

make the most of your existing infrastructure

ECONOMICAL AND EFFECTIVE MANAGEMENT

- ▶ **Global and transparent management** of the sewer and stormwater systems
- ▶ **Risk anticipation** through multi-dimensional forecasting updated in short or long term
- ▶ **Reduction of operating costs** through automatic and dynamic management of sewerage systems and Wastewater Treatment Plants during storm episodes
- ▶ **Upgraded value of stormwater/sewer assets, and investment optimization** by increasing volumes treated and storage availability

ENVIRONMENTAL AND PUBLIC PROTECTION

- ▶ **Monitoring** of river and bathing waters quality
- ▶ **Water quality preservation** by anticipating pollution and preventing risks through alerts
- ▶ **Flood risk controlled** by limiting overflowing in cities through forecasting, as well as storage and transport capacity optimization
- ▶ **Limitation of pollutant overflows** in the environment

WATER TREATMENT ENHANCEMENT

- ▶ **100% of water treated** during dry weather
- ▶ **Optimization of treatment plants' capacities**
- ▶ **Maximization of transport, storage and network retention capacities** to limit local overflow risks



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AQUADVANCED[®] Urban Drainage

Integrated Sewer &
Stormwater System
Management Software

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ready for the resource revolution



ready for the resource revolution



technologies for operational efficiency, public safety and environmental protection

SUEZ presents AQUADVANCED® Urban Drainage, a software suite for daily sewer system management, flood prevention, environmental protection, optimization of wastewater operations and asset performance

A modular software suite geared to meet your specific needs:

- ▶ **Monitor** sewerage system operations
- ▶ **Control** quality of river and bathing waters and **preserve** the environment
- ▶ **Anticipate** flood risks
- ▶ **Manage** stormwater and sewer efficiently
- ▶ **Reduce** capital investment

AQUADVANCED® Urban Drainage

EMPOWER YOUR DECISION-MAKING

Ensure optimal and transparent management of sewer and stormwater systems through:

- ▶ **Detailed and continuous overview** of your infrastructure and geographical follow-up of network operations
- ▶ **Energy monitoring**
- ▶ **Alerts and analytics** to help operator decide and minimize risk during crisis situations
- ▶ **Weather forecast with real-time calculation of rainfall impact** on sewerage system, city and receiving waters
- ▶ **Optimized management strategies** to ensure the best use of storage capacities while preventing flooding and polluted overflows

AQUADVANCED® Urban Drainage is a **real-time software** composed of 3 modules ranging from monitoring and events prediction to automatic control of the entire sewer and stormwater systems:

- ▶ **Monitoring Module:** Follows-up the whole system in terms of operations, hydraulics and quality of receiving waters by visualizing real-time measures and computed Key Performance Indicators, weather information, energy consumption and geographical display of ongoing operations.
- ▶ **Early Warning Module:** Models and predicts the impacts on natural environment or sewerage system to prevent and manage flooding risks in urban areas or pollution to rivers and coastal waters.
- ▶ **Advanced Control Module:** Calculates optimized operating strategies in real time and automatically controls system actuators. Enables coordinated management with Wastewater Treatment Plants.

Applicable to:

- ▶ Combined or separate sewer systems
- ▶ Closed networks and open drainage systems such as channels, rivers, surface run-off, and marine dynamics

all the features you need, in one software

- ▶ **Geographical dashboard of the system with continuous update** on the hydraulic state of the network and receiving environment quality
- ▶ **Computed Key Performance Indicators** for network, pumping stations, retention tanks, plants and sewer overflows
- ▶ **Meteorological context follow-up** with display of rain gauges and radar views, rainfall computation per catchment, indicators and rain alarms
- ▶ **Energy management** of pumping stations, plants and other electromechanical actuators through supervision of energy consumption, efficiency and cost
- ▶ **Follow-up of operations** on the network, including Key Performance Indicators, management of fleet and field teams by GPS, odor complaints and hot-spots
- ▶ **Anticipation** of hydraulics on the network, fluvial or marine states through advanced computational systems and analytics
- ▶ **Alerts management** from simple monitoring to early warnings in order to prevent crises such as flooding or pollution
- ▶ **Real-time calculation of management strategies** to optimize storage and treated water volumes, and minimize overflows
- ▶ **Transfer of management strategies to the operational control center** for automatic application of instructions

