



BIOFIN-EU Economic Valuation of Nature-based Solutions for River Basin Management: Comparative Evidence from Northern Italy

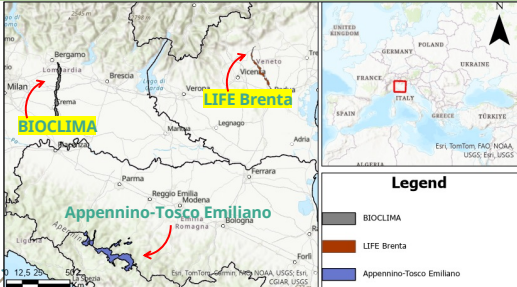
Mauro Masiero and Luisa Fernanda Eusse Villa
University of Padova (UNIPD)
7 | May | 2026



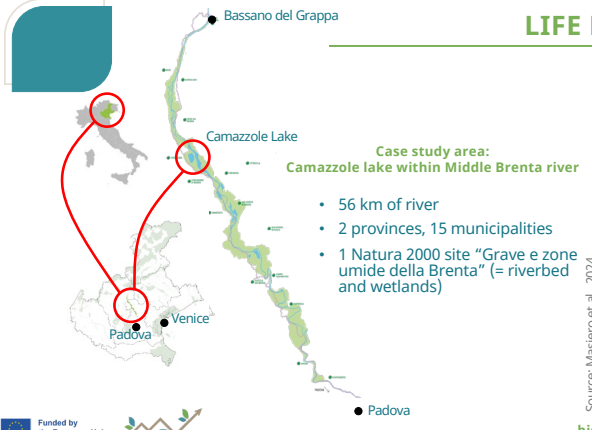

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Italian Learning Sites

- Appennino-Tosco Emiliano
- LIFE Brenta
- BIOCLIMA



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LIFE BRENTA LS (#7)

Case study area:
Camazzole lake within Middle Brenta river

- 56 km of river
- 2 provinces, 15 municipalities
- 1 Natura 2000 site "Grave e zone umide della Brenta" (= riverbed and wetlands)

Source: Masiero et al., 2024



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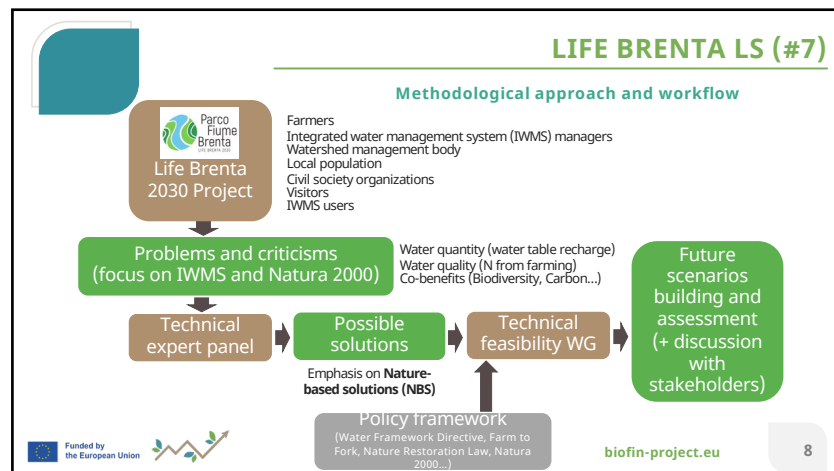
Densely populated area (509 inhab./km²)
Habitat fragmentation, farming activities

Gravel extraction activities

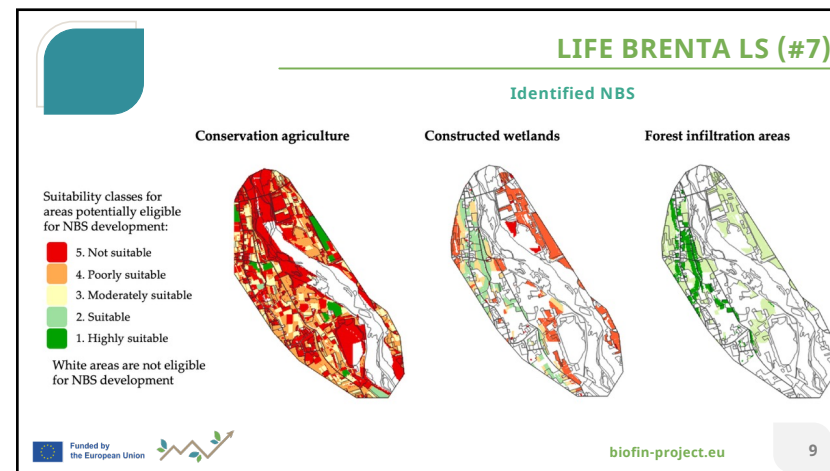
Camazzole lake and wells:
Tap water to Padova, Venice and Rovigo
1.5 M people = 1/3 of Veneto population served (ca 36.8 Mil m³/year)
→ Ground water from the water table

Pressures by visitors

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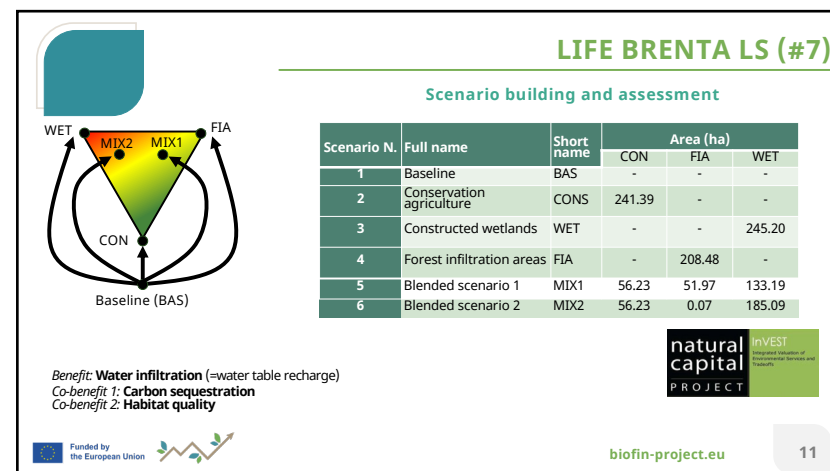
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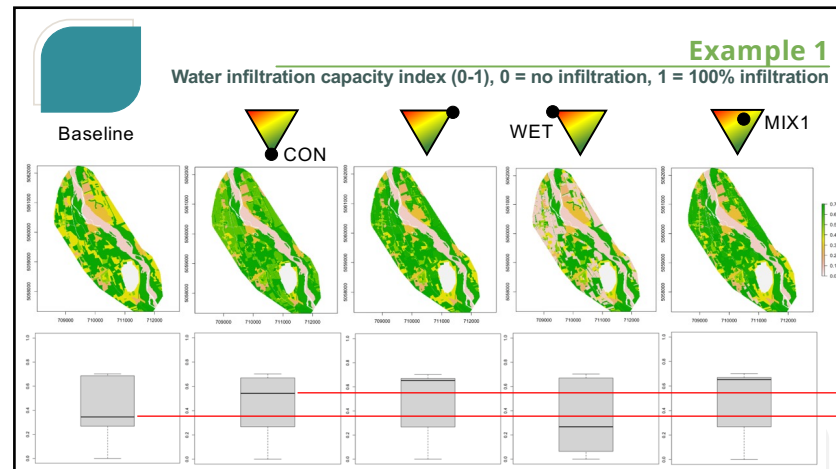
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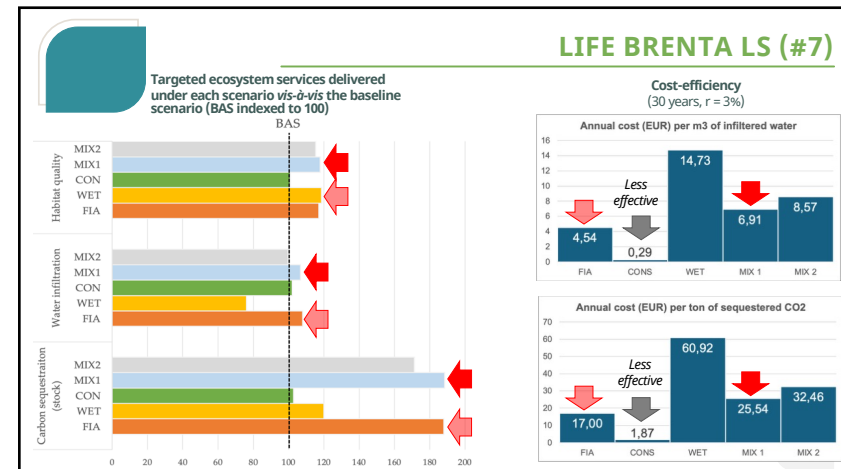
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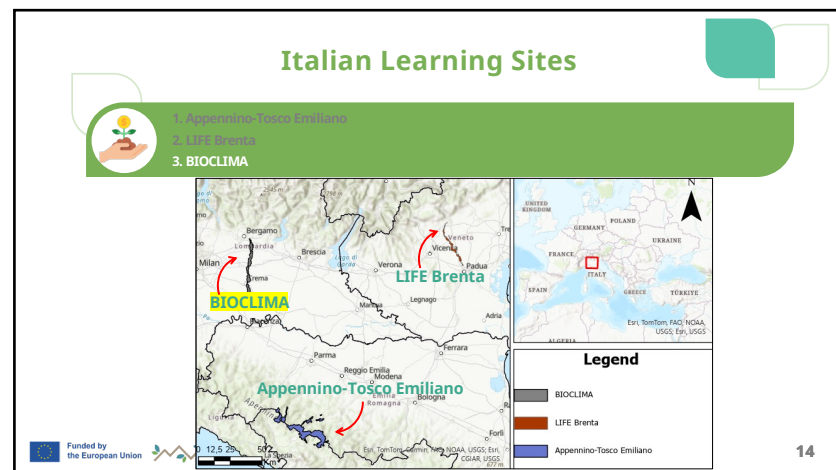
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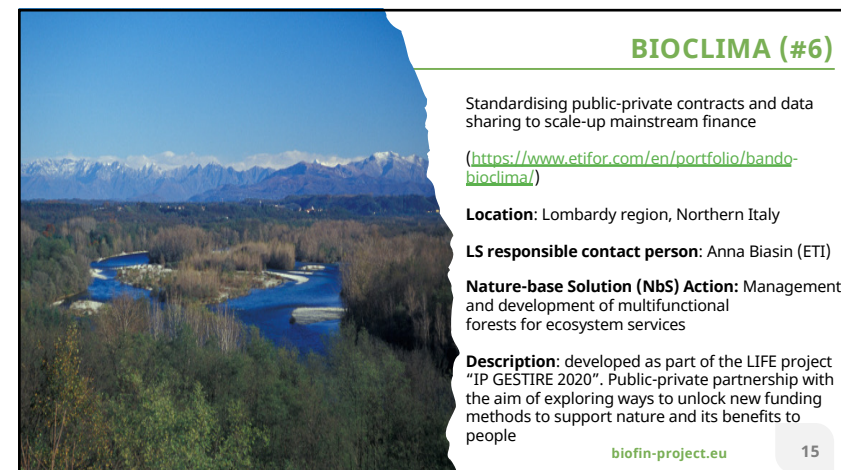
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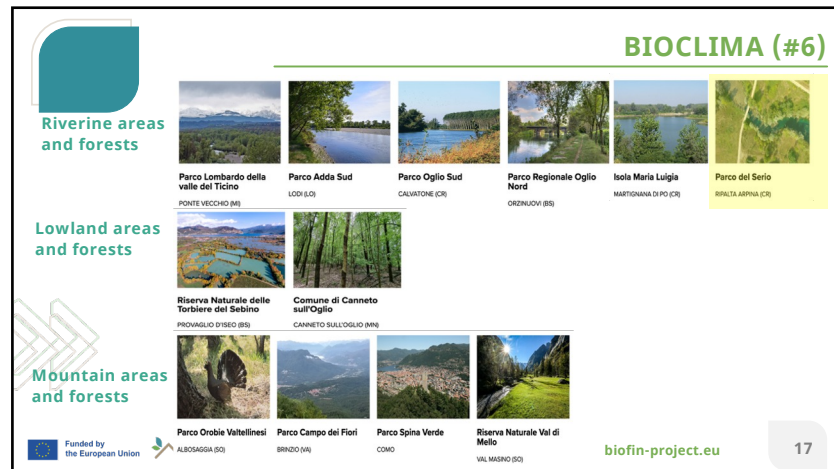
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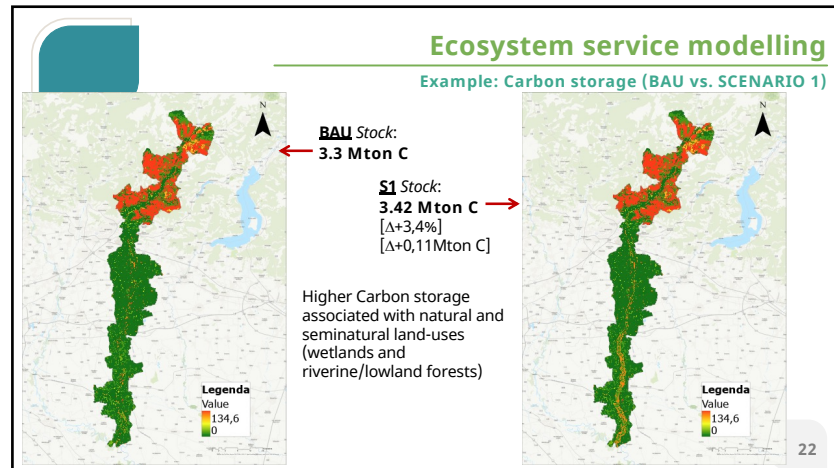


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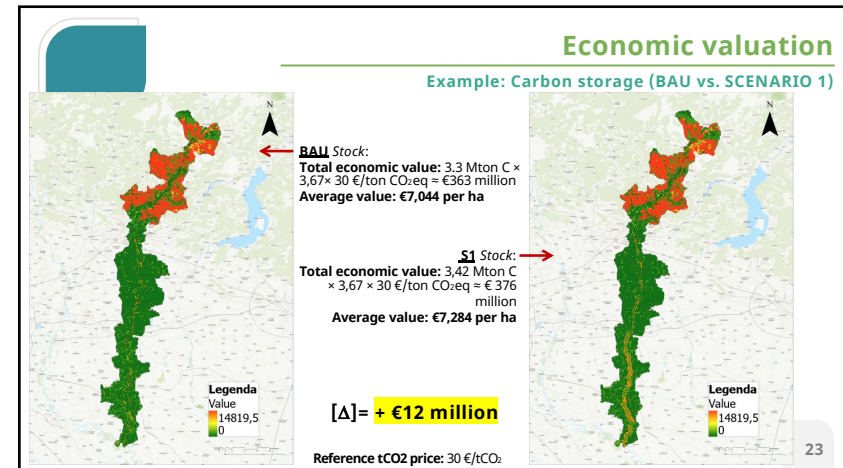


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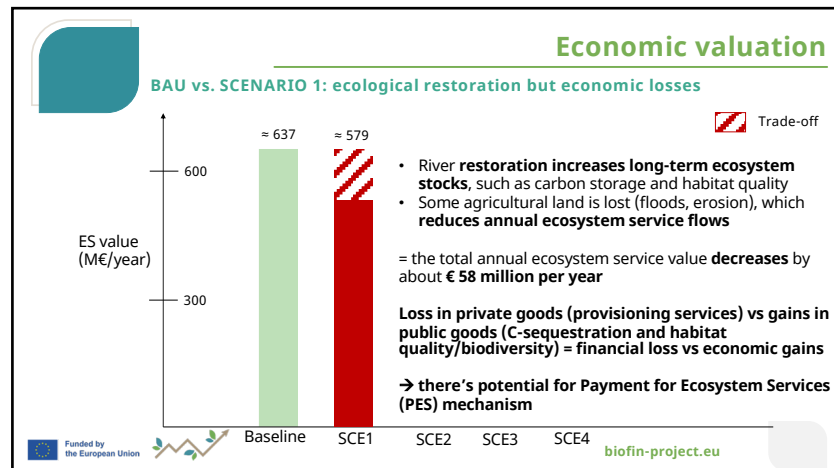




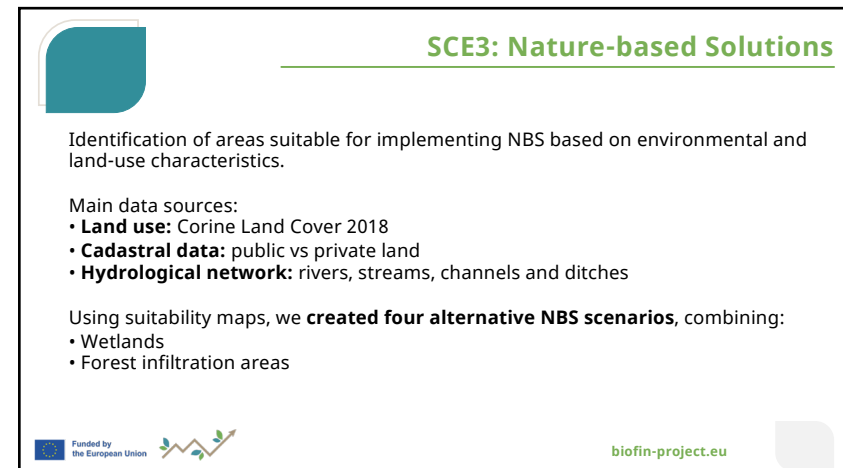
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Development of NbS Scenarios

Scenario	Type of NBS	Area (ha)	% of Study Area	Description
S1 – WET	Constructed Wetlands	379.92	0.74%	All areas suitable for wetland implementation
S2 – FIA	Forest Infiltration Areas	5,157.15	9.98%	All areas suitable for forest infiltration interventions
S3 – MIX1	Forest Infiltration Areas	1,343.99	2.60%	Priority given to FIA in the most suitable areas
	Constructed Wetlands	56.30	0.11%	Remaining areas allocated to wetlands
S4 – MIX2	Constructed Wetlands	244.88	0.47%	Priority given to wetlands in the most suitable areas
	Forest Infiltration Areas	49.79	0.10%	Remaining areas allocated to FIA

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SCE3 – Preliminary results

Scenario	Carbon Stock (Mton)	Carbon Value (M€)	Water Flow Regulation (Mm³)	Value (M€/year)	Habitat Quality
S1 – WET	3.3328	366.9	25,251	364.9	Not yet estimated
S2 – FIA	3.7012	407.5	24.744	357.6	Not yet estimated
S3 – MIX1	3.4147	375.9	25.112	362.9	Not yet estimated
S4 – MIX2	3.3281	366.4	25.249	364.9	Not yet estimated

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Final remarks

- A preliminary exercise to be further expanded and consolidated (key: close cooperation with local land managers and other actors)
- Taylored NBS rather than one size fits all
- Blended solutions more effective/efficient in delivering and balancing multiple benefits
- To be framed within current policies and coming soon strategies, e.g. Nature Restoration Law and National Restoration Plans + CRCF Regulation
- Collective actions and possible integration of multiple financial sources (public-private) → some mechanisms already in place (water tariffs, sponsorship)

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Thank You!

Mauro Masiero
UNIPD

Let's Get in Touch!

website
biofin-project.eu

e-mail
info@biofin-project.eu

social media
[in](#) [X](#) [f](#) [t](#) [v](#)







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