Environmental and coastal planning and development

BAC-TRACK

REAL-TIME IN-SITU DETECTION OF BACTERIAL POLLUTION IN THE AQUATIC ENVIRONMENT USING PORTABLE FLUORESCENCE

The BAC-TRACK project will design a system for real-time, in-situ detection of bacterial pollution for water quality managers in continental and coastal waters. It will serve as a decision-making tool for implementing action plans designed to limit possible bacterial water pollution.

To achieve this, the BAC-TRACK project will develop an in-situ, real-time early-warning measuring device, which will be installed on an autonomous platform for the collection of bacterial data. Depending on inspection managers' requirements, a sampling process could be defined to provide a response to early warnings of accidental bacterial pollution in the urban environment and, in the event of pollution, to warn local authorities in advance of the need to instigate a protection plan.

Several test campaigns in Breton and Mediterranean catchment areas will provide in-situ, real-time measurements of the fluorescent response of E. coli and Enterococcus bacteria and record marine environmental conditions.

The tool developed will meet adaptability, reliability and robustness criteria at a reasonable overall cost, so that it is tailored to markets associated with the management of bathing-water, shellfish-gathering and shellfish-farming zones.

Partners

Companies

NKE Instrumentation, Hennebont [Project Developer]
Evosens, Brest

Research center

Université de Toulon, laboratoire PROTEE (PRocessus de Transfert et d'Échange en Environnement), La Garde

Funders

Fonds Unique Interministériel
Région Bretagne
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Brest Métropole
Collectivités territoriales PACA

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30/10/2015

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1 545 K€