

## SUMMARY OF THE PROJECT IN DESIGN \* (\*)

### Trial reservoir:A Sustainable Source of Resources to Innovate in Water and Sanitation

<b>PITCH ELIGIBILITY DATE</b>		<b>COUNTRY(IES)</b>
07/29/2022		Brazil
<b>ALIGNED WITH COUNTRY STRATEGY?</b>		
Yes		
<b>PARTNER(S)</b>		
Isle Utilities		
<b>PRELIMINARY CLASSIFICATION ENVIRONMENTAL AND SOCIAL IMPACT</b>		
C (**)		
<b>TOTAL BUDGET</b>	<b>IDB Lab</b>	<b>LOCAL COUNTERPART AND COFINANCING</b>
US 1,000,000	US 500,000	US 500,000
<b>DESCRIPTION</b>		

**The problem** Significant limitations persist in the quality, reliability, and access of Brazilian citizens to water and sanitation services. According to OLAS[1], only 43% of the population has wastewater collected and treated. The demand for water use has grown by about 80% in total water withdrawal over the last two decades and is expected to continue to do so.

**Brazilian citizens have been highly impacted by environmental disasters recently.** The number of deaths from heavy rains and floods in 2022 has already exceeded the number of deaths in 2021. Even though local governments have taken and allocated new resources to prevent new flood disasters from occurring, these decisions are only being taken after the lives of many have already been lost. There are many opportunities to improve and the creation of new policies that use technology and innovation is an urgent demand.

**It is not possible to overcome these problems only by leveraging economic-financial resources in conventional programs and adapting traditional management models. The sector, particularly water utilities responsible for the service, must adopt and incorporate solutions that generate efficiency, reliability, and quality in the services provided to citizens.**

Brazil is a regional leader in innovation in the water sector of LAC, **the speed of adoption of innovation is not high enough and at the scale to effectively address the problems of the sector.**

This problem has three main ramifications:

1. *Few utilities have a robust innovation process.*
2. *Disconnection with innovation offer.*
3. *Difficulties to assume risks in the piloting and scaling up of new technologies.*

Overcoming these difficulties involves not only identifying the real needs, and the best technologies and demonstrating their effectiveness, but also developing clear testing mechanisms, robust innovation processes, and financial and administrative instruments to overcome the "trial, trial, trial" cycle and facilitate the effective implementation of innovations.

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\*\*The IDB categorizes all projects into one of six E/S impact categories. Category A projects are those with the most significant and mostly permanent E/S impacts, category B those that cause mostly local and short-term impacts, and category C those with minimal or no negative impacts. A fourth category, FI-1 (high risk) Financial Intermediary (FI)'s portfolio includes exposure to business activities with potential significant adverse environmental or social risks or impacts that are diverse, mostly irreversible or unprecedented, FI-2 (medium risk) FI's portfolio consists of business activities that have potential limited adverse environmental or social risks or impacts, FI-3 (low risk) FI's portfolio consists of financial exposure to business activities that predominantly have minimal or no adverse environmental and social impacts.

**The solution** The **project objective** is to accelerate the adoption at scale of novel tech-based solutions which can help the water sector achieve efficiency by testing during 3 years a new financing mechanism for tech trials in the water sector in Brazil that will move the sector beyond the "trial, trial, trial" phase by scaling the impact of tech-based solutions and developing capabilities for innovation absorption in the water sector.

This **financing mechanism called Trial Reservoir (TR)**, created by a technology and innovation consulting firm focused on the water sector called Isle Utilities Ltd, provides a framework in water and sanitation that allows utilities to implement new solutions and provides startups contingent recovery funding for piloting their solution that they pay back if the water utility moves ahead with buying the solution after the pilot. This arrangement enables water utilities to adopt technology with minimal financial risk and for the startups, opens new markets for their solutions.

**The beneficiaries** The project will benefit at least 1 million households as a result of the testing of 10 technologies in 6 utilities in different regions of Brazil. Some of the benefits expected from the introduction of these innovations are the reduction of leakage, lower operating costs, increased water reuse, reduced fraud, and increased energy efficiency, among others. In general, these benefits result in higher quality, reliability, and accessibility of the service for all. As described before, the poor, women, children, and marginalized minorities are affected the most by the lack of access or quality of water and sanitation services.

Other direct beneficiaries of the program will be technology solution providers in Latin America and the Caribbean. The project will prioritize the financing of solutions developed in LAC. It may also finance technology solutions from any other of the 48 member countries of the IDB Group if and only if they demonstrate that they have subsidiaries, affiliates, or alliances with entities established in the region. At least 15 suppliers will be highlighted at the TAG event and between 45 and 60 will be analyzed and become part of the platform's repository.

**The partner** Isle is a technology and innovation consulting firm focused on the water sector that provides advice on innovation and technology, supporting utilities, investors, and technology entrepreneurs. Founded in 2010, Isle is headquartered in the UK and employs 95 staff. It operates across Asia Pacific, Europe, North America, and LAC. Isle has extensive experience with the IDB Group and carried out several consulting projects and webinars on water and technology-related topics. It is currently leading a series of webinars on technology trends in the region sponsored by INE/WSA. Some of its clients are SUEZ, Thames Water, PUB, DC Water, BP, and Coca-Cola.

Isle has been working in Brazil since 2013, working in partnership with GO Associates benefiting with its activities the following water companies: SABESP - São Paulo, COPASA - Minas Gerais, CEDAE - Rio de Janeiro, SANEPAR - Paraná, CAESB - Distrito Federal, CAGECE - Ceará, CASAL - Alagoas, CONASA, AEGEA, CAB AMBIENTAL, Odebrecht Ambiental, OAS, SAMAR, DMAE - Porto Alegre. Isle also has a team focused on the LAC market.

**The IDB Lab's contribution** DB Lab's contribution of US\$300,000 will focus on financing the piloting of the solutions through a contingent recovery instrument. Technology testing at the utilities will be co-funded by IDB Lab and other TR sponsors (IDB Lab funded could not exceed 50% of the funding provided to each trial). These trials can cost anywhere from a few thousand USD to 100,000 USD and can take from 6 weeks to 9 months. If the trial is successful, the amount contributed by IDB Lab will go back into the fund to test new solutions. In case the test is not successful, the money will be consumed, and the loss will be borne by IDB Lab and the TR sponsors accordingly.

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The project will mobilize US\$200,000 in a non-reimbursable technical cooperation from Source of Innovation. This contribution will cover the technological exploration activities and events to be carried out by Isle. Isle will supplement these resources in the second year with fees for services from Brazilian utilities and, starting in the third year, these fees are expected to fully cover the cost of these activities.

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