



Call for Partners | Monitoring, Breakdown and Removal of PFAS from (Waste) Water

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Background

PFAS, known for their resistance to breakdown and posing health risks, are increasingly detected in the environment, including groundwater. As this serves as a vital source of drinking water, there is an urgent need for the development of new technologies and processes to ensure the safe reuse of (waste) water streams, prevent the release of PFAS into the environment, and safeguard groundwater as a dependable source of drinking water.

Objectives

The initiative of WFBR focuses on the development of a comprehensive process aimed at monitoring, removing and degrading PFAS from water, thereby ensuring its safe utilisation for various purposes, including agricultural irrigation, industrial processes, and potable water production.

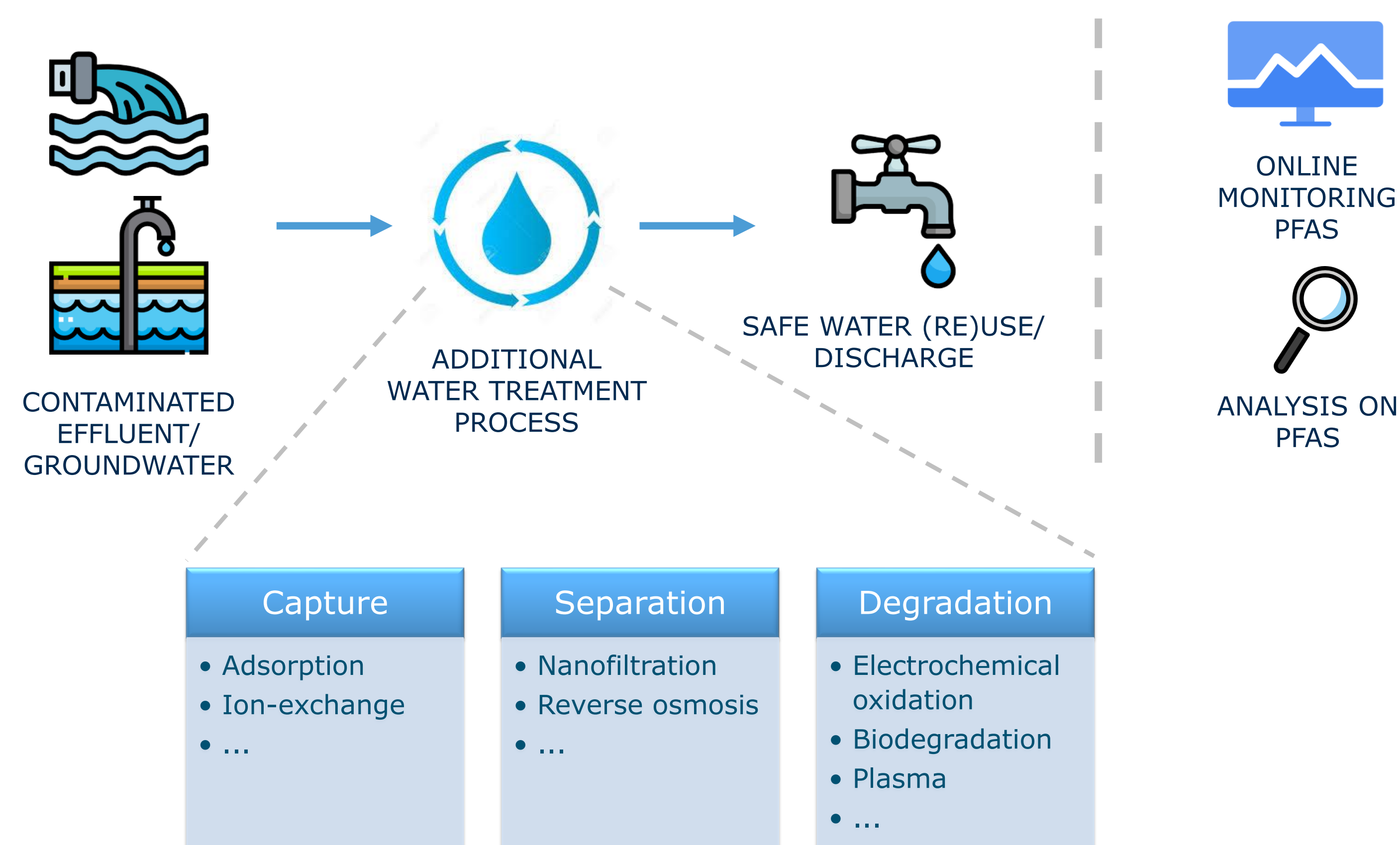
Our Approach

Our approach encompasses a thorough and integrated examination of separation, degradation, and monitoring technologies for PFAS.

Separation methods such as reverse osmosis, ion exchange, and adsorption will be tested for their efficacy in removing PFAS, while degradation technologies including electrochemical oxidation, plasma treatment, and biological processes will be explored for their potential to break down these persistent compounds.

Fast and reliable monitoring will be integrated throughout the treatment train to enable real-time assessment of PFAS removal and ensure safe water for (re)use

Goal: develop a process (in-situ) for complete removal and degradation of PFAS and fast PFAS monitoring to guarantee water quality



Project Information

Approved TKI project
Duration: 3 years
Start: June 2025

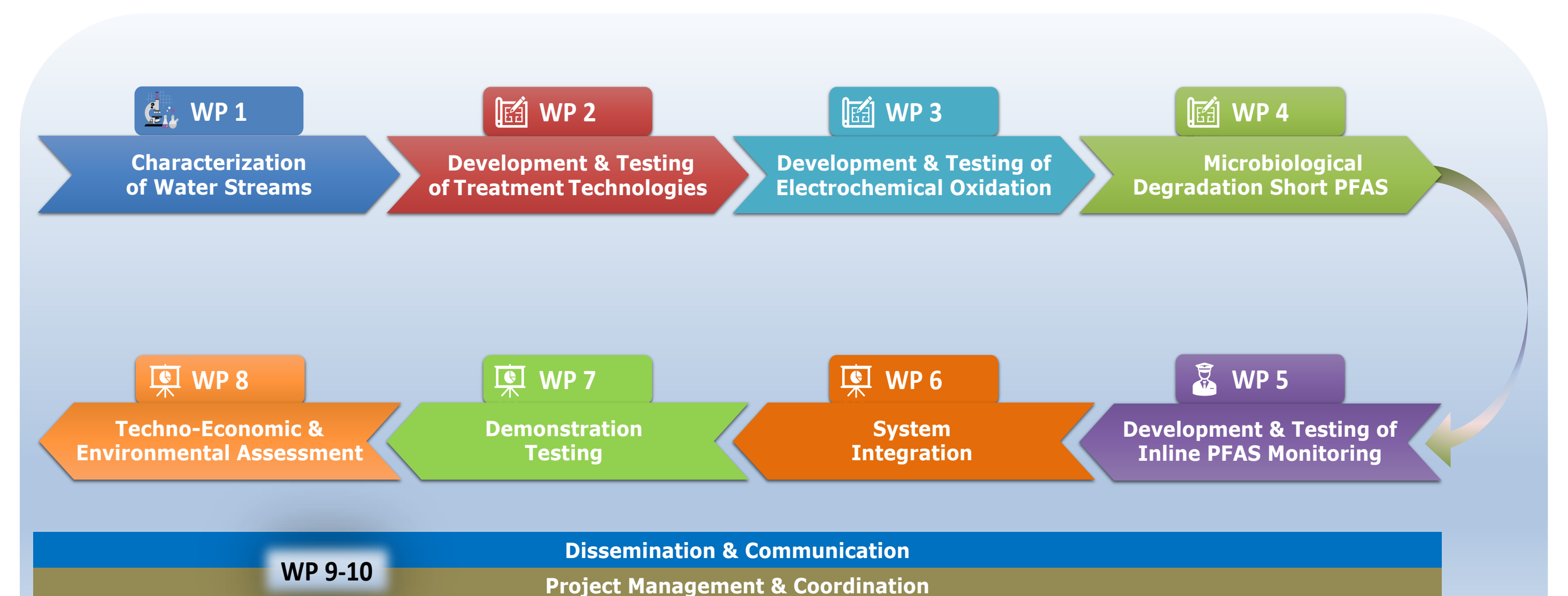
Why this Project?

Despite extensive PFAS research, key gaps remain:

- Integration of synergistic approaches (cascades, hybrids) for complete PFAS destruction.
- Real-world testing in pilot plants.
- Adaptation to diverse water matrices.
- Real-time monitoring and adaptation.
- Economic and operational feasibility.

Proposed Activities

- Experimental testing of state-of-the-art technologies (from industry) and the development of novel methods for PFAS removal and degradation.
- Process modelling, design, and cost estimation to optimise the removal of harmful components.
- Development of robust monitoring systems capable of swiftly detecting PFAS and other contaminants.



Collaboration with Partners

We welcome partners managing water streams affected by PFAS, such as water boards and provincial authorities, industrial partners with residual streams suitable for reuse, and entities involved in groundwater management. Additionally, we are seeking collaboration with technology providers specialising in water treatment, analysis, or monitoring to develop further and optimise the implementation of their products.

Partners are asked to make both cash and in-kind contributions.

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