

TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	BELIZE/CID - Isthmus & DR
▪ TC Name:	Design of Wastewater Treatment Solutions in Coastal Areas
▪ TC Number:	BL-T1125
▪ Team Leader/Members:	GRAU BENAIGES, JAVIER (INE/WSA) Team Leader; ORTIZ STRADTMANN, SILVIA (INE/WSA) Alternate Team Leader; SALAZAR, ASTRID DANIELLE (CID/CBL); ESCALA, VICTOR H. (VPC/FMP); WATSON, BRODRICK RAYLANDO (VPC/FMP); SASAKI, KEISUKE (INE/WSA); LOPEZ, LILIANA M. (INE/WSA); PERRONI, MARIA ALEJANDRA (INE/WSA); SANMARTIN BAEZ, ALVARO LUIS (LEG/SGO)
▪ Taxonomy:	Operational Support
▪ Number and name of operation supported by the TC:	Sustainable Tourism Program II - BL-L1020 Reinforcing the Sustainability of the Sustainable Tourism Program II Investments - BL-T1106
▪ Date of TC Abstract:	30 Jul 2020
▪ Beneficiary:	Belize and Belize Water Services Limited (BWSL)
▪ Executing Agency:	Belize Water Services Limited
▪ IDB funding requested:	US\$250,000.00
▪ Local counterpart funding:	US\$60,000.00 (Cash)
▪ Disbursement period:	24 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	INE/WSA - Water & Sanitation
▪ Unit of Disbursement Responsibility:	CID/CBL - Country Office Belize
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	Yes
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality ; Institutional capacity and rule of law; Environmental sustainability

II. Objective and Justification

- 2.1 The general objective of this TC is to improve wastewater management for key tourist areas in Belize. Its specific objectives are to prepare the detailed designs for a wastewater treatment plant and collection system for Caye Caulker and to conduct environmental and social studies for the alternative selected for wastewater collection and treatment.
- 2.2 Belize Water Services Limited (BWS) is the national water and sewerage utility. BWS is a regulated utility – the regulatory controls include a statutory regulator, the Public Utilities Commission (PUC), the Water Industry Act (2001), an operating license issued by the PUC and a Codes of Practice which is agreed by the Regulator and BWS and updated periodically. BWS operates in licensed service areas, serving all the municipalities of the country as well as some 44 villages. As at March 2019, BWS serves over 60,000 connections or approximately 257,000 consumers, with a total average water demand of approximately 225 million US gallons per month.
- 2.3 BWS operates and maintains sewerage systems in three municipalities namely Belmopan, Belize City and San Pedro Town. None of the municipalities served by these sewerage systems enjoy 100% coverage. The systems came into operation in 1970, 1980 and 1996, respectively. In the case of Caye Caulker, the Government of Belize (GOB) and BWS successfully completed a joint project to provide residents of Caye Caulker access to potable and reliable water in 2010. Completion of this project has prompted increase in tourists' arrivals and rapid urban development. It is therefore

very important to design and build an adequate wastewater system to protect public health and the Belize Barrier Reef Ecosystem.

- 2.4 This TC will work towards achieving the United Nations' Sustainable Development Goal (SDG) No. 6: Clean Water & Sanitation and will address environmental and health concerns arising from poor wastewater treatment.
- 2.5 It is important to note Belize will be one of the tourism dependent economies most impacted by COVID-19 in the world. This TC and eventual investment operation to finance the construction of wastewater treatment plants would contribute to Belize's economic recovery and ensure that Caye Caulker is well prepared to receive new tourism inflows in relation to one of its main attributes, ecotourism and environmental sustainability.

III. Description of Activities and Outputs

- 3.1 **Component I: Detailed designs for Sewage Collection and Treatment in Caye Caulker.** This component will finance the preparation of detailed design of the wastewater treatment and collection system for the entire island (south and north). It should include the selection of the most technically feasible collection system for the island based on terrain, soil, water table, land availability, and economical operating and capital expenditure costs.
- 3.2 **Component II: Environmental and Social Studies for wastewater collection and treatment.** This component will finance the necessary environmental and social studies including gender, climate change and diversity issues for the wastewater treatment plant and the sewerage system.

IV. Budget

Indicative Budget (in US\$)

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Detailed designs for Sewage Collection and Treatment in Caye Caulker.	\$175,000.00	\$50,000.00	\$225,000.00
Environmental and Social Studies for wastewater collection and treatment.	\$75,000.00	\$10,000.00	\$85,000.00
Total	\$250,000.00	\$60,000.00	\$310,000.00

V. Executing Agency and Execution Structure

- 5.1 The Executing Agency will be BWS, which is the authorized utility mandated by the Government of Belize to provide water and wastewater services in Belize and will act as executing agency for this TC.
- 5.2 BWS has executed and completed several IDB funded projects in the past, including, most recently, the Belmopan Sewerage Expansion Project under a GEF-IDB project (Establishment of a Revolving Fund for Financing Water Projects in Belize - GRT/FM-12724-RG) as well as BL-T1148 (Detailed Design of a Wastewater Collection and Treatment System in Placencia).

VI. Project Risks and Issues

- 6.1 The main risk is the lack of land available for the Wastewater Treatment Plants (WWTP) in Caye Caulker. This risk would be mitigated by including in the study the

identification, evaluation and selection of the most suitable available sites, including: 1) in the South Island, there may be land available near the Transfer Station for solid waste management. A lot of 5 acres is owned by the Belize Solid Waste Management Authority and currently approximately only 1.5 acres are being used. This may allow to have a package plant in that location; and 2) The North Island is beginning to be urbanized and it may be possible to find public land for the location of a small WWTP.

VII. Environmental and Social Classification

7.1 The ESG classification for this operation is "C".