Public Disclosure Authorized

Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 22-Jun-2022 | Report No: PIDC34148

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BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
El Salvador	P178734		El Salvador Water Sector Resilience Project (P178734)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
LATIN AMERICA AND CARIBBEAN	Dec 12, 2022	Mar 16, 2023	Water
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Republic of El Salvador	Administración Nacional de Acueductos y Alcantarillados	

Proposed Development Objective(s)

The proposed Project Development Objective (PDO) is to improve the financial and operational performance of the Administración Nacional de Acueductos y Alcantarillados (ANDA), as well as the quality and resilience of water supply and sanitation services in selected areas of El Salvador.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	100.00
Total Financing	100.00
of which IBRD/IDA	100.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	100.00

Environmental and Social Risk Classification	Concept Review Decision
Substantial	Track I-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **El Salvador, the smallest country in Central America and one of the most densely populated in the world, has registered persistent low levels of growth in the past decades, compounded by the recent pandemic.** With a population of 6.4 million (in addition to 1.5 million Salvadorian living outside the country) and a total land area of 21,041 square kilometers, the country is one of the world's most densely populated.[1] The gross domestic product (GDP) annual growth has reached 3 percent only twice since 2000, with an average of 2.3 percent in recent years. In 2019 the GDP grew 2.3 percent, fueled by remittances, robust domestic consumption, and investment.[2] By early 2020, remittances from abroad accounted for nearly one-fifth of the country's GDP.[3] Poverty has declined since 2007 but remains high: in 2019, 23 percent of the population lived below the poverty line with 1.5 percent in extreme poverty[4] conditions.[5] In 2020, GDP contracted by 7.9 percent due to the Coronavirus Disease of 2019 (COVID-19), though it began recovering in 2021 with 10.7 percent growth.[6] While El Salvador's economy is expected to grow by 2.9 percent in 2022 and 1.9 percent in 2023, public debt remains high above 90 percent of GDP which constitutes the main vulnerability of economic performance, whereas fiscal deficits have constrained the overall competitiveness. Persistent high levels of illegal activities and gang-related violence deter private investments and slow public investments. Facing limited employment opportunities and high exposure to crime and violence, many Salvadorians have emigrated from the country.

2. **The consequences of COVID-19 have affected the economy and people's livelihoods.** By December 2021, El Salvador confirmed 164,134 cases of COVID-19 and 4,134 deaths.[7] Due to the pandemic, the poverty rate increased by 4.6 percentage points from 2019 and 2020.[8] The Government responded with early quarantines, movement restrictions, and severe penalties for not respecting the confinement measures. An economic reopening plan was issued on June 1, 2020, expecting to progressively reactivate sectoral activity. The World Bank (WB), among other international organizations, provided support to El Salvador through an Emergency Response Project under the COVID-19 Strategic Preparedness and Response Program, with a loan of US$20 million.[9] Due to the pandemic's economic impacts, thousands of jobs have been lost, promoting a rural migration in some areas as unemployed adults move to the country in search of sustenance opportunities.[10]

3. **El Salvador's high vulnerability to natural disasters and climate change negatively affects its economy.** The country is among the most affected by weather-related events and other hazards, incurring annual losses of around 2.5

[1] El Salvador is located in the 83rd percentile in the world in terms of population density.
[2] International Monetary Fund (IMF). (2019). El Salvador Country Report No. 19/143. *https://www.imf.org/en/Publications/CR/Issues/2019/05/23/El-Salvador-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-46940*
[3] The Heritage Foundation. (2019). 2019 Index of economic freedom. Retrieved from Heritage: *https://www.heritage.org/index/country/elsalvador*
[4] Extreme poverty measured as living on less than US$1.90 a day.
[5] World Bank (2021). *https://www.worldbank.org/en/country/elsalvador/overview#1*
[6] Ibid.
[7] WHO. (2020). El Salvador COVID-19 Statistics. Retrieved on June 13th, 2022 from: *https://covid19.who.int/region/amro/country/sv*
[8] World Bank (2021). *https://thedocs.worldbank.org/en/doc/e408a7e21ba62d843bdd90dc37e61b57-0500032021/related/mpo-slv.pdf*
[9] WBG. (2020). El Salvador COVID-19 Emergency Response Project. ID: P173872.
[10] See *projects.worldbank.org/en/projects-operations/project-detail/P173872* and Annex 7 on *Impact of the COVID-19 pandemic and mitigation strategy*.

percent of GDP.[11] It also ranks second highest for risk exposure to two or more hazards, and highest for the total population at a relatively high risk of mortality from such hazards. It is estimated that over 90 percent of the population live in areas considered at risk of natural hazards such as earthquakes and volcanic eruptions and climate change-exacerbated impacts such as floods, droughts, and storms.[12] Projections for the 2040-2059 period indicate there will be an increase in annual maximum 5-days rainfall by 18.75 mm, as well as in mean annual temperature by 1.64°C. The annual precipitation, on the other hand, will decrease by -65.33mm in the same period.

Sectoral and Institutional Context

4. **El Salvador has a diverse landscape with coastal zones leading to steep topography, with many slopes of above 30 degrees, short watersheds, and one major river, the Lempa.** The country is divided into three distinct geographical regions: the southern coastal belt, the central valley and plateaus, and the northern mountains. Approximately 60% of people reside in urban areas and 40% in rural areas.[13] Although Central America is rich in water resources, El Salvador's small land area relative to its population size puts its thinning annual water supply per capita dangerously close to falling short of demand. El Salvador's annual water availability stands at 1,752 m^3/inhabitant, the lowest in the region.[14] Yet much is wasted: most rainwater fails to infiltrate due to widespread deforestation and eroded river basins; once in the system, 60% is unaccounted for.

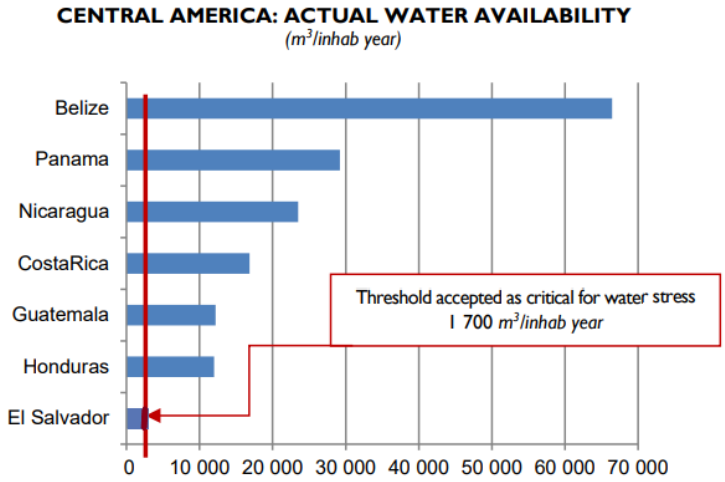

Figure 1. El Salvador has the lowest water availability per capita in Central America. [15]

5. **El Salvador is the driest country in Central America, with some regions suffering from water shortages and others from heavy rainfalls, floods, and landslides.** 66 percent of El Salvador's territory is exposed to high or severe drought risk[16] and years of drought have prompted water rationing in urban and rural areas across the country. El Salvador has limited and declining water storage capacity,[17] and its water crisis has adverse effects on household well-being,

[11] MARN, 2017. Plan de Acción de Restauración 2018-2022.
[12] World Bank (2021). Climate Change Knowledge Portal. *https://climateknowledgeportal.worldbank.org/country/el-salvador*
[13] Ibid.
[14] United Nations Climate Change in Central America, Potential Impacts and Public Policy Options. https://repositorio.cepal.org/bitstream/handle/11362/39150/7/S1800827_en.pdf#page=65
[15] ECLAC/CCAD/SICA/UKAID/DANIDA (2011), *La Economía del Cambio Climático en Centroamérica. Reporte Técnico 2011.* Mexico City.
[16] United Nations Disaster Information Management System. https://www.desinventar.net/DesInventar/profiletab.jsp
[17] Setting the Basis for Water Security in Central America: Challenges and Policy Recommendations. Washington, D.C. World Bank.

negatively affecting human health. An additional challenge in El Salvador is severe and growing water contamination. The unsafe water quality index is 0.8 out of 1, higher than of Panamá, Nicaragua, and Costa Rica.[18]

6. **In December 2021, the Government of El Salvador approved a new General Law on Water Resources, which defines the legal framework for the use, management, exploitation, distribution, consumption, care, protection, and prevention of water resources on a national scale.** The law proposed the creation of the Salvadorian Water Authority (SWA) under the Ministry of Environment and Natural Resources, who will set the policy and implement the legal framework for water resources management, including allocation and the establishment of the rates for use and exploitation, among other attributions. The law also maps the management of potable water supply subsector to the Ministry of Health, and management of sanitation subsector to the Ministry of Environment and Natural Resources. These entities are to manage water supply and sanitation aspects consistent with the guidelines and directives issued by the SWA.

7. **Water and sanitation services are provided primarily by the National Administration for Water Supply and Sewerage (*Administración Nacional de Acueductos y Alcantarillados*, ANDA[19]), with some participation of decentralized water service providers and schemes.** ANDA provides water services for over 5 million of the country's 6.7 million inhabitants.[20] While access to basic drinking water and sanitation services in El Salvador is high, standing at 97.9 and 82.4 percent respectively, these figures decrease to 77.4 and 17.1 respectively when it comes to *safely managed* drinking water and sanitation services; the large difference on the sanitation side owing to the very low levels of wastewater treatment coverage in the country.[21]

8. **ANDA's current long-term financial and operational sustainability is at risk, as its financial performance has been deteriorating with increasing negative operating results since 2018,** which also suffered from the impacts of the COVID-19 pandemic. ANDA has high operating costs because the nature and state of water sources in El Salvador determine the configuration of water systems that are geographically dispersed, pump-intensive, and require significant treatment. ANDA consumes more than 10 percent of the country's total energy consumption, and this input represents about 35 percent of its operating costs. In 2021, ANDA registered losses of US$45.9 million. ANDA's weak commercial management, with high levels of non-revenue water (64.8 percent), low collection rates (60 percent), and a tariff policy not sufficient to cover operating costs, results in poor maintenance and replacement of infrastructure, generating a vicious circle of inefficiency and higher operating costs. Currently, the Ministry of Finance is providing subsidies to ANDA so it can meet its debt-payment obligations and pay for its energy costs.

9. **In December 2021 and April 2022, ANDA finalized and adopted an Institutional Strategic Plan and a Business Plan,[22] charting the vision and a roadmap for ANDA's financial recovery**, which consists of investing in improvements to the company's operating efficiency and quality of service in the short- and medium-term, with a recommendation for the potential adoption of a new tariff framework in the long-term to ensure coverage of efficient operating costs. Given the current low tariff levels (average of US$0.20/$m^3$), this new tariff framework would likely consist of tariff increases, accompanied by subsidies targeted to low-income households. The implementation of this new framework will only be feasible after marked improvement in the management and quality of water supply and sanitation services provided by ANDA. As such, the Business Plan has a priority focus on improving efficiency, service levels and customer satisfaction through investment in energy efficiency, as well as in strengthening commercial management, including a loss reduction program and a strong communication strategy to restore customer's willingness to pay for water and sanitation services,

[18] World Development Indicators. Available at: https://databank.worldbank.org/source/world-development-indicators
[19] ANDA is an autonomous public institution, linked to the Presidency of the Republic of El Salvador.
[20] ANDA statistical bulletin 2020.
[21] WHO and Unicef Joint Monitoring Program. https://washdata.org/data/household#!/table?geo0=country&geo1=SLV
[22] These plans were developed with the support of the United States Agency for International Development (USAID).

as evidenced by the low collection rate of 60%. In its Institutional Strategic Plan, ANDA takes on the challenge to reduce water quality complaints by 40% as well as to reduce its environmental impact and greenhouse gas emissions through significant investments in efficiency energy, use of renewable energy sources, and wastewater collection and treatment, among others. ANDA is working with several partners,[23] including the World Bank, to implement the Business Plan by improving the quality of service provision through efficiency improvements, which will serve as a catalyst toward a virtuous sustainable cycle of increasing operational and financial performance, leading to higher levels of safely managed drinking water supply and sanitation services.

Relationship to CPF

10. **The proposed operation is aligned with the World Bank Group's corporate goals and COVID-19 response.** The project is aligned with Pillar 4 Strengthening policies, institutions, and investment for rebuilding better of the World Bank COVID-19 Crisis Approach Paper: it will build resilience in the water supply and sanitation sector and contribute to a green recovery. Reducing greenhouse gas emissions through improved energy efficiency and reduced physical water losses will also support the World Bank Group's green, resilient, and inclusive development (GRID) approach and the agriculture, food, water, and land system transition under the Climate Change Action Plan.

11. **The proposed project is also well aligned with the Country Partnership Framework (CPF) FY15-19 for El Salvador (Report # 95383) discussed by the Executive Directors on June 23, 2015.** The project will invest in institutional capacity building that will contribute to the long-term sustainability of ANDA and will improve the quality and resilience and long-term sustainability of water services supporting the CPF's Pillar 2 – *Fostering Sustainability and Resilience* and its objectives of promoting efficiency of public spending as well as building capacity to manage disasters and environmental challenges. The project is also aligned with the High-Level Outcome 3 *Fostering Resilience* of the draft new Country Partnership Framework for FY23-29 under preparation.

12. **The proposed operation is similarly aligned with the El Salvador National Development Strategy[24] and Nationally Determined Contribution.** The National Development Strategy has a Priority Area *Climate Change and Resilience*, with a sub-area on improving access and sustainable management of water resources. By investing in reducing non-revenue water, the proposed operation will reduce physical and commercial losses and engage in community education and outreach to encourage rational use of limited water resources. Investing in energy efficiency under the proposed project will contribute to reducing emissions from the energy sector, recognized in the Nationally Determined Contribution as the second highest national source of greenhouse gases (after agriculture, forestry, and land use). At the same time, investments in non-revenue water, continuity of water services, and resilient planning align with the national adaptation goals to improve water use efficiency and invest in the resilience of water supply and sanitation infrastructure, recognizing the importance of uninterrupted access to these basic services for national economic growth, even in the face of climatic pressures.

C. Proposed Development Objective(s)

13. The proposed Project Development Objective (PDO) is to improve the financial and operational performance of the Administración Nacional de Acueductos y Alcantarillados (ANDA), as well as the quality and resilience of water supply and sanitation services in selected areas of El Salvador.

Key Results (From PCN)

[23] Inter-American Development Bank, USAID, Japan International Cooperation Agency, and AECID, among others.
[24] Joya, Katherine. (2020). *Estrategia País El Salvador 2020-2024.*

14. Key indicators to measure the progress towards achievement of the PDO include:

- Number of households benefitting from increased hours of water supply
- Annual savings from commercial and operational efficiency measures
- ANDA's working ratio (% of operating costs covered by revenues)
  Risk profiles and contingency plans for emergencies and climate events for ANDA's priority water supply and wastewater systems developed for at least 3 priority systems

D. Concept Description

15. The proposed US$100 million project will be the first World Bank water supply and sanitation operation in El Salvador. Through these improvements, the project intends to enhance the beneficiaries' resilience to climate change-exacerbated water shortages, droughts, and floods. The proposed project will support the implementation of priority no-regret actions identified in ANDA's recently adopted Business Plan,[25] while developing planning instruments for longer-term resilience and development. The proposed interventions to be financed under the project will improve the quality and resilience of services and support the modernization and improved efficiency of ANDA by focusing on areas that include internal procedures, customer management, communications, community outreach, and gender equity. These improvements will improve ANDA's operational and financial efficiency, improving financial sustainability and long-term planning before investing in expanding water supply and sanitation services. The proposed project investments and planning instruments will focus on establishing a solid base for a potential long-term partnership in the sector. The proposed project has four components.

Component 1: Improve quality, resilience, and performance of water services in the Metropolitan Area of San Salvador (US$88 million)

16. This component will finance works, goods, and services aimed at improving the quality and resilience of water supply services to the under-served population in the urban and peri-urban areas of the Metropolitan Area of San Salvador (MASS). Improved water services will make the target population less vulnerable and more resilient to droughts and water shortages by enhancing water quality and availability and reducing non-revenue water, which would lead to a larger volume of water being available to beneficiaries, especially during climate change exacerbated vulnerabilities stated above. The activities include the implementation of a comprehensive non-revenue water reduction program targeting physical and commercial losses in the area of influence[26] of the Torogoz water supply system, as well as improved energy efficiency, which will translate into a more resilient and reliable water supply service provision in urban and peri-urban areas of the MASS.

17. The non-revenue water reduction program will target physical and commercial losses in the area of influence of the Torogoz water supply system; these interventions will also have an impact in terms of energy efficiency by reducing overall energy consumption. It includes the implementation of macrometering and micrometering, rehabilitation and replacement of pipes and water connections, pressure control, better commercial management, and citizen engagement. This component will also support the creation of a permanent non-revenue water monitoring unit in ANDA's institutional structure to lead a daily monitoring program of non-revenue water first in MASS, then at the country level.

18. Additionally, this component will finance the acquisition of equipment, technical assistance, and training on asset

[25] Business Plan: Efficient and Sustainable ANDA, April 2022.
[26] The area of influence of the Torogoz water supply system includes the distribution network from the Torogoz Water Treatment Plant (which covers 40 percent of the population in the AMSS), as well as the geographically disbursed traditional systems (wells) that interconnect with the Torogoz distribution network.

management, system operation and maintenance for efficiency optimization, water quality monitoring, and telecontrol systems (SCADA) that contribute to the rapid identification and repair of failures in the Torogoz system. Technical assistance will also be targeted towards improving ANDA's modernization process by simplifying internal processes and procedures for commercial management.

19. As for energy, the proposed interventions will improve the reliability of water supply services by rehabilitating existing power supply lines and installing redundant electrical interconnections to assure supply to critical infrastructure and reduce energy costs and greenhouse gas emissions through implementation of energy efficiency measures.

Component 2: Strengthen ANDA's planning and preparedness for a green, resilient, and inclusive future (US$10 million)

20. This component aims to support ANDA in developing key planning instruments for the provision of climate resilient water supply and sanitation services and preparing the utility for a green, resilient and inclusive future.

21. Activities financed under this component include: (a) the development of a master plan for sanitation in the metropolitan area of San Salvador;[27] (b) master plans for water supply and sanitation for the cities of San Miguel and Santa Ana; (c) development of risk profiles and contingency plans for emergencies and climate events for ANDA's priority water supply and wastewater systems; (d) a study of alternatives to improve the reliability of the intake of the Torogoz Water Treatment Plant; and (e) an analysis of the feasibility of achieving carbon neutrality in the Torogoz water supply system. These planning instruments will improve the resilience of water supply and sanitation systems to natural hazards and climate-related events and also improve the resilience of communities in the target areas.

Component 3: Project Management (US$2 million)

22. This component will provide project management support including operating costs, the preparation of progress reports, and independent audits, as well as support on project financial, procurement, environmental, and social management, as needed. ANDA will also contribute with in-kind support for project management.

Component 4: Contingency Emergency Response Component (CERC) (US$0)

23. This component will support potential disaster recovery needs by providing immediate response to an eligible crisis or emergency, as needed. This may consist of immediate support in assessing the emergency's impact and developing a recovery strategy or the restructuring of existing or provision of new IPF and may also include operating costs, supply of critical parts and equipment, minor civil works rehabilitation, fuel supply, renting of generators, as well as rapid transportation of chemicals and critical parts by express mechanisms.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

24. **The overall environmental and social risk profile for this project is considered Substantial. The environmental risk rating for the Project is considered moderate** given that the scope of the expected investments will be limited to

[27] The Inter-American Development Bank is already financing a master plan for water supply in MASS.

rehabilitation works within existing footprints. Anticipated concerns for potential environmental risks and impacts are mostly related to the rehabilitation works and expected to be site-specific, short-term, and effectively avoided, minimized, or mitigated subject to the establishment of proper environmental and social (E&S) measures. Key environmental risks and impacts include (i) generation of solid waste from residual construction materials; (ii) nuisance related to dust generation, vibration, and noise; (iii) temporary disruptions to local traffic during the construction phase; (iv) health and safety risks to the project workforce and local communities. Exposure and vulnerability to natural disasters in the project area may result in direct or indirect impacts on the work sites and/or surrounding areas.

25. **The social risk rating is Substantial**, considering the information available at Concept Stage and given that the specific locations of the infrastructure interventions is not yet known. The Project is expected to generate positive social impacts from better quality and availability of water supply services, as well as improved commercial management and citizen engagement in ANDA. Anticipated social risks include (i) disproportionate impacts on vulnerable individuals or groups resulting from project-supported reduction of commercial losses; (ii) potential limited restriction to access or involuntary resettlement (scale to be determined during project preparation, if applicable); (iii) opposition from individuals or groups currently benefitting from illegal water connections resulting in escalation of social conflict; (iv) the presence of gangs in the project area, which may constitute a barrier to stakeholder engagement and a risk for contractors and workers; (v) risk of exclusion or perpetuation of exclusion of vulnerable groups resulting from the development or improvement of commercial management, including citizen engagement and community outreach activities, as well as resulting from the development of new master plans for water supply and sanitation, and contingency plans for emergencies and climate events; and (vi) risks related to civil works, including traffic, noise, dust, occupational and community health and safety. This social risk classification may be revised during preparation as more details about project location and activities is known.

26. **The Borrower will prepare an Environmental and Social Management Framework (ESMF) for the project in line with the Environmental and Social Standards and the World Bank Group (WBG) Environment, Health and Safety (EHS) Guidelines.** The draft ESMF will include, inter alia: (i) identification of applicable national legislation; (ii) an environmental and social assessment (ESA), including an E&S characterization of the project area and vulnerable groups who may be disproportionately affected or who may benefit from proactive social inclusion measures in project activities, and the identification and evaluation of positive and negative, direct and indirect E&S risks and impacts; (iii) appropriate generic E&S mitigation measures in accordance to the mitigation hierarchy; (iv) implementation arrangements (including monitoring, supervision, and reporting) during the design, construction and operational phases; and (v) an E&S budget for all related activities and measures. Pre-identified vulnerable groups include women, people living in slums and in places with the presence of gangs, youth-at-risk, the elderly, households with persons with disabilities, as well as people who self-identify as indigenous or afro descendant in urban areas. The draft ESMF will also include a preliminary natural disaster risk assessment tailored to the project site and the areas close in proximity. Prior to Appraisal, the Borrower will prepare and disclose a: (i) Draft Environmental and Social Commitment Plan (ESCP); (ii) Draft Environmental and Social Management Framework (ESMF); (iii) Draft Stakeholder Engagement Plan (SEP); (iv) Draft Labor Management Procedures (LMP); a Draft Resettlement Framework (RF); and potentially a Draft Indigenous People Policy Framework (IPPF) or Indigenous People Plan (IPP).

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APPROVAL

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