



# Guyana Water Inc.

REDEFINING WATER QUALITY





GWI

# GUYANA WATER INCORPORATED

Redefining Water Quality

RESEARCH BY [TAYO AKANBI](#)



Guyana is derived from the Amerindian language that translates to the ‘Land of Many Waters’. And it’s easy to see why, given the country’s abundance of freshwater that flows from its many rivers, streams and creeks.

The South American nation, bounded by the Atlantic Ocean, has three large rivers, the Demerara, Essequibo and Berbice. Among its many waterfalls is the mighty Kaieteur Falls, which is not only the largest single-drop waterfall in the world but, at 226m, is five times higher than Niagara Falls.

While Guyana’s water resources can meet domestic demands and support continued growth in the agricultural and industrial sectors, there are growing concerns about the quality of its drinking water. This is due mainly to various issues from biological and chemical contamination, inadequate sewage networks and wastewater treatment plants, and the increasing scale of mining operations.

However, this is where Guyana Water Inc (GWI) steps in and is now providing a multi-billion dollar approach to solving some of the long-standing issues experienced in the country and enhancing proper water resources management.

Incorporated in 2002, GWI is a semi-autonomous entity that resulted from the merger of the Guyana Water Authority and the Georgetown Sewerage and Water Commissioners. As an arm of the Ministry of Housing and Water, GWI brings the water and wastewater services of the 65 local authorities together under one national service provider.



# CREATIVE DESIGN FLAWLESS CONSTRUCTION

## SERVICES OFFERED

- ✓ Construction of Potable Water Wells
- ✓ Water Supply Projects - Installation of pure water transmission and distribution systems
- ✓ Infrastructure Development Works- (Drains and Structures, Culverts and Bridges, Roads, Pipe Laying)
- ✓ Construction of Heavy Duty Concrete Bridges
- ✓ Construction of Highways and All Weathered Roads
- ✓ Construction and Rehabilitation of Buildings
- ✓ Construction of Sea Defence
- ✓ Drainage and Irrigation
- ✓ Equipment Rental



### R. KISSOON CONTRACTING SERVICE

Lot 687, 18th Street Foulis Housing  
Scheme E.C.D Guyana



+592 255 0049, +592 255 0793, +592 624 0484



rkissooncontractingservices@gmail.com



GWI became responsible for all public water services involving potable water supply and wastewater collection and disposal within the capital, Georgetown. Its responsibilities also encompass overseeing the investment and procurement of new projects and the continued management and maintenance of the sewerage sector.

This feature looks at the GWI's operation headed by Chief Executive Officer (CEO), Shaik Baksh, has turned around the fortunes of the agency by making it more sustainable as well as highlighting the many infrastructure projects that GWI is embarking on to ensure that water quality and sanitation for its citizens are of international quality.

**A Strong Leadership**

Under the visionary leadership of CEO Shaik Baksh, Guyana Water Inc (GWI) has undergone a remarkable financial renaissance, presenting a prime opportunity for B2B collaboration. With a keen focus on revenue optimization, particularly from commercial partners, outstanding debts have been reduced to just over \$3 billion. Baksh's strategic acumen has propelled GWI into a new era of commercial vitality, empowering the company to operate without the need for overdraft facilities and ensuring a seamless cash flow for all commitments, including

employment costs. Streamlining the workforce to 988, GWI achieved an annual savings of \$240 million, showcasing their unwavering commitment to operational excellence.

Furthermore, the company's astute financial management is evident in substantial reductions in electricity costs and strategic supplier payment plans. By nearly extinguishing an inherited debt of \$800 million, GWI is on a path of financial resurgence. The installation of 15,000 new meters in 2021 and a target of 20,000 for the current year underscore their commitment to operational efficiency. The company is actively inviting industry pioneers to join them in achieving 85 percent meter coverage by 2025, a crucial step towards reducing water losses and ensuring financial stability. Through a strategic focus on reducing Non-Revenue

**JEMCORP**  
ENGINEERING & IMPORTS

**IF YOU CAN  
IMAGINE IT  
WE CAN  
BUILD IT!**

FOLLOW US [Facebook] [Twitter] [Instagram] [LinkedIn]

JEMCORP ENGINEERING AND IMPORTS  
238 Shanti, Nekota Street  
Prashad Nagar  
Georgetown, Guyana  
Email: jemcorpGuyana@gmail.com

CALL NOW **+592 673 9949**



Water (NRW), GWI is poised to bring NRW losses down to approximately 45 to 50 percent by 2025, solidifying their position as an industry trailblazer.

**Capacity**

GWI supplies potable water to various communities via two primary well water sources derived from sand wells and surface water from rivers, creeks, springs and canals. These water sources have inherent characteristics which require respective treatment and monitoring to address various parameters, such as turbidity, colour, metal contaminants and E. Coli.

The corporation serves over 172,000 customers and produced 160 million cubic meters of water in 2019, with 52% meter coverage, via 28 water treatment plants

servicing 53% of customers and more than 250 water wells nationwide.

There are also clear water springs in hinterland locations from which water is distributed directly to the network, similar to the wells.

GWI's scientific services department oversees water quality testing, instrumentation use, and standards enforcement. Lab testing of water quality through sampling, testing, and reporting enables it to offer appropriate interventions for quality control in line with international standards.

Additionally, the corporation has 24 sewerage pumping stations that form a sewerage system within central Georgetown and a septic receiving

**UNLOCKING GUYANA'S POTENTIAL: ZECO GROUP OF SERVICES INC.**

In the heart of Guyana's development surge, Zeco Group of Services Inc. (ZGSI) emerges as a transformative force, shaping the nation's future through a blend of Visionary Projects, Comprehensive Services, and Strategic Partnerships. Its recent accomplishment of triple ISO Accreditation – 9001 (Quality), 14001 (Environment) and 45001 (Occupational Safety and Health), demonstrates its unwavering commitment to progress alongside its pivotal collaboration with Guyana Water Inc (GWI) to upgrade and expand its network throughout Guyana.

**Leading the Way with Projects:** ZGSI has acquired Projects of recent that would enable it to redefine how work is executed in the infrastructure landscape of Guyana. Utilizing novel Methods, Processes and Technologies marked by innovation and precision, ZGSI intends to not only bolster the development of the Physical Infrastructure of Guyana but to also foster its economic growth, simultaneously elevating Communities across Guyana.

**Comprehensive Services:** ZGSI offers a holistic suite of Services that span various Sectors, ranging from Design

and Engineering to Construction and Commissioning. ZGSI is also actively engaged in utilizing Sustainable and Green Technologies and Processes in the execution of its Projects. Through its plethora of Human Resources and Innovation-Centred Vision, it has positioned itself to expertly address the diverse Challenges underpinning the Development Journey of Guyana with resilience and fortitude.

**Strategic Alliances:** The alignment of ZGSI with GWI exemplifies its commitment to collaborative success. By working hand-in-hand with GWI, it actively contributes to enhancing the Water Supply Infrastructure, ensuring that communities have access to this vital resource.

Zeco Group of Services Inc. strives to be a catalyst for positive change, aligning vision with action to steer Guyana towards a prosperous and sustainable future. As it continues to reform development paradigms, the nation stands enchanted by its transformative growth.

[www.zecogy.com](http://www.zecogy.com)



station at Tucville that receives sewage from a network within the Tucville-Stevedore housing schemes.

These two network stations collect effluent from about 60,000 residents and a transient population of another 200,000. The estimated combined daily per capital load is approximately 11,000 cubic meters.

Part of the company's developmental program is the construction of two

wastewater treatment plants. These plants will be constructed at the end of the Georgetown Sewerage System and the other at the Tucville Sewerage System.

**Current Projects**

With the World Bank projecting Guyana's population growth forecast of 2.1% through to 2030, GWI is presently in the midst of a strategic five-year plan to continue improving, upgrading and expanding potable water for its diverse communities. GWI's strategic goal is to provide 90% treated water coverage by 2025.

The company has launched three projects, totaling over \$40 million, for the construction of seven water plants to treat water across the coast and benefit close



## As the Government continues to develop thousands of new housing lots, GWI has created a new unit within its structure to control the pace and expansion of infrastructure works

to 100,000 people. The contracts were signed under GWI's Coastal Water Treatment Infrastructure Programme.

Supported by Government of Guyana funding, the programme will see the water treatment plants being constructed at Onderneeming in Region 2, Parika, Wales and Lust en Rust in Region 3, Caledonia, Cummings Lodge and Bachelor's Adventure in Region 4.

A further \$143 million has also been invested in treatment to achieve a satisfactory level of water service.

The projects and their sizeable investments are also a realization of the Government's commitment to prioritizing the improvement of water infrastructure and, ultimately, water service across Guyana.

As the Government continues to develop thousands of new housing lots, GWI has created a new unit within its structure to control the pace and expansion of infrastructure works. The strategic plan will also see 12 existing plants upgraded, with 12 smaller plants slated to be built.

GWI is also embarking on a \$170M restoration project of the Friendship Water Treatment Plant on the East Coast of Demerara. As part of the project, seven new filters have been installed to increase the plant's treatment capacity. The newly installed filters will be linked to the plant's storage tank and are expected to produce approximately eight mega-liters of water per day and benefit about 7,000 residents locally.

Crucially, some 40 new wells will be drilled in the Guyana hinterland regions in 2023, with the Government allocating \$1.4 billion to increase access to potable water for communities.



Over the past two years, access to potable water in the hinterland regions has increased significantly. Coverage in the hinterland increased from 46% in 2020 to 75% in 2022.

It is now working to achieve 85% coverage by the end of 2023 and complete coverage for the hinterland by 2025. GWI is also on its way to providing 99% access to water on the coastal belt.

In late 2022, GWI secured \$8.5 billion in contracts to construct seven new water treatment plants in communities along the coast. In 2023, it will embark on a pilot project and tendering for ten new in-line treatment plants to be set up to test the plants. These seven new treatment plants, 12 upgraded treatment plants and a new pilot project are expected to serve up to 300,000 people.

## Over the past two years, access to potable water in the hinterland regions has increased significantly. Coverage in the hinterland increased from 46% in 2020 to 75% in 2022.

GWI has also set out its plans for wastewater and sewerage upgrades, with \$40 million of the strategic investment programme projected to be expended. A portion of these resources will be for the rehabilitation and expansion of Wastewater Treatment Systems in Georgetown and New Towns.





Additionally, GWI will be rehabilitating and expanding the Ruimveldt Sewerage Collection Station. Approximately 15,000 cubic metres of untreated wastewater is discharged daily into the Demerara River. An estimated \$10 million is needed to extend the gravity sewer network to collect septic tank effluent from Kitty, Festival City, Guyhoc Park and La Penitence area.

GWI is also making strides to improve its disposal methods by constructing a Central Georgetown Wastewater Treatment Plant, which is expected to cost \$30 million. The plant will treat 20,000 cubic metres of raw sewage daily from the existing Central Georgetown sewage network.

**Strategic Partners and Suppliers**

As part of Guyana Water Inc.'s vision and mission to bring high-quality water and services to its communities, it has matched that with an internationally recognized

quality control programme to monitor all its projects.

GWI's procurement process for projects is through public advertisement, with submitted proposals evaluated by an evaluation committee selected by the National Procurement and Tender Administration Board (NPTAB). The analysis is based on various factors, such as the experience of the company and its staff and accepted practices and techniques, depending on the nature of the contract.



Three recent contracts awarded by GWI attest to the quality of the contractors that they can attract. These international firms comprised Hi Pro Ecologicos Mexico, Sigma Engineers Limited from Bangladesh and Toshiba Water Solutions Private Limited from India.

R Kissoon Contracting Service is a construction services company that has worked with GWI on its projects. Additionally, Zeco Group of Services is another key partner, offering fabrication and technology among its supply services to meet the demand for future infrastructure development in Guyana. Other partners and suppliers that complement GWI contracts include JemCorp Engineering & Imports, C&L Construction Inc, Build Smart Const., H. Nauth & Sons, Adamantium Holdings, Morris Jeffrey Enterprise, Farm Supplies Ltd Read, VG GROUP INTL, International Import Supplies, Behary Automotive Ltd., General Marine Company and GEO Enviro Support Services Guy. Inc

GWI has acknowledged in its strategic plan that reliable, high-quality water supplies are increasingly essential to attract foreign direct investment into Guyana.

**Socio-Economic Impact**

Water poverty is a complex issue that affects many aspects of human development, such as health, education, income, and the environment. The World Bank suggests Guyana has experienced a decline in poverty over the past decade but still faces challenges such as coastal flooding, low agricultural productivity, and limited access to essential services.

**Water poverty is a complex issue that affects many aspects of human development, such as health, education, income, and the environment**

The socio-economic impacts of water poverty include increased vulnerability to natural disasters, which can damage infrastructure, crops, and livelihoods; reduced opportunities for education and employment, especially for women and children, who often bear the burden of fetching water or coping with water-related diseases, and a lower quality of life through a lack of nutrition, hygiene, and sanitation.

Access to potable water and a reliable, safe water supply are essential contributors to the industrial and related growth that leads to progressive social development.

GWI is acutely aware that, for all the water the nation experiences, it still needs to do more to ensure that water quality and



safety are at their highest.

Its strategic plans of recent years, and the one that it is currently in the midst of, will ensure that thousands more people will be lifted out of 'water poverty' and benefit from the latest project implementation. It has also engaged with hinterland communities to improve sanitation through rainwater harvesting.

**Moving Forward**

According to the International Monetary Fund, Guyana's economy is set to expand by 38% this year thanks to the oil wealth it is now tapping into. Massive offshore oil deposits first drilled by Exxon Mobil Corp. in 2015 have allowed the economy to quadruple in size over the last five years, with rapid growth projected to continue for some time. Oil production will continue



to expand as three new approved fields come on stream between 2024-27, and a sixth field is expected in 2028.

According to a recent report from the International Organization for Migration, between 2013 and 2018, travellers from the Caribbean were recorded as having the highest increase in migration to Guyana compared to those from Venezuela, Europe, and the United States of America



(USA).

The labour study attributes these travel trends to Guyana's emergent oil and gas industry and subsequent sectors, where it is estimated that up to 160,000 jobs will be in demand in the coming years.

Such dynamics are set to change and challenge the face of Guyana in future years. GWI has adopted strategies to counter the demand for its water supplies and eradicate the triple challenge of poverty, unemployment and inequality confronting the country.

GWI's vision for the water sector is: "sustainable water and basic sanitation for all by 2030", which means ensuring that "all people living in Guyana have access

**GWI's vision for the water sector is: "sustainable water and basic sanitation for all by 2030"**



to adequate, safe, affordable and reliable water services, practice safe sanitation and hygiene and that water resources are sustainably managed."

GWI's mission will be to lift the lives of hundreds of thousands of people across the country. With the commitment of the Government and key contractors, with the construction of new treatment plants, the rehabilitation of existing ones and the installation of new in-line filters, it is on course to expand coverage across the nation and achieve 99% potable water access.

GWI

Guyana Water Incorporated

☎ (592) 227 8701

Fax: (592) 227 8718

✉ com.dept@guyanawaterinc.com

www.guyanawaterinc.com



**Guyana Water Incorporated**

Corporate Complex Vllissengen Road and Church Street,  
Bel-Air-Park,  
Georgetown,  
Guyana

☎ (592) 227 8701

Fax: (592) 227 8718

✉ [com.dept@guyanawaterinc.com](mailto:com.dept@guyanawaterinc.com)

[www.guyanawaterinc.com](http://www.guyanawaterinc.com)

Produced by:

**BE Business Excellence**

[www.bus-ex.com](http://www.bus-ex.com)