



## New Providence, Bahamas A very successful water loss reduction project



### LOGDX+LOGD3+HL5000 24/7 data logging

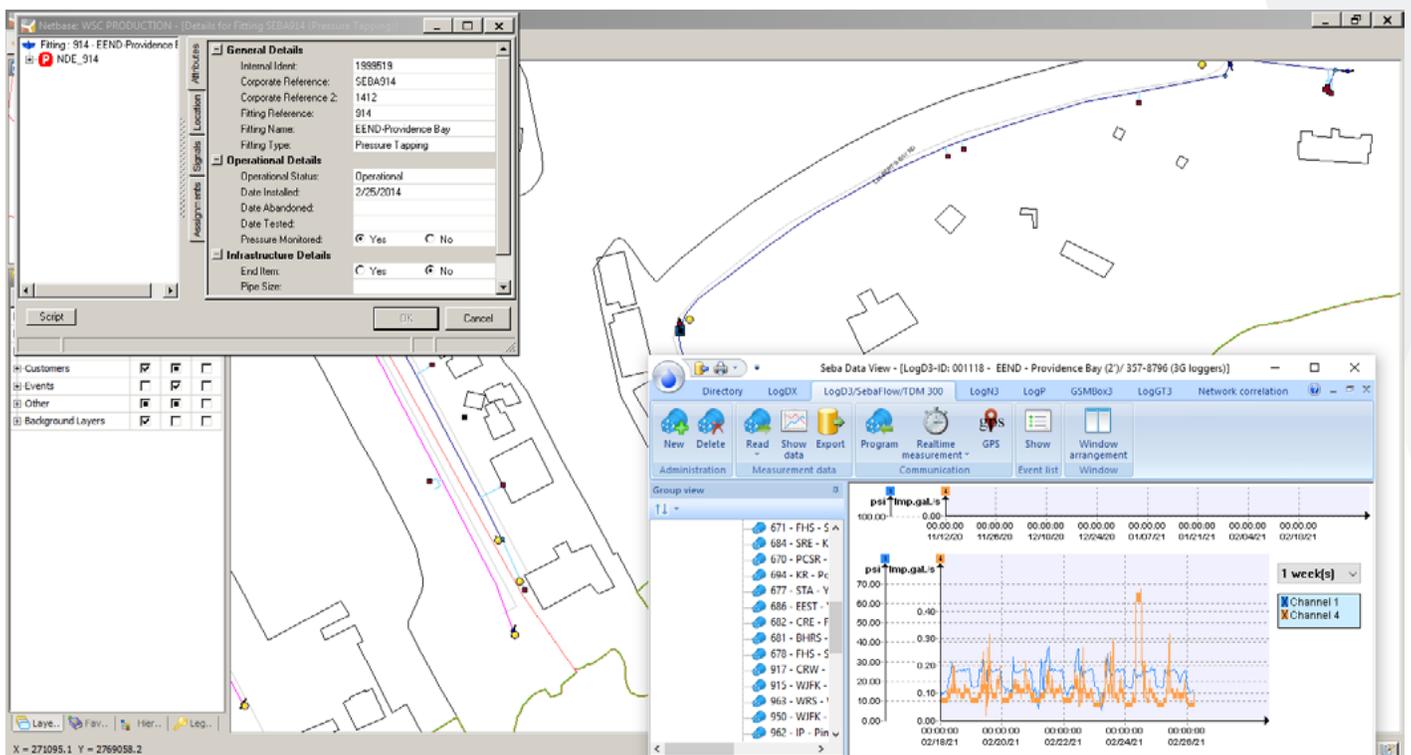
#### Description

In 2012, The Bahamas Water & Sewerage Corporation (WSC) has contracted Miya to conduct a 10-year NRW reduction project. As a part of this contract, Miya Bahamas was required to reduce Non-Revenue Water (NRW) in the New Providence distribution system from 6.87 MIGD (Million Imperial Gallons per Day) to an annual average of 2.5 MIGD by year 5 and to 2 MIGD by year 7.

The island of New Providence, on which this program is centered, accounts for approximately 70% of the population of The Bahamas (351,000 inhabitants). Over 90% of the drinking water supplied to the island comes from reverse osmosis plants, which yields a comparatively expensive product.



[Further details on the next page](#)





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The NRW reduction levels achieved between 2012 and 2017 were significant and constitute the single most important accomplishment of the program. They reflect the overall success of the NRW reduction strategy. In 2019, the NRW level was reduced to 2.00 MIGD, once average water pressure and the impacts of delays on leak repairs were taken into consideration.

The key elements of the strategy were proactive leak detection, in which was largely used tool HL5000 from SebaKMT, rapid repairs, use of adequate materials, pressure management, selective replacement of network elements, disconnection of inactive service lines, large customer metering and asset maintenance. Other essential components were hydraulic modeling, system optimization, GIS updating, SCADA, and the use of data management hardware and software by the deployment of hundreds of data loggers' types LOGDX/LOGD3 from SebaKMT to collect hydraulic parameters on a daily basis.

The economic impact of the NRW reduction program is significant. Annual cost savings were calculated as a result of a reduction of the system input volume purchased and the increases in revenues compared with the baseline. At the end of 2018, the cost savings due to reductions in system input volumes had already amounted to US\$31.5 million, based on marginal production costs of US\$8.18 /1,000 gallons. The increase in revenue, compared to the baseline, amounted to US\$37.2 million. Thus, MIYA estimates that the total financial benefits added to US\$68.7 million by 2018.

*Report by courtesy of Mario Tavera,  
Project Manager, Miya-Bahamas*

### Project

10-year Non-Revenue Water (NRW) reduction project

### Equipment/Quantity

100+ LOGDX/LOGD-3 + HL5000

### Customer

Miya Bahamas

