



Constructed wetlands for decentralized water reuse in agriculture

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Objectives:

- Promotion of **Nature-Based Solutions (NBS)** for **fit-for-purpose water reuse** in rural areas of Portugal, Spain, and France facing water scarcity and climate challenges.
- Creation of a **Water-Oriented Living Lab** (NB-WoLLs) to foster open innovation and collaboration among civil, public, academic, and private stakeholders.

Beneficiaries (10):



Promedio; Funseam; Corporación Tecnológica de Andalucía; Agencia de Medio Ambiente y Agua de Andalucía; Fundació Solidaritat UB



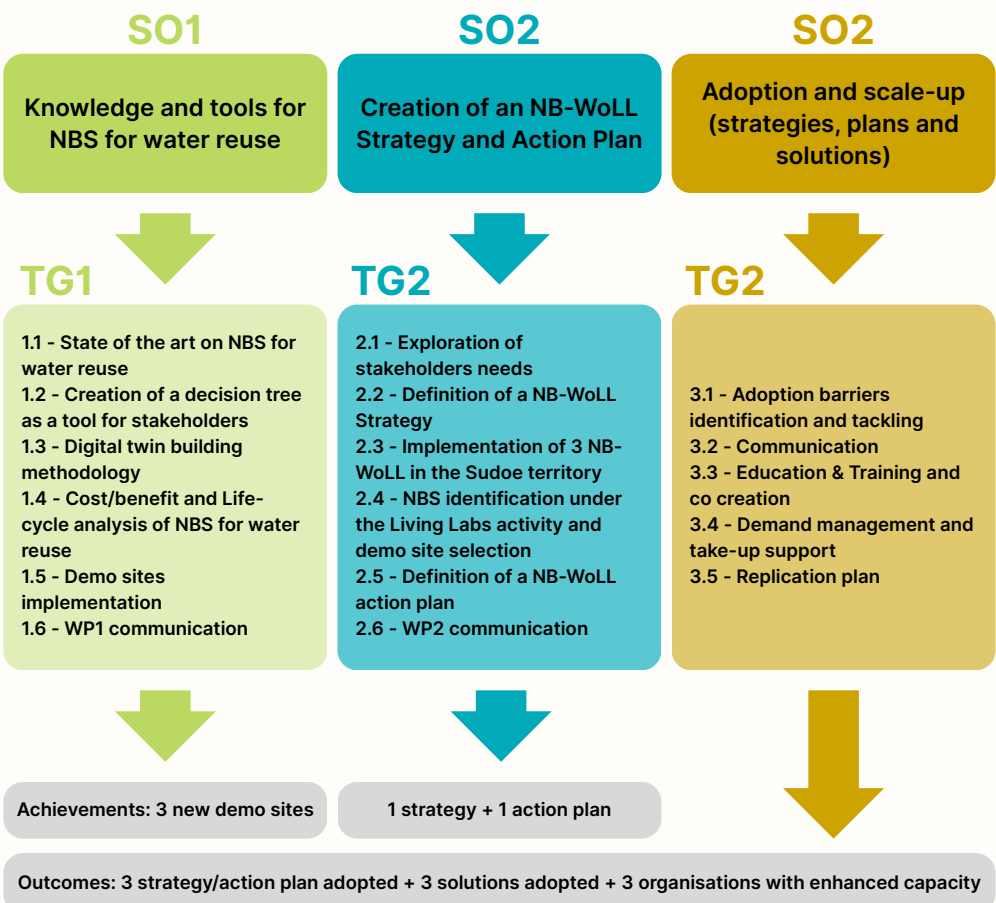
Instituto Superior Técnico; Águas do Tejo Atlântico

+ 26
associated
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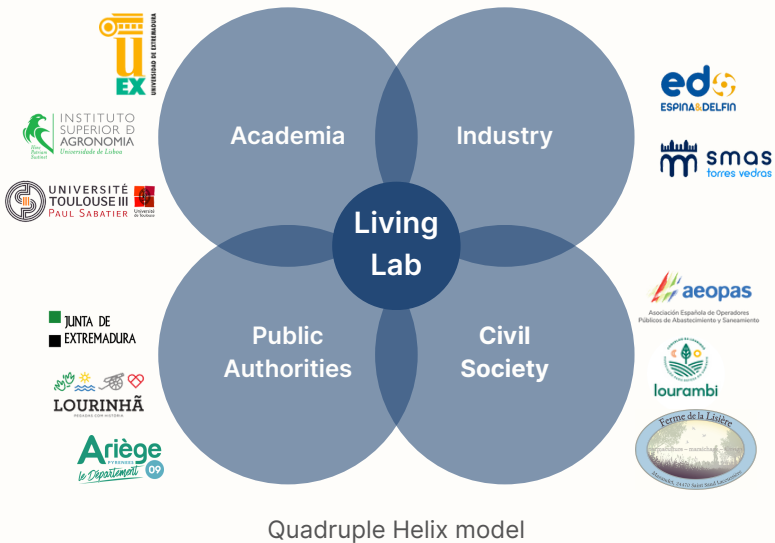


Université Toulouse III - Paul Sabatier; Communauté de communes Couserans-Pyrénées Direction du Service des Eaux; ECOFILAE

Specific objectives and task groups



Stakeholder engagement in the Living Lab



Stakeholders needs (2.1)

- Boost public trust
- Simplify permits
- Provide incentives
- Protect environment & water
- Offer training/awareness
- Ensure space & storage

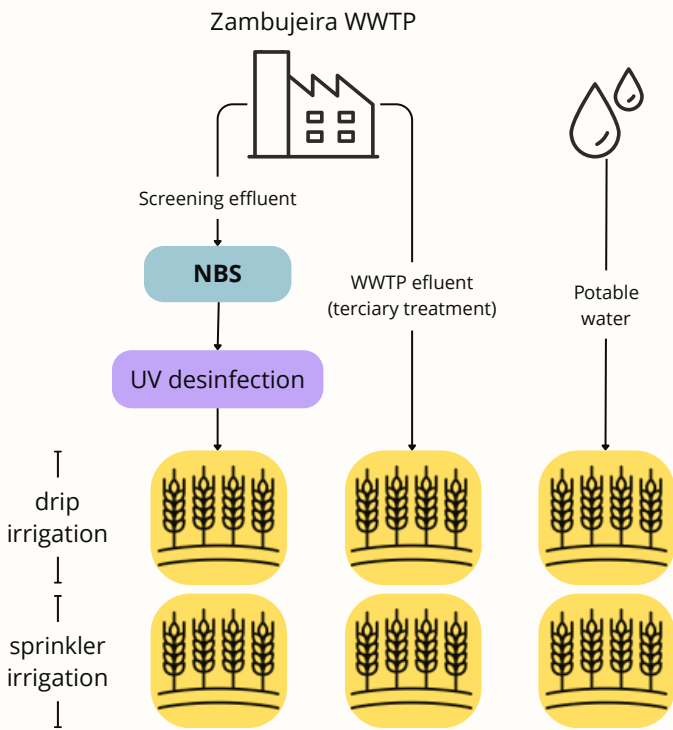
Long-term deployment of NBS (3.1)

- Technical & non-technical barriers → Regulations
- High costs / low motivation → Incentives
- Knowledge gaps → Capacity building
- Low awareness → Dissemination & campaigns



Workshops with stakeholders in Portugal (left) and France (right).

Schematic representation of the Portuguese Demo Site



Analysis: TSS, CQO, nitrate, ammonium, phosphate and Ecoli (water and vegetables)



Future Portuguese demonstration site.

Expected results

Implementation

- Develop a NBS-WoLL strategy and action plan for different rural contexts.
- Collaborate with municipalities and local stakeholders.
- Monitor and evaluate NBS performance and compliance.

Replication

- Engage stakeholders to promote wider adoption.
- Identify and solve technical, social, and regulatory barriers.
- Share lessons learned to support replication in other areas.

Support Activities and Tools

- Organize networking events and workshops.
- Create an interactive knowledge hub with guidelines and case studies.
- Provide digital tools for ongoing engagement and co-creation.

Demonstration Sites

- Implement three sites addressing different rural needs:
- Livestock-focused (France)
- Crop irrigation with restrictions (Spain)
- Crop irrigation without restrictions (sensitive crops, Portugal)
- Test NBS and evaluate their impact for best practice examples.



For further details about the project, scan the QR code.