

digital-water.city



Leading urban water management to its digital future

H2020 innovation action

| *5 M€ funding*

Project start: June 2019

| *Duration: 3.5 years*

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DWC in few words

- Leverage the **potential of data and digital** technologies
- **Boost the water management** in EU cities
- **Promote the value** of the digital solutions for the tech providers
- Achieve a **new step in the integration** of digital solutions in EU, in particular regarding cybersecurity, interoperability and governance



24 partners

KOMPETENZZENTRUM
Wasser Berlin



Utilities

R&D

Companies and SME

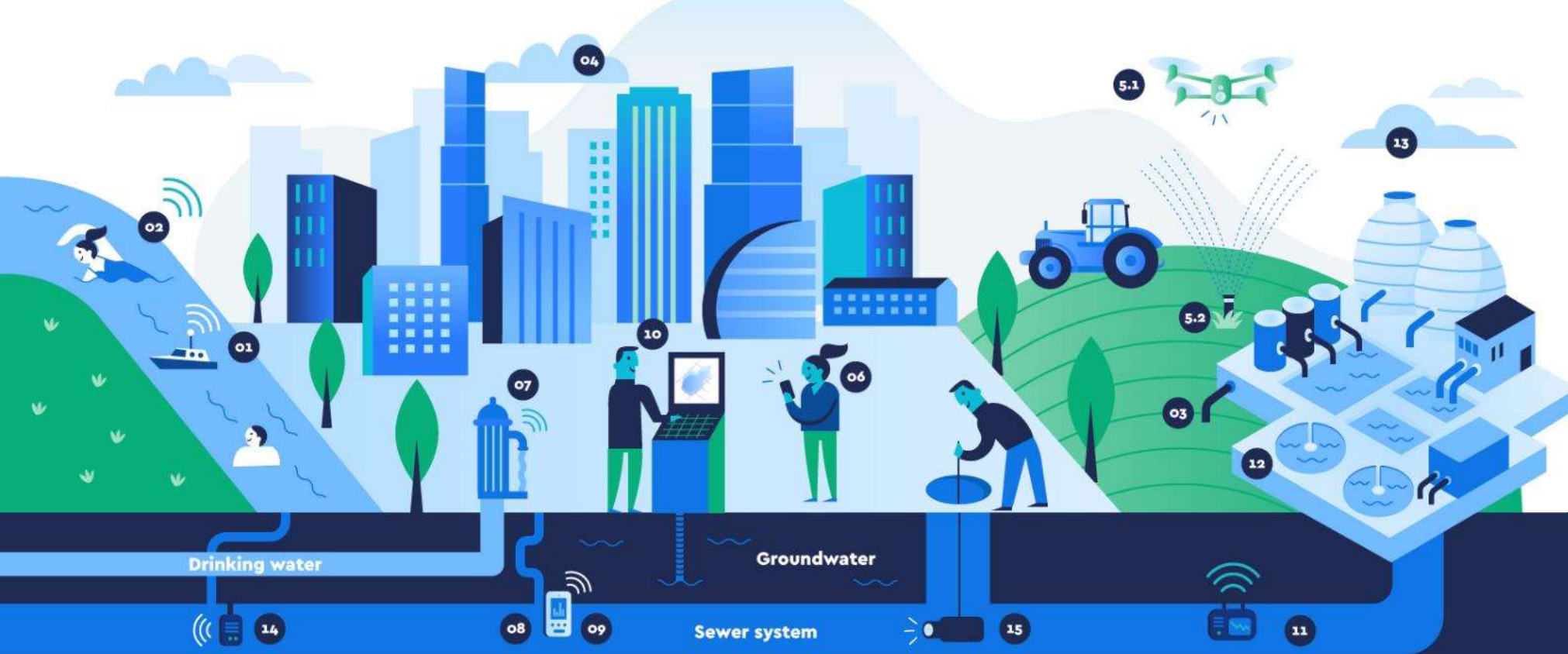


5 cities

- Large scale assessment of the **benefits provided** by the digital solutions
- **Lighthouse to raise awareness** of other cities and accelerate market uptake



15 solutions



Bathing water

- 01 e-coli sensors
- 02 EWS bathing water

Drinking water

- 07 App predictive maintenance

Sewer

- 8+9 Illicit connections
- 11 Flow modelling
- 14 CSO sensors
- 15 Sewer cleaning

WWTP

- 03 EWS for reuse
- 12 Integrated RTC
- 13 Visualization platform

Reuse

- 5.2 Drone water stress
- 5.3 Match-making

Public involvement

- 04 WebGIS
- 06 Serious game for nexus
- 10 AR for groundwater

The image features a blue background with a stylized sewer system. At the top left, there is a network of dark blue pipes. In the center, a small grey device with a screen and a green dot is connected to three green curved lines representing a wireless signal. Below this, a large dark blue pipe enters from the left and discharges a thick, brown stream of sewage into a large, shallow, brown-colored basin. The basin is surrounded by a dark blue border. Below the basin, a cross-section shows a green layer representing the ground or water table, with a dark blue pipe extending downwards into it. The word 'Sewers' is written in white on a dark blue rounded rectangle in the upper right.

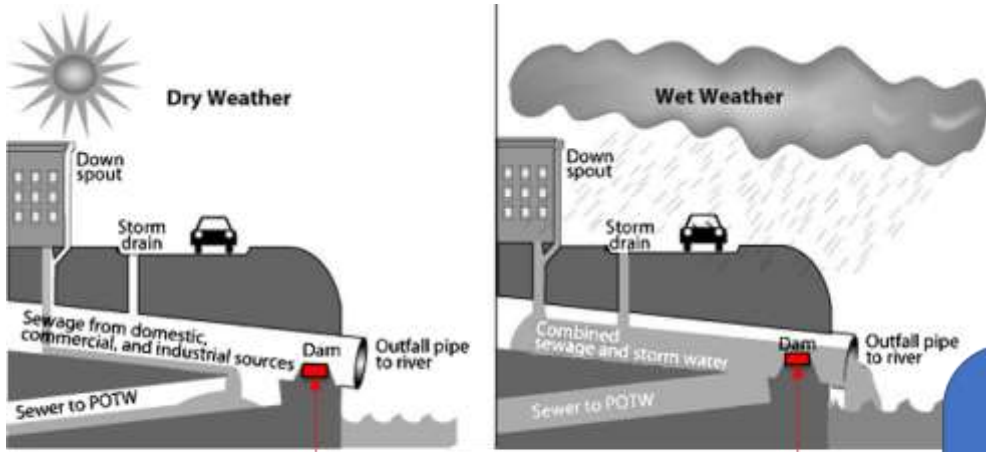
Sewers

Innovative monitoring of sewer illicit connections

Low costs CSO monitoring technology with T sensor

Advanced 48h sewer flow forecast

#Sewer monitoring

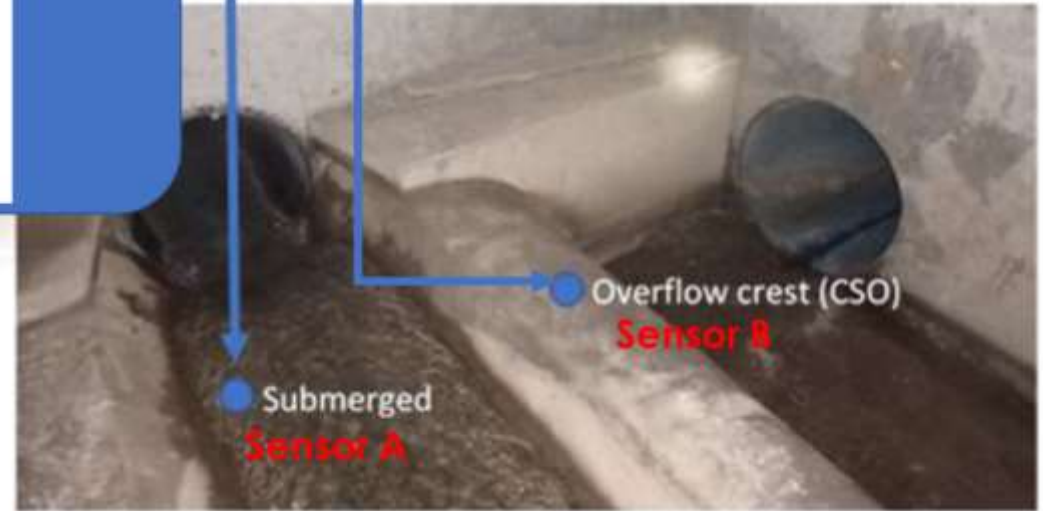


Temperature sensor



Sensor

OFFLINE CONFIGURATION

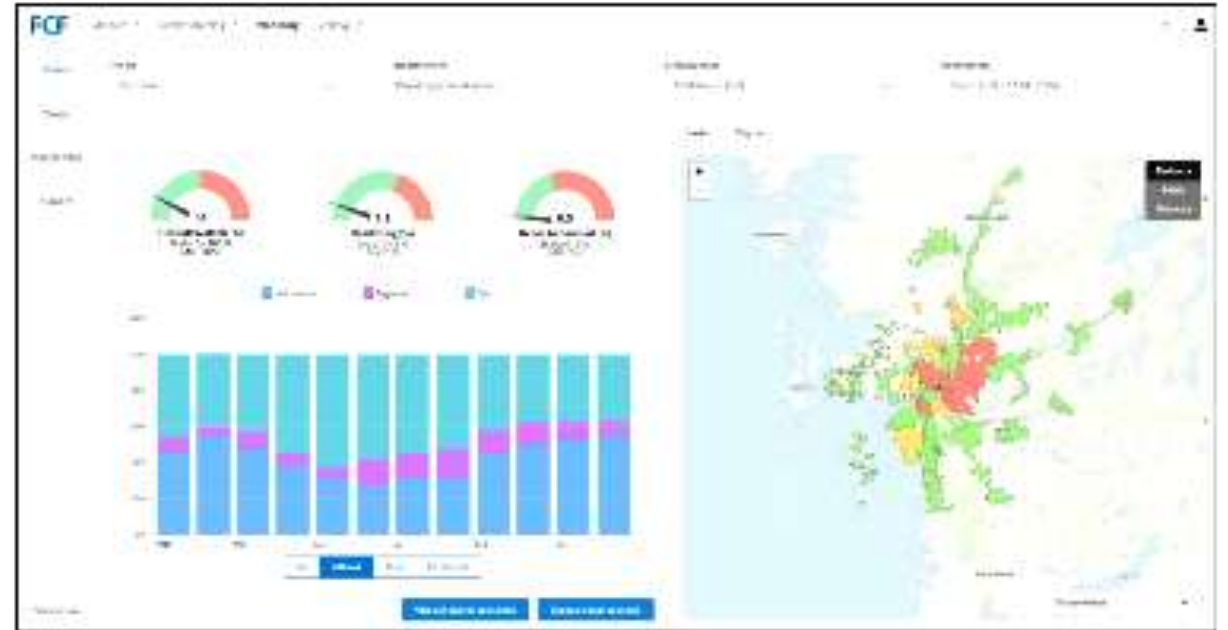
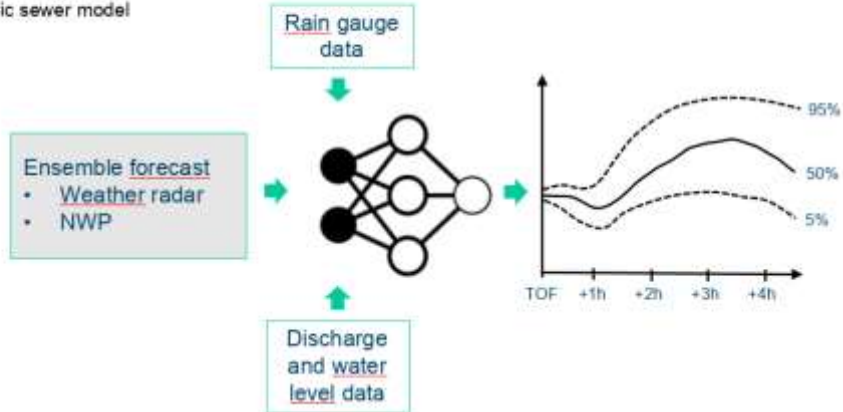


#Real-time control of WWTPs

DWC digital solution 11 - Sewer flow forecast toolbox

Flow forecast with up to 48 hours forecast horizon based on the smart integration of

- (1) real-time sewer flow data
- (2) open climate data
- (3) numerical weather model
- (4) hydrodynamic sewer model



Water reuse



| *Remote monitoring of water stress*

| *Match making platform to support water allocation*



#Safe water reuse and matchmaking for agricultural irrigation

Real-time monitoring of *E.coli* and Enterococci



fluidion
fluidic intelligence

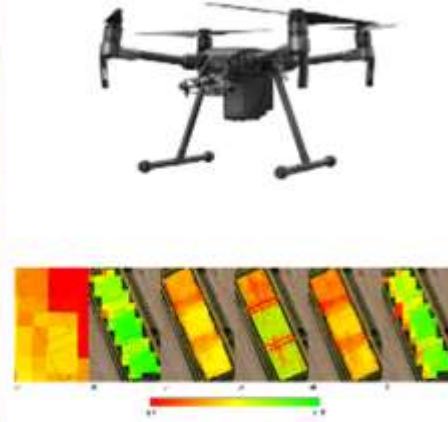
Meteorological station



Ground sensors



UAV IR imagery



Precision irrigation

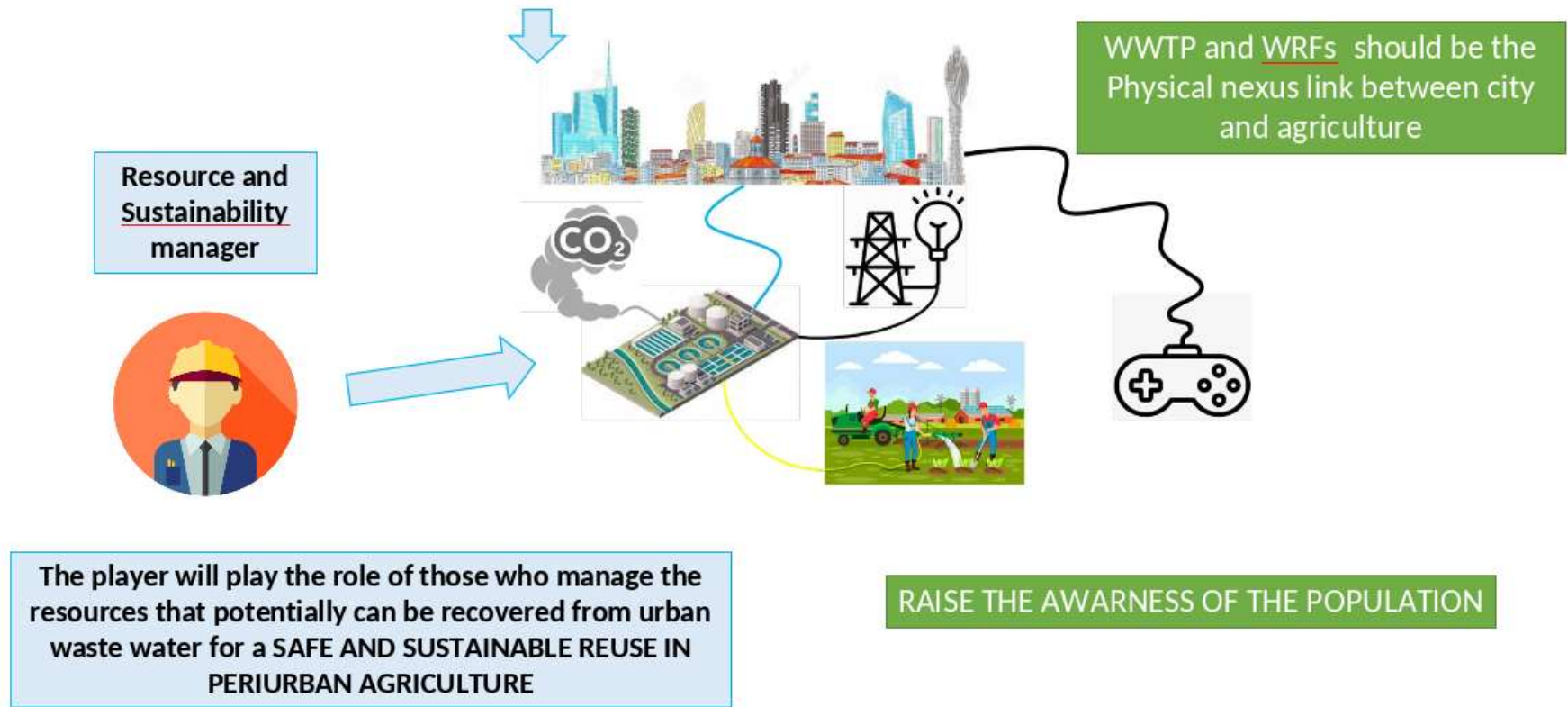


#Water-Energy-Food-Nexus

The water-energy-food-climate (**WEFC**) nexus is a systematic approach that focuses on **synergies** and trade-offs emerging in the **interactions between water, energy, food and climate** at bio-cyber-physical, socio-economic and governance level

Serious Game

Web-based serious game for the water reuse - carbon - energy - food - climatic nexus



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