Case Study

IBATHWATER: ENSURE BATHING WATER QUALITY WITH ADVANCED URBAN WATER MANAGEMENT

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CHALLENGE

Lakes, rivers and seas are often exposed to significant amounts of contaminants produced in urban areas.

Sewers, surface runoff and failing septic systems often contribute to this pollution.

Even well-maintained sewer networks can overflow during times of heavy rainfall.

This discharge of urban wastewater directly into the environment raises the concentration of harmful chemicals and pathogens in water bodies.

Such contaminants lead to sanitary risks when reaching periurban bathing areas.



adasa

Adasa has developed aquaBio, implemented in Barcelona and Berlin.

Under EU legislation, national authorities are responsible for monitoring bacteria in these waters and keeping the public upto-date and informed about local pollution levels.

ADASA'S SOLUTION

iBathwater, funded by the EU's LIFE programme (LIFE17 ENV/ES/000396), uses an **open software platform to coordinate tasks involved in operating sewage systems** and reducing pollution levels in water bodies located near urban centres.

Two demonstration sites have been set up in Barcelona and Berlin, aiming to improve wastewater monitoring, treatment, and management in and around the cities.

The software's holistic design **makes it possible to combine information from existing infrastructure** with online measurements from water quality monitoring probes. Adasa's solutions for online microbiological water **monitoring** are contributing to the iBathwater project.

Our reliable measuring device, named **aquaBio**, **collects data and detects concentrations of** *Escherichia Coli* **and enterococci** through its optical measuring system, which is fully operational in fresh and saltwater.

The **aquaBio** unit **helps to avoid the impacts of Combined** Sewage Overflows (CSO).

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Adasa's aquaBio has enabled me to contribute to the iBathWater project for in-line microbial control of bathing areas.

Four more partners are collaborating in the project: Fundació Eurecat (project coordinator), Barcelona City Council, Barcelona Cicle de l'Aigua, SA and Kompetenzzentrum Wasser Berlin GmbH.

This partnership has **facilitated the installation of four monitoring pilot sites in Somorrostro and Bogatell beaches (Barcelona) and Sophienwerder and River Havel (Berlin)**, providing valuable data during bathing seasons.

RESULT

- Online microbial monitoring and tailor-made dispersion models over comprehensive insights.
- Assists Barcelona and Berlin authorities in the assessment of sewage overflow environmental impact
- Increased transparency and control helps reduce the number and volume of sewer overflows that discharge wastewater from urban areas to recreational water bodies.

- Minimise environmental impacts and health risks to bathers.
- **Improve** water quality.
- Reduce the load of contaminants during abrupt water pollution events after heavy rainfall, including pathogens and organic matter.

The total project budget is \notin 2,274,164. EU LIFE program is financing part of this budget with \notin 1,364,497 under Grant Agreement nº LIFE 17 ENV/ES/000396.



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