# Impacts of the project

Improve water reclamation and reuse methods to reduce pollution, safeguard freshwater sources, and ensure compliance with EU water standards.

Optimise the use of water, pesticides, and fertilisers and promote eco-friendly farming, reducing environmental harm, and enhancing biodiversity.

Advance monitoring and decision-making tools to help farmers adapt to climate change impacts and ensure efficient water use.

Remove effectively contaminants and pollutants to reduce risks to human health and protect aquatic ecosystems.



UNIVERSWATER

| DURATION | BUDGET | CONSORTIUM |
|---|---|---|
| **42 months** | **€ 5 996 597** | **15 partners** |

**Project coordinator:** Tyndall National Institute Institiúid Náisiúnta

Teagasc Agriculture and Food Development Authority · Ollscoil na Gaillimhe University of Galway · Ethnikon Asteposkopeion Athinon National Observatory of Athens · planetek italia · University of Western Macedonia · wings. · Società Servizi Informatici SysMan Progetti & Servizi Srl · Omega Innovations · Consorzio di Gestione di Torre Guaceto Area Marina Protetta • Riserva Naturale dello Stato · acquedotto pugliese l'acqua, bene comune · Water Europe Technology & Innovation · csem · LEITAT managing technologies · CNR IRSA

universwater.eu

universwater.eu

universwater-eu

Funded by the European Union

Project funded by

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
**State Secretariat for Education, Research and Innovation SERI**



# UNIVERSWATER

## Pioneering innovative solutions for sustainable agri-water management

# Our mission

Europe's water resources are facing growing pressure. In 2019, 38% of the EU population experienced water scarcity. Agriculture accounted for 59% of freshwater use in 2017, sourced from surface water, groundwater, and increasingly, reclaimed water.



UNIVERSWATER is an EU-funded project focused on developing a common strategy to optimise water management in agriculture. Bringing together 15 partners from 6 European countries, the project aims to develop a universal agri-water management platform. This platform will support farmers and water stakeholders in implementing localized reclamation and reuse strategies to enhance water quantity and quality, optimize pesticide and fertilizer use, and meet crop growth requirements effectively.

# 3 case studies




**Water reuse in dairy farms**

County Cork, Ireland




**Water reuse for sustainable agriculture**

Torre Guaceto, Italy




**Farm management for optimised pesticide and fertiliser use**

Area of Greek Prespa, Greece

# How will UNIVERSWATER operate?

**Creating portable, on-site sensors** for detecting water and soil contaminants (e.g., E. coli, pH, nitrates, pesticides).

**Integrating satellite imagery and AI algorithms** for real-time monitoring and decision support.

**Combining nature and technology-based solutions** for effective water treatment and pollutant removal.

**Using an incremental approach** to develop, test, and improve technologies, ensuring early feedback and optimisation.

**Creating a universal, adaptable DSS** to guide sustainable water management practices across various settings.

