




ENVISION
GROUNDWATER
IN MOTION



iFLUX developed an innovative groundwater monitoring solution to explore **speed and direction** of pollution flow underground **over a certain period**.

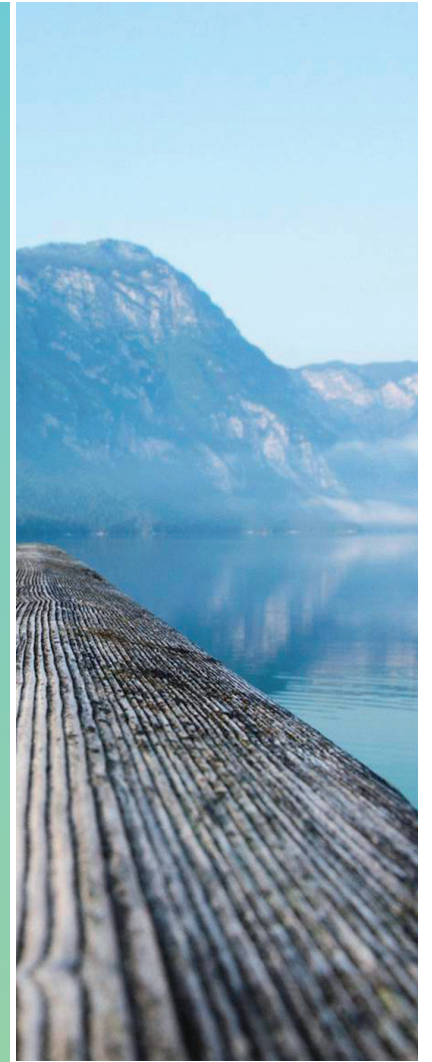
Trustworthy flux results provide soil experts key insights to **reduce the risk and uncertainty** of soil contamination management. iFLUX measurements deliver accurate and essential information to perform **fast and cost-efficient soil remediation**.

Why iFLUX?

Trustworthy groundwater monitoring to assess soil contamination is a challenge. Current methods for the determination of movement of pollution in groundwater use no direct measurements but only simulations. This entails large uncertainties which cause remediation failures and higher costs for contaminated site owners.

iFLUX introduces a flux sampler that provides direct and accurate measurements of groundwater and pollution movement. Our customers receive a clear analytical report containing detailed and reliable flux data, with comprehensible graphs and maps of the designated field.

This leads to a novel approach of dynamic soil contamination management in a more cost-effective and faster manner.



How does the iFLUX technology work?

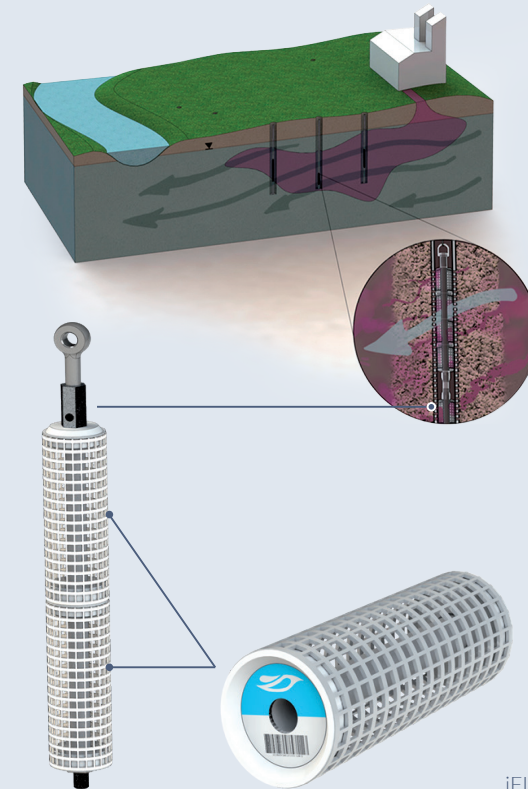


Depending on site specifications, different cartridges are combined into our modular and expandable **iFLUX sampler** system, which perfectly fits into existing monitoring wells and is able to sample several types of pollution at the same time. Each iFLUX sampler is exposed **from 1 week to up to 6 months** before retrieval.

iFLUX offers different cartridge types:

- **iFLUX pollutant cartridges** are filled with pre-processed absorbents to capture the pollutants of interest. We are able to capture the most common types of pollutants (90% of all contaminations): from volatile organic compounds (VOC's) to heavy metals and nutrients.
- The **iFLUX waterflux cartridge**, contains a set of water soluble resident tracers which gradually leach into the groundwater according to the flow conditions.

iFLUX guarantees accurate results provided by a **certified lab analysis** and validated **flow field distortion calculations** which are necessary to translate measured fluxes into detailed aquifer fluxes.



iFLUX technology

When to apply iFLUX monitoring?

Flux measurements will provide useful information in virtually all aspects of contaminated site management: better risk characterization to support optimal remediation selection and design (pre), remediation performance monitoring and optimization (during), and long-term monitoring (post).

Well-timed and iterative flux measurements will provide a better set of data and insights to finalize the often lengthy and expensive site remediation process.

iFLUX delivers key information to:

- Avoid soil remediation costs by improved risk-based management
- Remove the uncertainty of costly and long-lasting remediation processes
- Assess performance of ongoing remediation measures
- Perform trustworthy after-care monitoring over time



Which steps to take during an iFLUX project?

We will guide you through the dynamic remediation management process. **Each project contains 4 important phases:**



Field design — Based on preliminary site investigation and customer input, a detailed monitoring campaign is developed.



On-site sampler installation — Our quality management system ensures robust and trustworthy production of our iFLUX cartridges. An authorized field team will guarantee a precise installation of the selected iFLUX samplers on site.



Retrieval and lab analysis — After retrieval, dedicated transport from site to our partnering laboratories is taken care of. A certified lab analysis provides the raw flux data measured.



Data analysis and reporting — Validated flow field distortion calculations deliver detailed and reliable flux data in the aquifer. Our end report contains comprehensible graphs and maps of the designated field.



About iFLUX?

iFLUX is a 100% spin-off company of the Flemish Research and Technology Organisation (VITO) and the University of Antwerp. For many years dr. Goedele Verreydt, a well-known expert in the domain of risk assessment on soil contamination, managed several research and development projects to create the unique iFLUX technology.

iFLUX aims to help safeguard our precious land by envisioning the dynamics of the earth's subsurface. Our innovative solutions deliver flux measurement results to environmental consultants and authorities, by guaranteeing them more accurate and trustworthy information to draw the right conclusions and perform the most cost-efficient actions.

Are you interested in more information?

Invite us to meet you and discover how iFLUX will improve your groundwater monitoring.

tim@ifluxsampling.com +32 499 53 92 91
goedele@ifluxsampling.com +32 473 83 64 62

www.ifluxsampling.com