
Electromechanical equipment installed in selected service areas	Equipment	0	2022			5		5	Installation Certificate	It includes electromechanical equipment and piping modifications and accessories.

Smart meters installed in selected service areas	Smart Meters	0	2022			6,645		6,645	Installation Certificate	It includes the installation of meters and all other accessories needed for installation.
Public awareness campaign designed and implemented	Campaign	0	2022			1		1	Semi-annual Report based on consultancy report	The campaign will be implemented where the disinfection equipment and smart meters are installed.
Gender and Diversity Strategic Operational Plan implemented	Plan	0	2022			1		1	Semi-annual Report based on administrative records	Implemented means the activation of the Plan, including outreach and recruiting programs and training, the development of guidelines to address gender and diversity needs in the workplace and the hiring of the gender and diversity focal point.

Country: Belize

Division: WSA

Operation No.: BL-L1043

Year: 2023

Fiduciary Agreements and Requirements

Executing Agency (EA): Belize Water Services Limited (BWSL)

Operation Name: Water Supply and Modernization Program

I. Fiduciary Context of Executing Agency

1. Use of country system in the operation (Any system or subsystem that is subsequently approved may be applicable to the operation, in accordance with the terms of the Bank's validation).

<input type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input type="checkbox"/> Information System	<input type="checkbox"/> National Competitive Bidding (NCB)
<input type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Others
<input type="checkbox"/> Accounting	<input type="checkbox"/> External Control	<input type="checkbox"/> Individual Consultants	<input type="checkbox"/> Others

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Particularities of the fiduciary execution	The EA will be BWSL, through the Project Planning Unit, which will be responsible for fiduciary management of the project.
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3. Fiduciary Capacity

Fiduciary Capacity of the EA	BWSL has a solid performance history executing projects financed by the Bank and otherwise. Additionally, the results of the institutional capacity assessment and risk analysis conducted during the project preparation indicates that the fiduciary systems and structures are satisfactory with most of the identified fiduciary risks qualified as low, except for the possibility of work overload and delays in international payments.
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4. Fiduciary risks and risk response

Risk Taxonomy	Risk	Risk level	Risk response
Human Resources	If the existing staff assume the responsibility of carrying out all the fiduciary tasks for the project, it could lead to work overload and overall execution delays in the first two years.	Medium-High	Strengthening the institutional capacity of the Project Planning Unit within BWSL through (i) the hiring of a procurement specialist and a financial specialist, besides the technical personnel foreseen, with experience of managing projects financed by the Bank or other multi-lateral institution; (ii) providing training to the EA in the Bank's processes; and (iii) providing continuous guidance on the Bank's fiduciary procedures.

Economical financial	If there are delays in payments to international suppliers, goods or services may be delayed, affecting the execution and achievement of the products.	Medium-high	Agreement with the Ministry of Finance, Economic Development, and Investment to adopt the arrangement used by other IDB-financed projects whereby foreign currency payments are processed by the Central Bank of Belize
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5. Policies and Guides applicable to operation: The procurement processes financed in full or in part by Bank resources will be conducted in accordance with the Policies for the Procurement of Goods and Works Financed by the IDB (GN-2349-15) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-15), or those in effect at the time of project execution.

6. Exceptions to Policies and Rules: not applicable

II. Aspects to be considered in the Special Conditions of the Loan Agreement

Pre-first disbursement conditions: the EA has appointed or contracted: one procurement specialist and one financial specialist.
Exchange rate applicable to the documentation and rendering of expenditure in the Borrower's local currency is Option (b) (ii) of Article 4.10 of the General Conditions of the loan contract, i.e., exchange rate on the effective date of payment of each expenditure in local currency.
Type of Audit: Throughout the loan disbursement period, the EA will submit to the Bank annual audited financial statements within 120 days after the close of the fiscal year, March 31st. The audit will be conducted by a Bank-eligible independent audit firm. The audit's scope and related considerations will be governed by the Financial Management Guidelines (document OP-273-12) and the Guide for Financial Reports and Management of External Audit. Audit costs will be financed with project resources.
Other financial reports: Within 60 days after the end of each semester, an audited financial execution report for the period will be submitted as part of the semi-annual progress report.

III. Agreements and Requirements for Procurement Execution

<input checked="" type="checkbox"/>	Bidding Documents	For procurement of Works, Goods and Services Different of Consulting executed in accordance with the Procurement Policies (document GN-2349-15), subject to ICB, the Bank's Standard Bidding Documents (SBDs) or those agreed between EA and the Bank will be used for the particular procurement. Likewise, the selection and contracting of Consulting Services will be carried out in accordance with the Policies for the Selection and Contracting of Consultants (document GN-2350-15) and the Standard Request for Proposals (SRP) issued by the Bank or agreed between the EA and the Bank will be used for the particular selection. The revision of the technical specifications, as well as the terms of reference of the procurements during the preparation of selection processes, is the responsibility of the sectorial specialist of the project. This technical review can be ex-ante and is independent of the procurement review method.
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<input checked="" type="checkbox"/>	Recurrent Expenses	The recurrent expenses required to put the project into operation approved by the Project Team Leader, which are financed, will be made following the executing agency's administrative procedures. Such procedures will be reviewed and accepted by the Bank, provided that they do not violate the principles of value for money, economy, efficiency, equality, transparency, and integrity.
<input checked="" type="checkbox"/>	Advanced Contracting Retroactive financing	The Bank may retroactively finance from the resources of the loan, up to the amount US\$100,000 (1.7% of the proposed loan amount), eligible expenses incurred by the Borrower prior to the date of approval of the loan for expenses described in the Operations Manual, provided that requirements shall be in accordance with those set out in the loan contract. Such expenses must have been incurred from November 28, 2022, but under no circumstances will expenses incurred more than 18 months before the loan approval date be included. (See GN-2349-15, GN-2350-15 y I(a) Policy on Cost Recognition, Retroactive Financing and Early Acquisition (GN-2259-1)). The following type of expenditure has been identified: contracting of key personnel for BWSL's PPU.
<input checked="" type="checkbox"/>	Procurement supervision	The method of supervision for the procurement processes executed by the EA shall be ex-ante. If during project execution, it is identified that the EA has developed sufficient capacity, the possibility of supervising procurement processes on an ex-post basis will be evaluated.
<input checked="" type="checkbox"/>	Records and Archives	The BWSL will be responsible for maintaining proper records and supporting documentation of all procurement processes financed with the project resources along with the relevant payment supporting documents in accordance with the terms of the loan contract.

Main Acquisitions

Description of the procurement	Selection Method	Estimated Date	Estimated Amount US\$
Goods			
Purchase and installation of water disinfection equipment in six locations of the BWS network	ICB	03/31/2025	1,410
Supply and installation of electromechanical equipment in priority/pilot locations of the BWS network, as well as piping modifications and accessories	ICB	03/31/2024	1,204
Purchase and installation of smart meters for the BWS network in the San Pedro District, Caye Caulker District, and Placencia District	ICB	06/30/2024	1,500
Purchase of pipes and fittings for the expansion of the other BWS water networks - Belmopan Suburbs Area 1	ICB	06/30/2025	202

Provision of complementary materials including grounding, surge protection devices, automatization, and monitoring devices	ICB	06/30/2024	247
Expansion of other BWS water network infrastructures - Belmopan Suburbs Area 1	NCB	06/30/2025	435
Expansion of BWS water network infrastructure in Harmonyville	NCB	09/30/2023	235
Program Technical Specialist for the Project Planning Unit of BWS	Individual consultant	07/01/2023	115
Program Financial Specialist for the Project Planning Unit of BWS	Individual consultant	07/01/2023	101
Program Environmental and Social Management Specialist for the Project Planning Unit of BWS	Individual consultant	07/01/2023	101

To access the procurement plan [\[here\]](#)

IV. Agreements and Requirements for Financial Management

<input checked="" type="checkbox"/>	Programming and Budget	The budget preparation process is led by the CEO's office in collaboration with the Planning and Information Technology Department, the Technical/Operations Department, and the Finance Department. The Planning and Information Technology Department is responsible for compiling the Five-year Strategic Business Plan of BWS, the Technical/Operations Department is responsible for the capital expenditure (CAPEX) and recurrent budget (OPEX), and the Finance Department is responsible for the administrative budget and overall consolidation of BWS's budget. The project will form part of the CAPEX budget. The BWS has committed to allocate the necessary counterpart resources to guarantee the timely execution of the project. As such, no bottlenecks regarding resource allocation and the budget process are anticipated.
<input checked="" type="checkbox"/>	Treasury and Disbursement Management	In accordance with the norms of Government of Belize, a bank account at the Central Bank of Belize (CBB) will be designated for the project to receive disbursements of project resources and to make foreign currency payments. A local bank account will also be established at a commercial bank for making payments in local dollars. For foreign currency payments, the BWS will request to the CBB, through the MFEDI, to make those payments directly from the designated project bank account at the CBB. It is expected that the advance of funds methodology will be mainly used for the project. The advance of funds, when used, will be based on the true liquidity needs of the project for a period not exceeding six months. Subsequent advances may be disbursed once 80% of the total accumulated balance pending justification has been submitted and accepted by the Bank. The other disbursement methods that may be used includes the Reimbursement of Payments (DPB) method (for eligible retroactive financing) and Direct Payments to Supplier.
<input checked="" type="checkbox"/>	Accounting, information systems and reporting	Financial management responsibilities of BWS are guided by the internal regulations and procedures contained in the "Belize Water Services Finance Accounts Procedural Manual" (updated in October 2020). The document covers the accounting procedures, including the allocation of responsibilities to specific areas and staff position, a guide to the use of internal resources and tools for financial management, norms and procedures, and workflows for various tasks

		(including accounts payable, accounts receivable, treasury and collections, general ledger, financial statements, and other. BWS uses the Enterprise Resource Planning System (ERP), SAGE 300, to execute its financial management and administrative responsibilities. SAGE 300 comprises several financial and administrative modules and integrates the following functions: financial reporting, general ledger, asset management, purchasing (workflow and purchase order), capital projects, and other. For externally financed projects, BWS uses QuickBooks accounting software to facilitate book-keeping and financial reporting. BWS will also use QuickBooks to facilitate accounting and reporting for this project.
<input checked="" type="checkbox"/>	Internal Control and Internal Audit	<p>The internal control and internal audit of BWS is considered adequate to reasonably ensure that the project resources are used for their intended purposes. BWS has its internal control procedures well-documented in its manual, built-in controls and segregation of duties automated through its SAGE ERP platform along with the requirements for supporting documentation (physical and electronic) for all financial transactions, which provides for a solid internal control environment.</p> <p>Additionally, the Internal Audit Department, under the Audit Committee of the Board, provides for a risk-based ex-post internal audit mechanism based on established risk profiles for each internal process, and following the Department's Internal Audit Charter, Annual Audit Plan, and following the BWS' Internal Audit Manual, under approval of the Audit Committee.</p>
<input checked="" type="checkbox"/>	External control: external financial audit and project reports	<p>The preparation of financial statements for BWS is facilitated through the SAGE platform. Annual financial statements are audited by independent auditors following strict procedures issued by the Board through the Internal Audit Committee, which is ultimately responsible for the administration of the external audit process and the follow up on recommendations. The external audits of the previous year reports show unqualified statements free of any materiality. The external audit firm of BWS is Moore Magana, LLP which is currently on the list of external audit firms eligible to audit projects financed by the Bank.</p> <p>An eligible audit firm will be engaged to conduct independent external audits of the project in accordance with the Terms of Reference agreed with the Bank. These audits will be financed with resources from the project.</p>
<input checked="" type="checkbox"/>	Project Financial Supervision	<p>The financial supervision plan will focus on: (i) activities related to the implementation and follow-up of arrangements and systems being implemented for the fiduciary management of the project; (ii) follow-up on the implementation status of risk mitigating measures; and (iii) capacity building of BWS personnel in the Bank's procedures and requirements. Disbursements will be reviewed on an ex-post basis.</p>

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/23

Belize. Loan ____/OC-BL to Belize Water Services Limited (BWSL)
Water Supply and Modernization Program

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 Belize Water Services Limited (BWSL), as borrower, and Belize, as guarantor, for the purpose of granting it the former a financing aimed at cooperating in the execution of the Water Supply and Modernization Program. Such financing will be for the amount of up to US\$5,000,000 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 ____ 2023)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/23

Belize. Nonreimbursable Investment Financing ____/GR-BL
to Belize Water Services Limited (BWSL)
Water Supply and Modernization Program

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as Administrator of the IDB Grant Facility, hereinafter referred to as the "Account", to enter into such contract or contracts as may be necessary with Belize Water Services Limited (BWSL), as beneficiary, for the purpose of granting it a nonreimbursable investment financing to cooperate in the execution of the Water Supply and Modernization Program. Such nonreimbursable investment financing will be for an amount of up to US\$1,000,000, which form part of the Account, and will be subject to the Terms and Financial Conditions and the Special Contractual Conditions in the Project Summary of the Nonreimbursable Financing Proposal.

(Adopted on ____ 2023)