D4RUNOFF

Data-Driven Nature-Based Solutions for Preventing and Managing Runoff Pollution

The overall goal of D4RUNOFF is to create a novel framework for preventing and managing the pollution from this stormwater
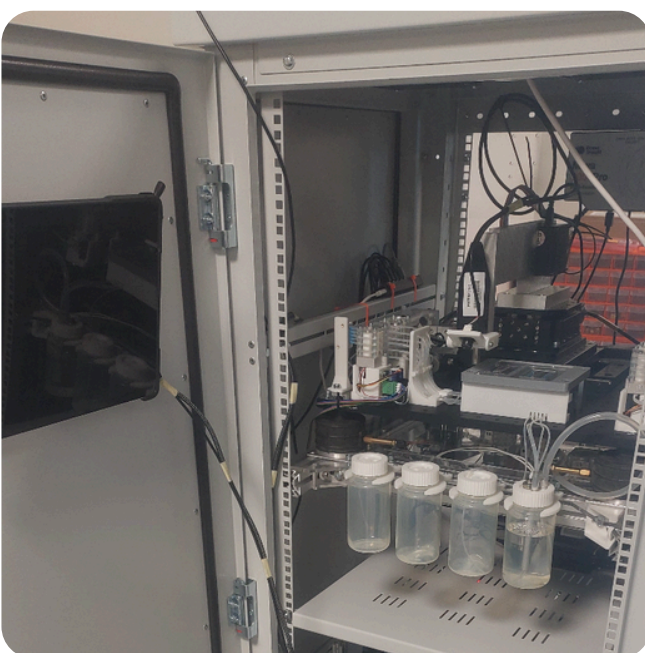
Novel detection methods

Detection and classification of several contaminants in the runoff waters in different areas in Europe

- 34 runoff samples
- **Wastewater contaminants** caffeine, paracetamol, desvenlafaxine
- **Traffic contaminants** 6 PDD- Quinone, 1,3 Disphenylguanidine, ZINC

Online sensors

Development novel sensors to
- collect remote and real-time data
- control contaminants of emerging concern (CECs) and other pollutants in runoff waters

Multi-criteria decision analysis for hybrid solution

Developement of
- A library of drainage solutions to help select effective stormwater systems for urban areas.
- Multi-criteria analysis for selection and location of nature-based solutions

ⓘ www.d4runoff.eu/results

AI-assisted urban runoff management platform

The platform serves as a Decision Support System, to enable the management of urban runoff and the design of effective mitigation measures. There are three modules to explore:

- Operational & strategic module
- Policy making module
- Social module

ⓘ www.d4runoff.eu/resources

Validation process

Our technologies are currently under validation in the pilot sites - Santander (Spain), Pontedera (Italy), Odense (Denmark)

𝕏 D4RUNOFF project

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