



**gHost**

# Real Time Data Intelligence

Everything you need to develop and generate value from your data assets





# Rainfall Derived Infiltration and Inflow (RDII) as a Service

Analysing the impact of RDII on water treatment costs

## THE CHALLENGE

Whether caused by 'normal' rainfall conditions or extreme weather brought on by phenomena such as a La Niña event, storm water infiltration into sewer networks is an ongoing challenge for most water utilities.

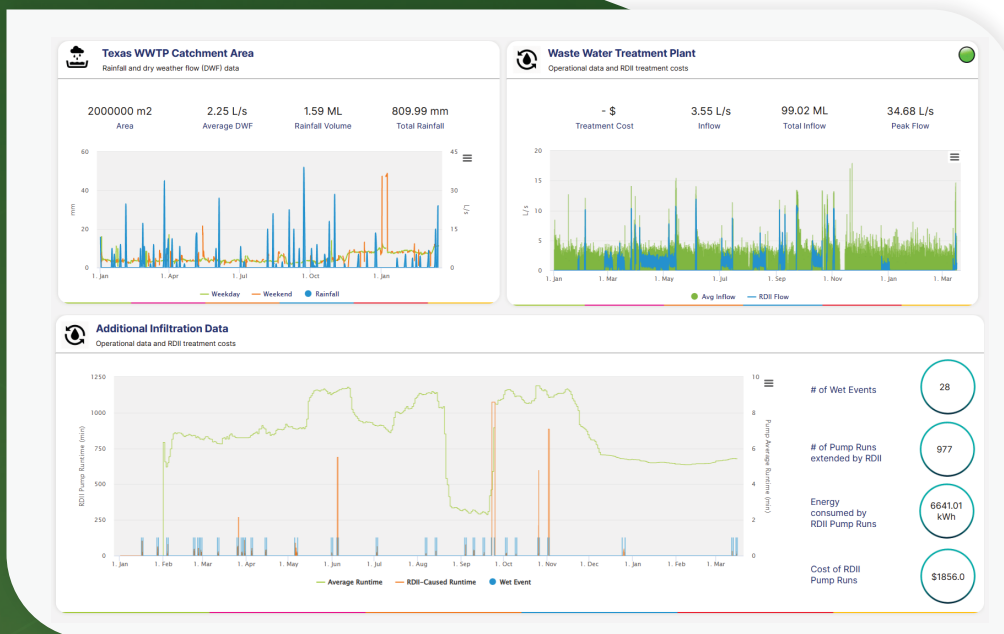
Two key impacts of infiltration on water utilities are increased treatment costs (energy and chemical), and the increased risk of spills into the environment.

While increased treatment costs can potentially be quite high, sewerage spills into the environment typically come with a much higher cost - fines from regulatory agencies, clean-up costs, and reputational damage that occurs because of the inevitable negative publicity.

## THE gHOST SOLUTION AS A SERVICE (SAAS)

To help water utilities meet challenges like this, gHost has developed a number of "Solution as a Service" (SaaS) applications. These are a set of "out of the box" solutions which are highly configurable and managed securely in the gHost platform.

One of these applications is the Rainfall-Dependent Infiltration and Inflow (RDII) app. To evaluate the impact of infiltration at a facility - or at an even more granular level, if the data is available - we create several 'baselines' that represent regular network operations during dry periods, according to WSAA guidelines. Then, when a period of significant rainfall occurs, the impacts of that rainfall event are determined on a per-location basis, and in real-time.



## THE BENEFITS

By delivering these **real-time insights** to our customers, the **real costs** of treatment can be monitored on web-based dashboards, for multiple catchment areas or facilities at a time.

Having this data so readily available provides planners with the information required to more easily identify parts of the wastewater network that will provide the **highest cost-benefit** return from remedial works, and make **informed decisions** to allocate budgets and resources accordingly.