



# Synergy Group DigitalWater2020

A group of 5

DigitalWater2020 is composed of five European projects funded by the European Union's Horizon 2020 Research and Innovation programme. All these projects address digital water related issues



**CLIMATE ADAPTATION**

**AGRICULTURE**

**BATHING**

**WATER**

**DIGITAL**

**ENVIRONMENT**

**DIGITAL WATER**

**CYBERSECURITY AND PRIVACY**

**FLOODS**

**OPEN DATA**

**DRINKING WATER**

## CLIMATE ADAPTATION

Climate adaptation measures

## AGRICULTURE

Common Agricultural Policy  
Proposal 2018 for water reuse  
Regulation 2020 on min. req. for water reuse

## WATER

Bathing water directive

Directive on env. quality standards  
Water framework directive  
Urban WW treatment directive

Floods directive 2007

Directive on protection  
of groundwater  
Quality of Water Directive 1998

Action Plan  
Digital Single Market for Water Services

## DIGITAL

Cybersecurity Strat. for the Digital Decade  
Network and information systems Directive  
GDPR

Directive 2003 on public access to env. info  
EU Inspire Directive  
Directive 2019 on open data

# CLIMATE ADAPTATION

F4W/DWC: **Measurement of GHG emission** and energy consumption at WWTP

A3S/F4W/DWC/NAIADES: Digital applications for **climate adaptation of utilities and energy optimization**  
# water demand forecast and  
# WW treatment

F4W/NAIADES: Methodology and apps for raising **awareness and education** to water use and savings

# DRINKING WATER

A3S/F4W: 3 new sensors for **drinking water quality monitoring** and Early Warning

F4W/A3S/NAIADES: Tools for **identification of anomalies and leakages**

All projects: AI and advanced modelling tools applied to  
**water demand forecast** and  
**raw water production**, treatment and conveyance from different sources  
**predictive maintenance** of drinking water wells

# ENVIRONMENT

## *SENSORS*

SW: environmental monitoring for legal compliance at major **construction projects**

A3S: new sensors for detection of possible **threats** (i.e. harmful substances on the water surface)

DWC: new sensors for monitoring **CSO and illicit connections**

## *MODELS AND DSS*

SW: data driven **predictive maintenance** of sewer and stormwater networks

F4W/DWC: AI (Integrated) **modelling and control strategies** for sewer network and WWTP

NAIADES: Optimize **urban watering**

# ENVIRONMENT

## *AWARENESS*

F4W/NAIADES: Solutions for **raising awareness and education** to water use and savings

DWC: **Augmented Reality** for groundwater visualization and communication

A3S: **Social media** crawling: identify pollution sources and raise awareness

# OPEN DATA

All projects: FIWARE deployment to foster **interoperability** and facilitate access to public information

F4W: Consensus protocol to **co-create policies** based on public access to environmental data

SCOREwater: **Public engagement** platform on urban water quality based on open data generated in the project



# CYBERSECURITY AND DATA PRIVACY

DWC: New database for **identification of risks** and mitigation measures

NAIADES: Blockchain based **data signature** to protect data integrity

DWC: **Stress testing** for integration of new digital solutions in existing systems.





Hidden for now



