



Evidence and Solutions for improving **SPONGE** Functioning at Land**SCAPE** Scale in European Catchments for increased Resilience of Communities against Hydrometeorological Extreme Events

Project presentation

Name, Surname

Function, Organisation



Funded by
the European Union



UK Research
and Innovation

SpongeScapes in short

5

Years
2023 - 2027

3

Million Euro
(Horizon Europe and
UKRI funding)



Funded by
the European Union



UK Research
and Innovation

10

European partners
Deltares project
coordinator

14

Case Studies
across 7 EU countries

Deltares



Editor is a spin-off company
of the University of Padua



REPUBLIC OF SLOVENIA
MINISTRY OF THE ENVIRONMENT, CLIMATE AND ENERGY
SLOVENIAN ENVIRONMENT AGENCY



University of Jyväskylä
Faculty of Civil and Geomatic Engineering



Sponge measures?

Sponge measures absorb, store, and slowly release water, mitigating floods and droughts and providing lasting benefits.

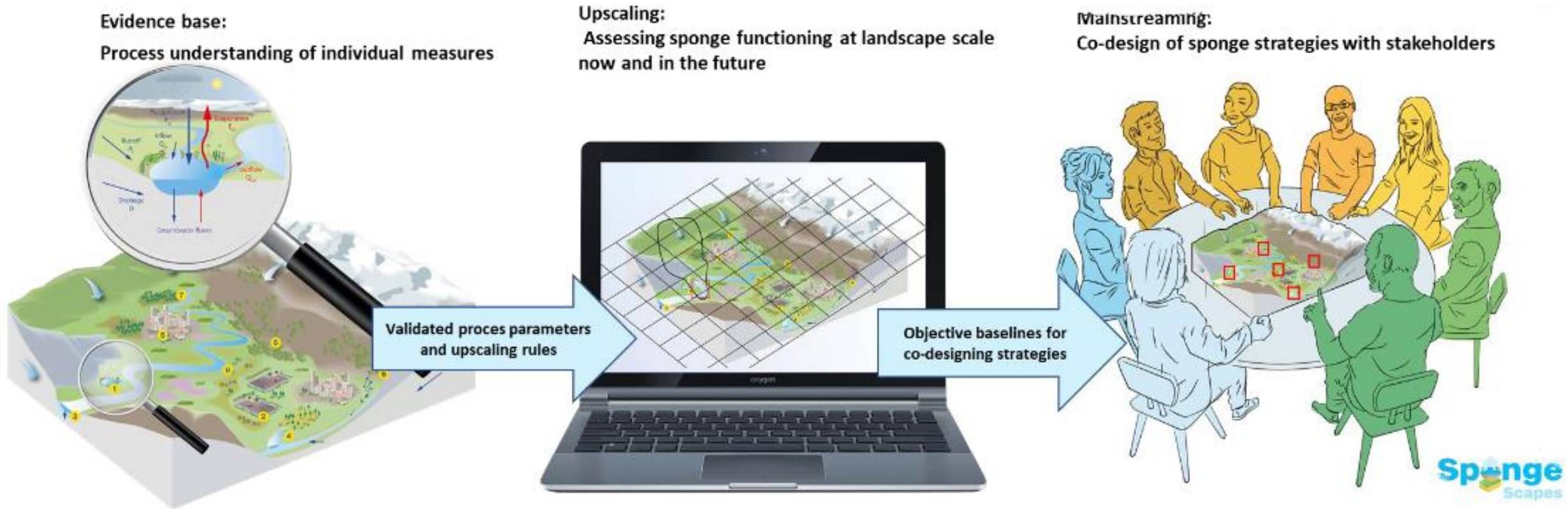
SpongeScapes objective?

Accelerate solutions that improve the sponge functioning of soil, groundwater, and surface water ecosystems.

Upscale individual “sponge measures” into overarching “**sponge strategies**” at the landscape scale.

SpongeScapes methodology

- combining **detailed monitoring** of individual measures with **modelling approaches** at landscape scale to determine the maximum sponge capacity of catchments under current and future change scenarios.



SpongeScapes Case Studies

- **14 case studies**

- 1 Chaamse beken catchment (NL)
- 2 Aa and Maas catchment (NL)
- 3 Riseholme stream (UK)
- 4 Evenlode catchment (UK)
- 5 New Forest & Cole catchments (UK)
- 6 Upper Thames agricultural sites (UK)
- 7 Upper Biebrza catchment (PL)
- 8 Lèze catchement (FR)
- 9 Timonchio site (IT)
- 10 Municipality of Santorso sites (IT)
- 11 Agripolis site (IT)
- 12 Bosco Limite (IT)
- 13 Gradaščica catchment (SI)
- 14 Kavouropotamos stream (GR)

- **Different climatic zones**

- *Atlantic Central*
- *Nemoral*
- *Mediterranean North*
- *Mediterranean South*
- *Mediterranean Mountains*
- *Alpine South*

- **140 recorded cases** of sponge measures
- **4 different sponge measure categories** (surface water, groundwater, soils and mixed)
- **diverse soils** (sandy, silty, clayey, peaty, calcareous)
- ➔ monitor their performance under different types of hydrometeorological events





www.spongescapes.eu

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Consortium partners

Deltares



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