# Challenges at the interface between water and ecosystems | RESTORE4Cs project

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Institute of Atmospheric Pollution Research National Research Council of Italy



European Commission

RESTORE4Cs - Modelling Restoration of wetlands for Carbon pathways, Climate Change mitigation and adaptation, ecosystem services, and biodiversity, Co-benefits

#### Consortium







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Land sea continuum spatial scales

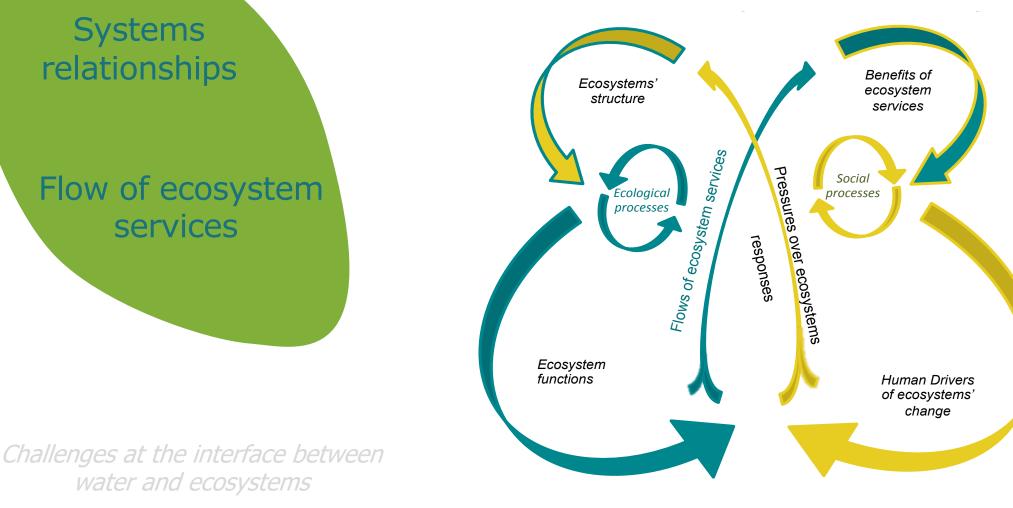
> Aquatic realms continuum

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 ER 2023
 Image source: Gómez et al. (2016) The AQUACROSS Innovative Concept. Deliverable 3.1, European Union's Horizon 2020 Framework Programme for Research and Innovation grant agreement No. 642317)

https://aquacross.eu

across

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Operationalization of the concept of ecosystem services

# EU Biodiversity strategy

*Challenges at the interface between water and ecosystems* 

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European Commission Which drivers of Are Europe's Can we value the ecosystems in good flow of ecosystem change increase or decrease the delivery shape to continue services from delivering essential of ecosystem ecosystems to ecosystem services? society? services? We need to Map and Assess Ecosystems and their Services

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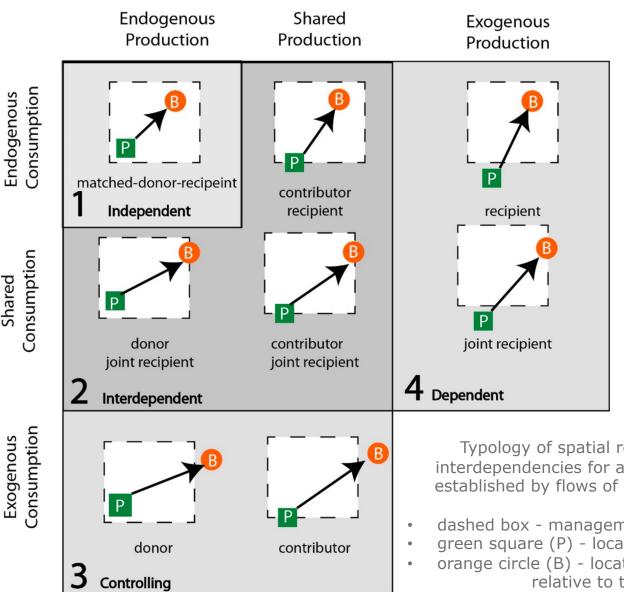


Image source: Schematic representation of the three key questions that underpin the need for mapping and assessment of ecosystem services. (Image source: EC DG JRC MAES WG)

Shared

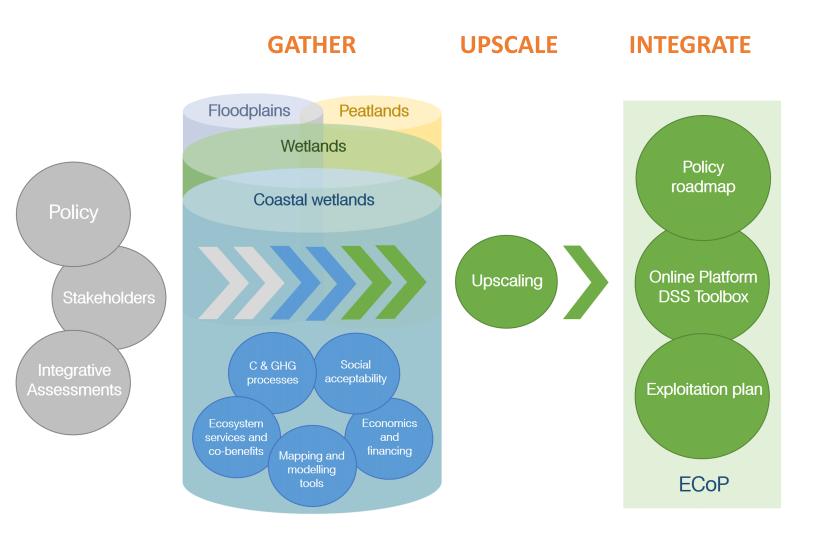
Ecosystem services across multiple scales Flow of ecosystem services Science of the Total Environment 649 (2019) 1452-146 Contents lists available at ScienceDirect Science of the Total Environment ournal homepage: www.elsevier.com/locate/scitoten A simple spatial typology for assessment of complex coastal ecosystem Check for services across multiple scales Tim O'Higgins <sup>a,\*</sup>, António A. Nogueira <sup>b</sup>, Ana I. Lillebø nental Research Institute. Beaufort Building, Haulobowline Rd., Ringaskiddy, Co Cork, Irela

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Typology of spatial relationships and interdependencies for a management area established by flows of ecosystem services

- dashed box management area
- green square (P) location of the production
- orange circle (B) location of the benefits relative to the management area



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SUPPORT the implementation of Climate and Biodiversity policies in the context of the European Green Deal, the new EU Nature Restoration Law and the implementation of the Land Use, Land Use Change and Forestry (LULUCF) Regulation with respect to the inclusion of wetland restoration activities



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Thank võ

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