

Hubgrade

PERFORMANCE

CASE STUDY | Guayaquil



GUAYAQUIL

Interagua is a water utility company operated by Veolia Ecuador. The company is responsible for the operation and maintenance of the distribution, collection and treatment of the water infrastructure of Guayaquil, the largest city in Ecuador.



THE CHALLENGE

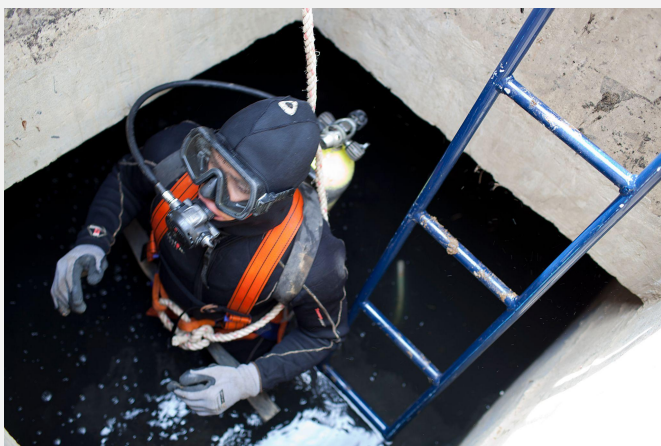
Heavy rain events spurred by climate change increased in the last years in the city of Guayaquil, a port city located in the southeast of Ecuador. **The sewer network age makes it difficult for Interagua, to manage stormwater events**, which generates serious flooding situations, exposing human health and the environment to dangerous risks.

One of the main challenges of Interagua was to **renovate and maintain the network with the right priority and in an effective way**. The sewage network of Guayaquil was experiencing inflow and infiltration (I&I): inflow is generally referred to as rainwater collected flows that drain directly into the sewer. Infiltration is rainwater infiltrated into the system due to defects in the pipes or improper sanitation connections. With the cost of pipe inspection and relining being substantial, Interagua was looking for a solution to **optimize the maintenance costs, preserve the water resources and protect human health at the same time**.

THE SOLUTION

In 2021, Veolia Water Technologies implemented the sewer module of Hubgrade Performance.

The I&I feature of Veolia's digital solution is a **data-driven time series analysis based on any pump or flow data**, splitting the flow into the following fractions: wastewater, constant infiltration (groundwater), indirect inflow and direct inflow. Thanks to this feature, Interagua is today able to analyse the levels of infiltration in the sewer network, allowing as such better maintenance management and operation of the overall sewer network.



CLIENT BENEFITS

Thanks to the I&I feature the operating team Interagua were able to **identify high levels of infiltration** in three different locations of the system. Odours, corrosion and hydraulic capacity problems were highlighted and included in the task board of the maintenance team. With Hubgrade, Interagua were able to **prioritize these tasks per catchment area, reducing the inspection time and improving work efficiency**. Additionally, with Hubgrade, the operation of the sewer network is gaining **proactivity thanks to the alerts and the possibility of tracking improvements** along the way as maintenance tasks are carried out.



Veolia Water Technologies

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