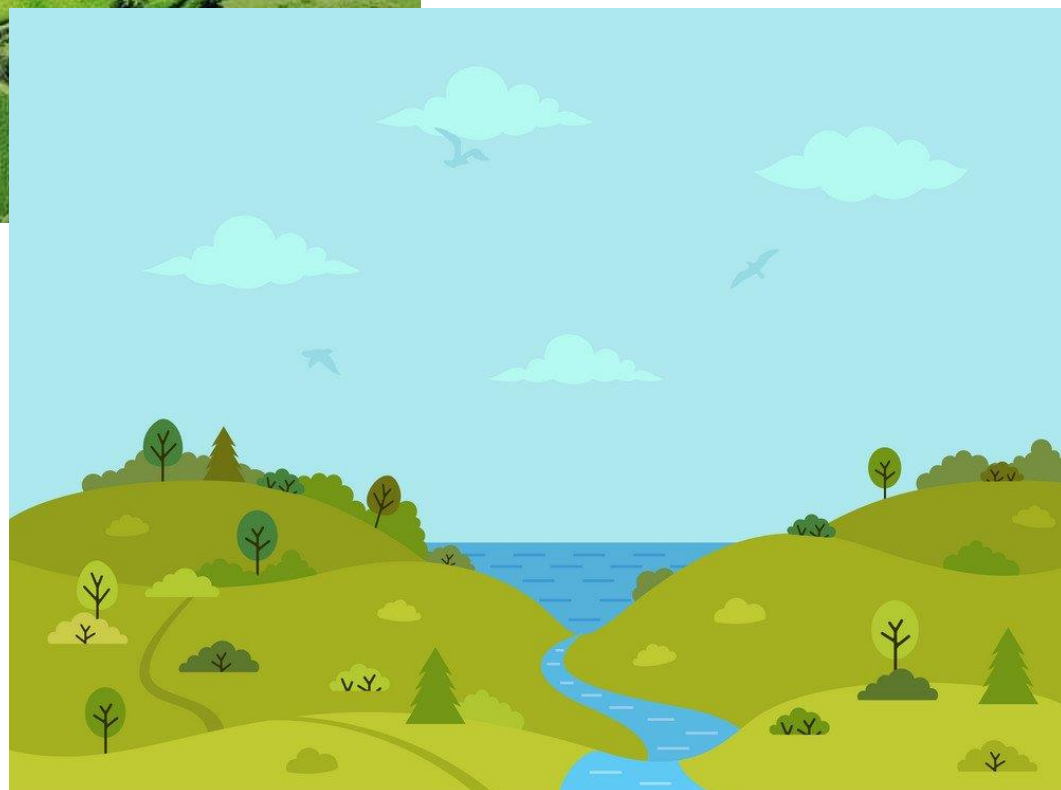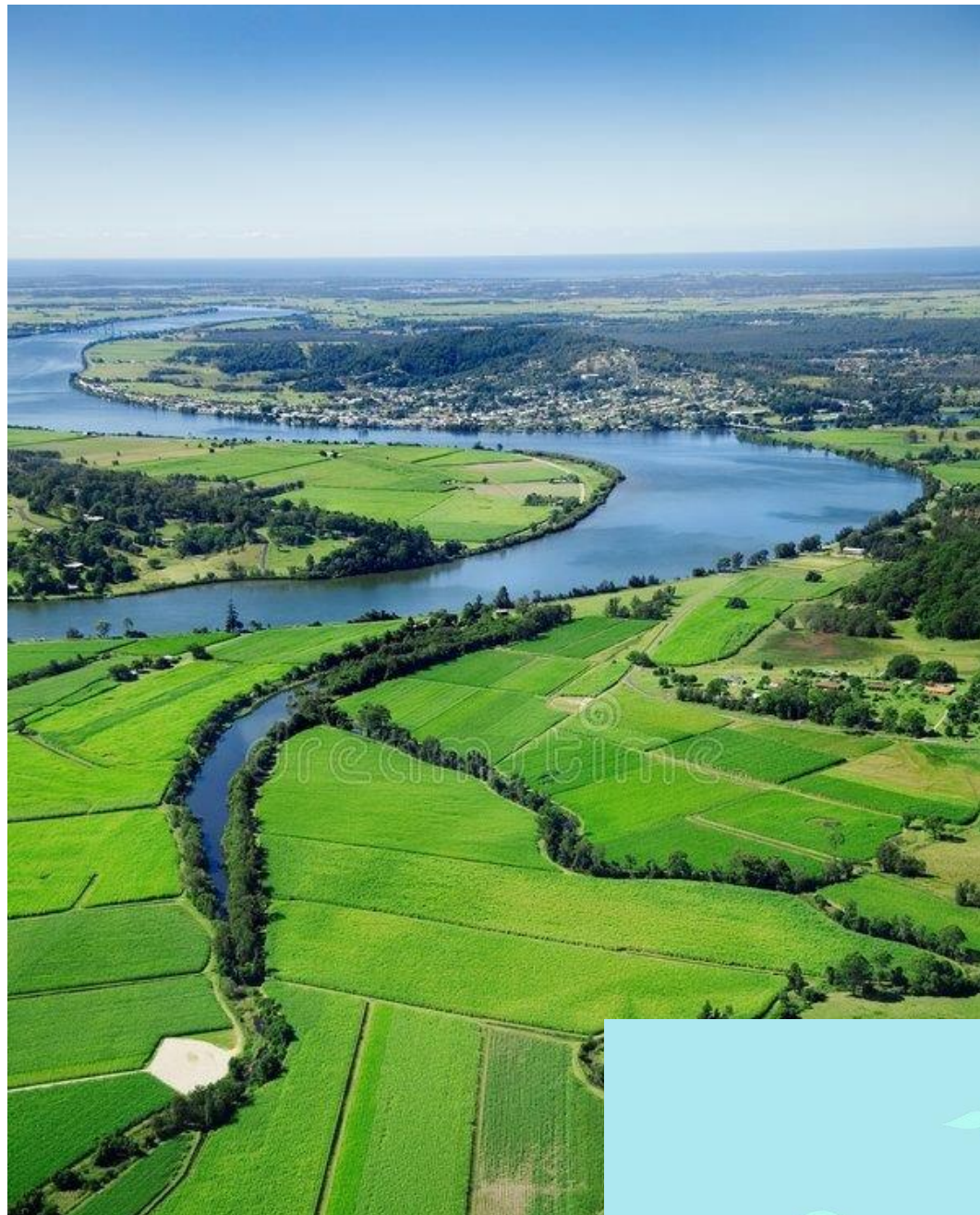# SEACURE,
Mission Ocean and Waters and Mission Soil

Circular Summit Fryslân

12th of June 2025

Anna Rovira Andujar – 12 June, 2025
anna.rovira.andujar@uvic.cat

Beta
Biodiversitat, Ecologia, Tecnologia Ambiental i Alimentària

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Landscape-River-Sea system

Nutrient pollution
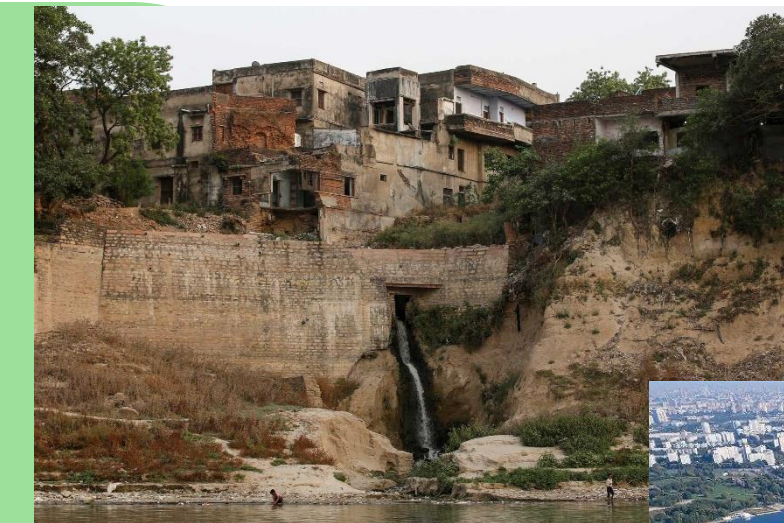## Main sources to aquatic environments

Diffuse
Agriculture
Runoff
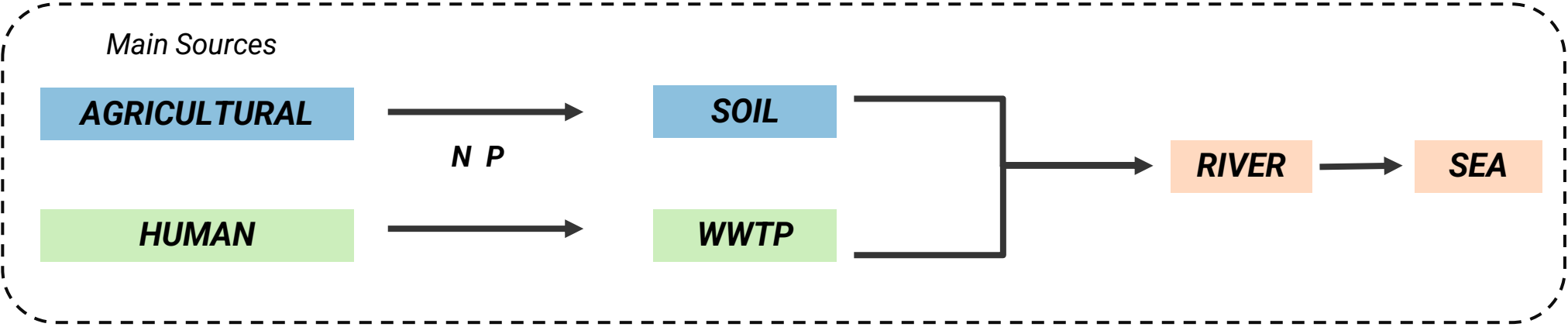Leaching
Deposition
...

Punctual
WWTP effluents
CSOs
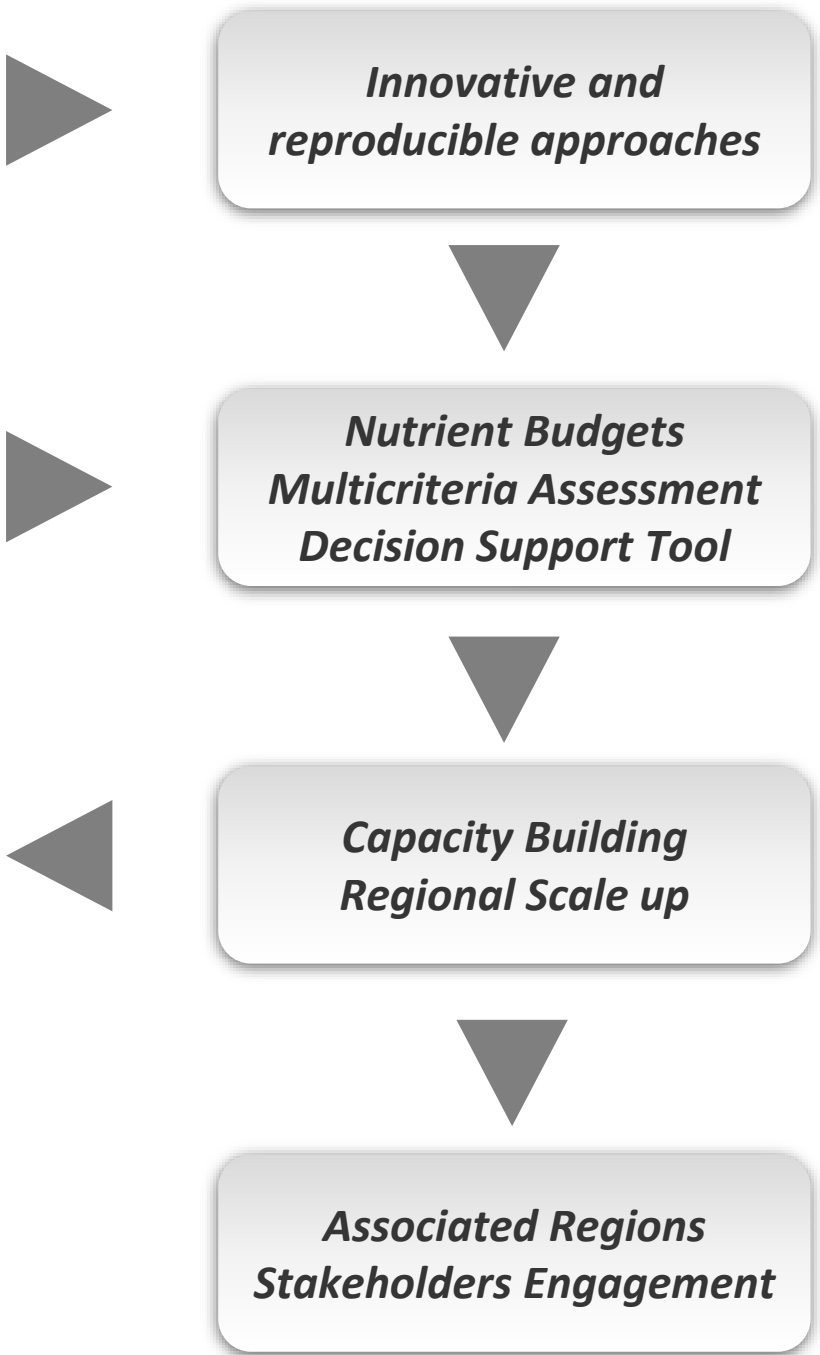Leakages
Small / Non-compliant agglomerations
...

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Tecnologia Ambiental i Alimentària
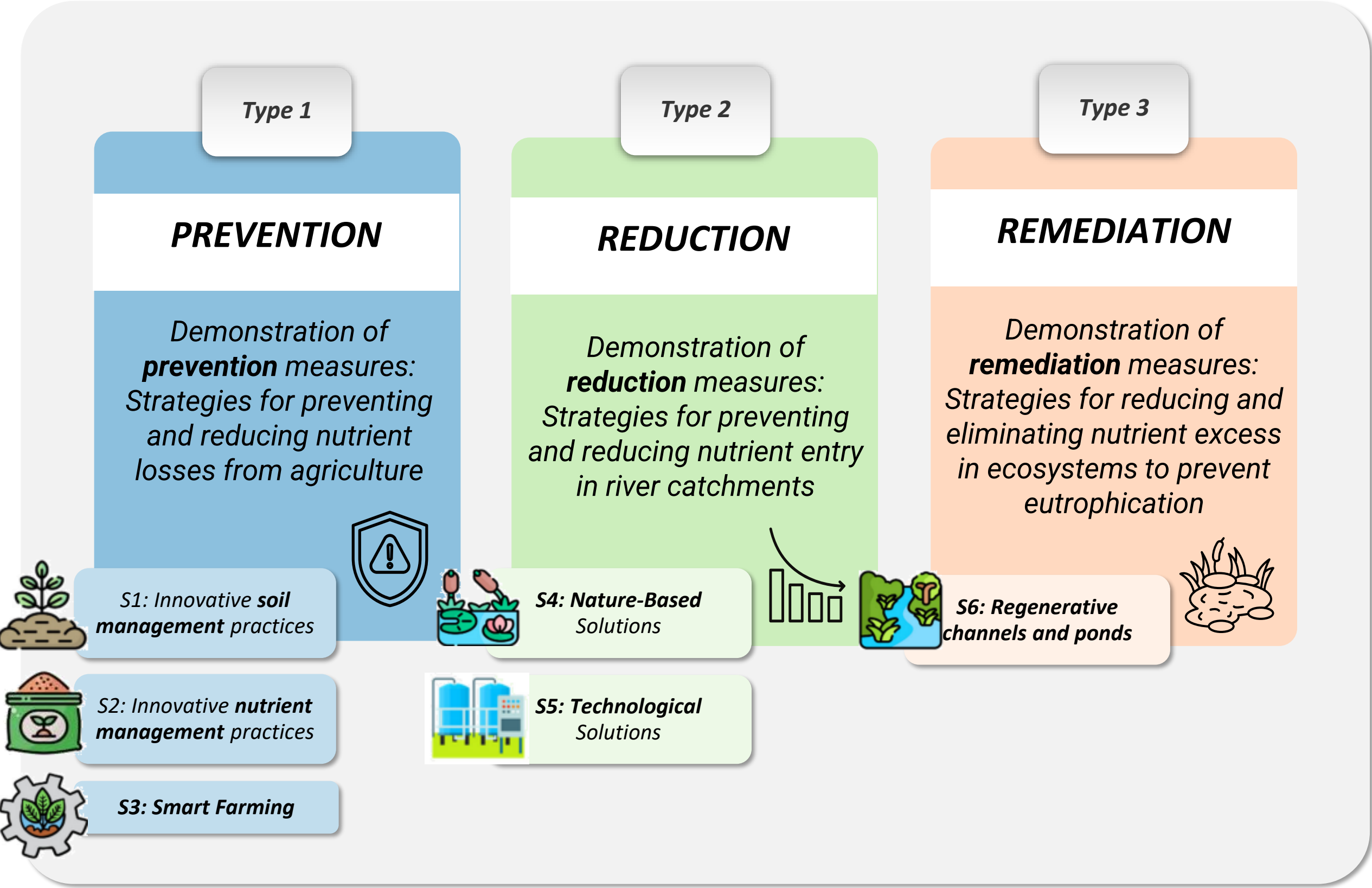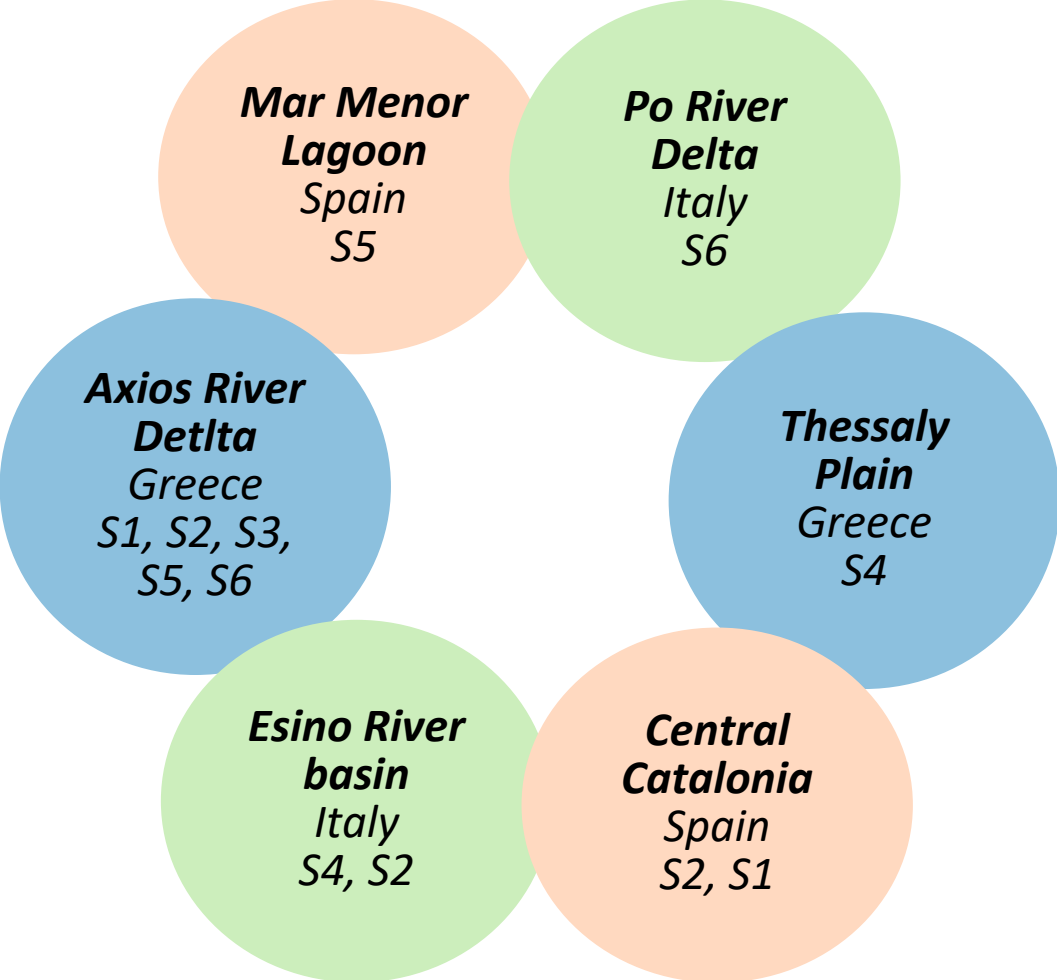
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The project SEACURE will aim at demonstrating, scaling up and replicating effective innovations for the systemic prevention, reduction and remediation of nutrient pollution in the Mediterranean Sea basin
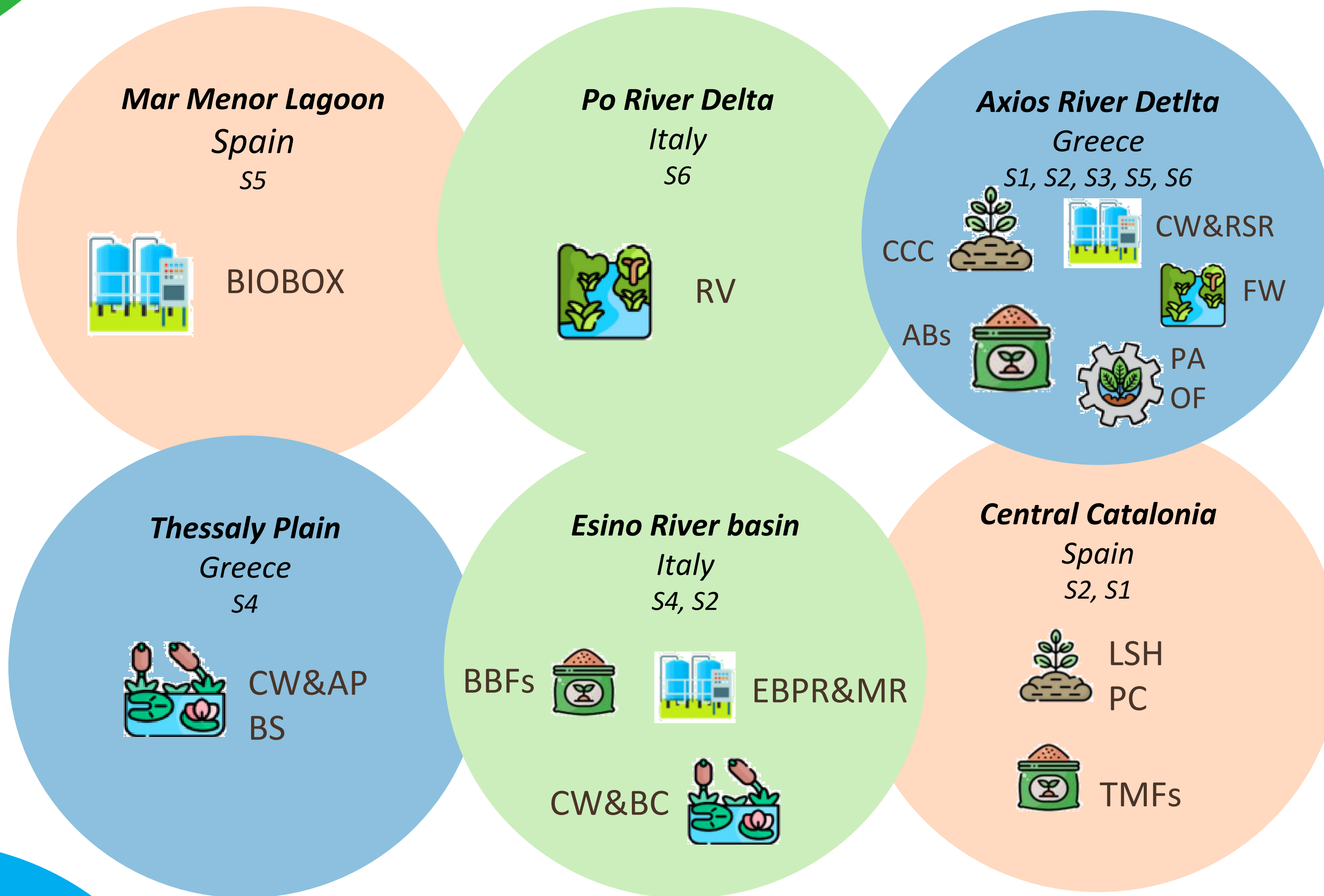
Nutrients flows along the landscape-river-sea system in the Mediterranean basin

Main Sources

AGRICULTURAL → N P → SOIL

HUMAN → WWTP

RIVER → SEA

6 Demo Regions

- Mar Menor Lagoon — Spain — S5
- Po River Delta — Italy — S6
- Axios River Detlta — Greece — S1, S2, S3, S5, S6
- Thessaly Plain — Greece — S4
- Esino River basin — Italy — S4, S2
- Central Catalonia — Spain — S2, S1

Type 1 — PREVENTION

Demonstration of **prevention** measures: Strategies for preventing and reducing nutrient losses from agriculture

- S1: Innovative **soil management** practices
- S2: Innovative **nutrient management** practices
- S3: Smart Farming

Type 2 — REDUCTION

Demonstration of **reduction** measures: Strategies for preventing and reducing nutrient entry in river catchments

- S4: Nature-Based Solutions
- S5: Technological Solutions

Type 3 — REMEDIATION

Demonstration of **remediation** measures: Strategies for reducing and eliminating nutrient excess in ecosystems to prevent eutrophication

- S6: Regenerative channels and ponds

- ▶ Innovative and reproducible approaches
- ▶ Nutrient Budgets Multicriteria Assessment Decision Support Tool
- Capacity Building Regional Scale up
- Associated Regions Stakeholders Engagement

SEACURE Demos

Mar Menor Lagoon
Spain
S5

BIOBOX

Po River Delta
Italy
S6

RV

Axios River Detlta
Greece
S1, S2, S3, S5, S6

CCC
CW&RSR
FW
ABs
PA
OF

Thessaly Plain
Greece
S4

CW&AP
BS

Esino River basin
Italy
S4, S2

BBFs
EBPR&MR
CW&BC

Central Catalonia
Spain
S2, S1

LSH
PC
TMFs

1. **BIOBOX** = nitrate removal patented technology
2. **RV** = Riparian merging vegetation
3. **CCC** = Cover Catch Crops
4. **ABs** = Advanced Biostimulants
5. **PA** = Precision agriculture
6. **OF** = Online fertigation
7. **CW&RSR** = Hybrid system of Constructed Wetlands and Raceway Solar Reactor
8. **FW** = floating wetlands
9. **CW&AP** = Combined system of u/s Constructed Wetlands and Algal Pond
10. **BS** = Bioswale
11. **BBFs** = Bio-Based Fertilizers
12. **CW&BC** = Constructed Wetlands & BioChar
13. **EBPR&MR** = combined Enhanced Biological P removal and MicroAlgae Reactor
14. **LSH** = Living Soil Horticulture technique,
15. **PC** = Perennial Crops
16. **TMFs** = Tailor-Made Fertilizers

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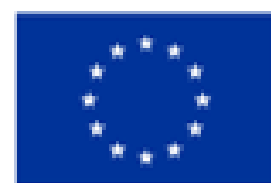Co-funded by
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SEACURE Demos

Associated Regions' Opportunity

SEACURE Open Call for Associated Regions

Open Call

Co-funded by the European Union

The aim of the Open Call is to empower regions facing similar nutrient pollution issues in the Mediterranean basin and beyond, and to strengthen their capacity to replicate innovative solutions developed within the SEACURE project.

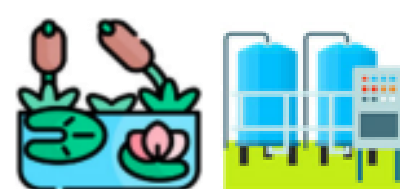Potential **outcomes** of the Open Call in the awarded Associated Regions:

Asses the **replicability of SEACURE solutions** in the awarded ARs.

S1   S2   S3   S4   S5   S6

Development of **public policies**, strategic plans and mechanisms.

Engage with **regional stakeholders** to strength their capacity in addressing water and soil health matters.
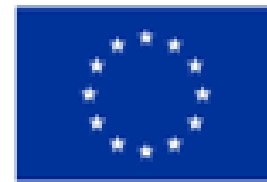
SEACURE Open Call for Associated Regions

Don't miss the latest news from the Open Call!

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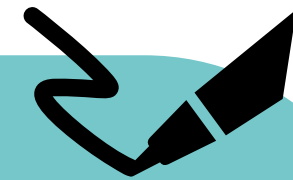
Co-funded by the European Union

SEACURE Open Call for Associated Regions

Open Call

Co-funded by the European Union

Associated Regions Activities

- Technical Assistance **Action Plan for ARs** → developed together with SEACURE consortium.
- Attendance to **SEACURE's physical events**.
- **Capacity building** for regional actors.
- Mobilization of **regional actors ecosystem** through networking and participatory approaches.
- **Social awareness** / citizen science.
- Preparation or update of **Environmental Management Plans or Policies**.
- Design of **regional upscaling plans**.

SEACURE support programme to Associated Regions

- **Knowledge exchange** in bilateral discussions.
- **Training** on participatory methodologies for multi-actor planning and regional action on nutrient pollution.
- Advise on **design and implementation of nutrient management strategies and measures.**
- **Assessment of potential replicability** using the Decision Support Tool.
- SEACURE **Regional Business Plan** for upscaling methodology.
- Advise on **updating public policies** and implementation of **societal awareness**.
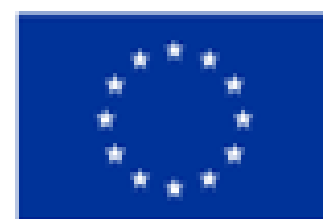
SEACURE Open Call for Associated Regions

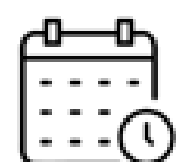*Don't miss the latest news from the Open Call!*

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SEACURE Open Call for Associated Regions

Open Call

Co-funded by the European Union

SEACURE Open Call for Associated Regions

Opens in December 2025.

Up to 100.000 € per project.

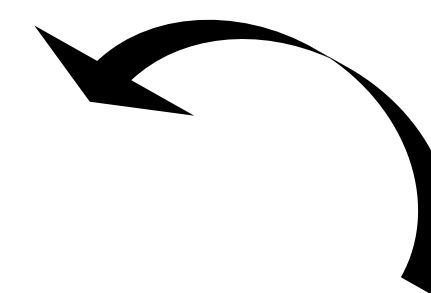7 demonstration projects in winning AR.

Public authorities involved in local and regional land and/or wastewater management

Regions situated in basins with similar nutrient pollution problems from the EU Member States and Third Countries associated to Horizon Europe. *

Don't miss the latest news from the Open Call!

*Participants from project consortium countries (Spain, Italy, Greece, Austria and Belgium) and Other Third Countries are NOT eligible.

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THANKS

SEACURE coordination team

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