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Introduction and background

- **EU Water Framework Directive, WFD (Directive 2000/60/EC):** halting deterioration in the status of EU water bodies and achieve their good status
- **Nature-based solutions (NBS)** can support WFD effective implementation and link to other policy tools/targets (Farm-to-Fork, Nature Restoration Law, Biodiversity Strategy to 2030...)

How to support their implementation?

- **Governance, technical and financial barriers** (among others)
- Art. 9 WFD: cost recovery through water pricing → **polluter pays principle**

ERC = Environmental (= damage that water uses impose on the environment/ecosystems) and **Resource** (= foregone opportunities for other uses) **Costs**

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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)**

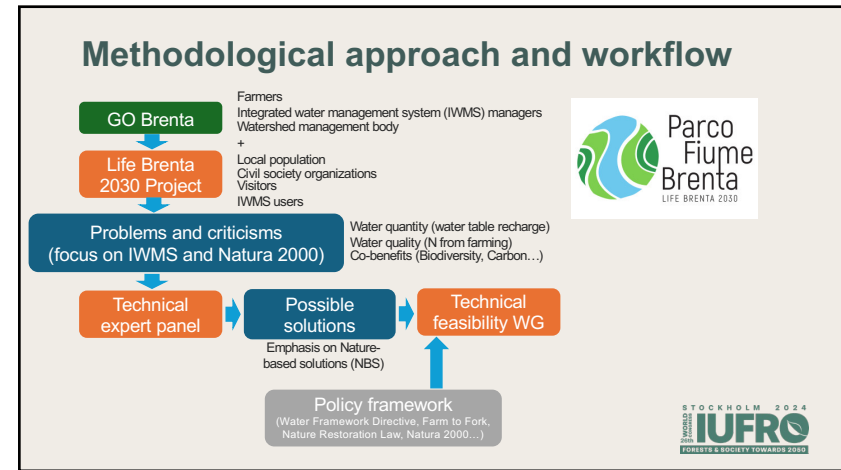
Natura 2000 site, «Grave e zone umide della Brenta» (SCI/SPA IT3260018)

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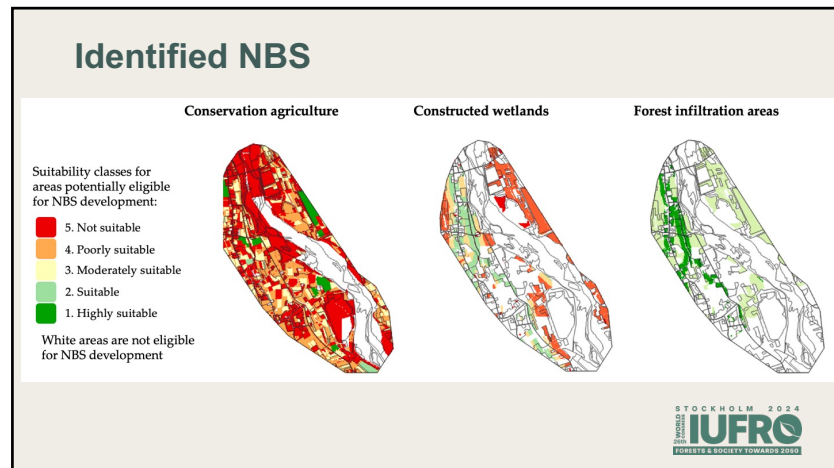
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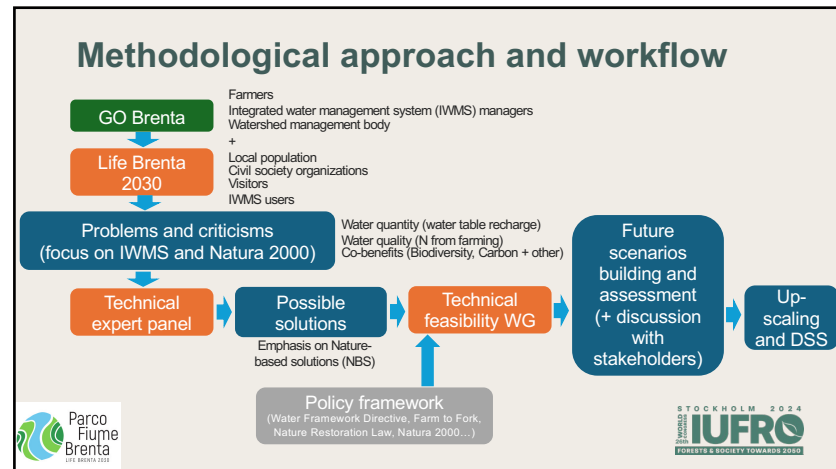
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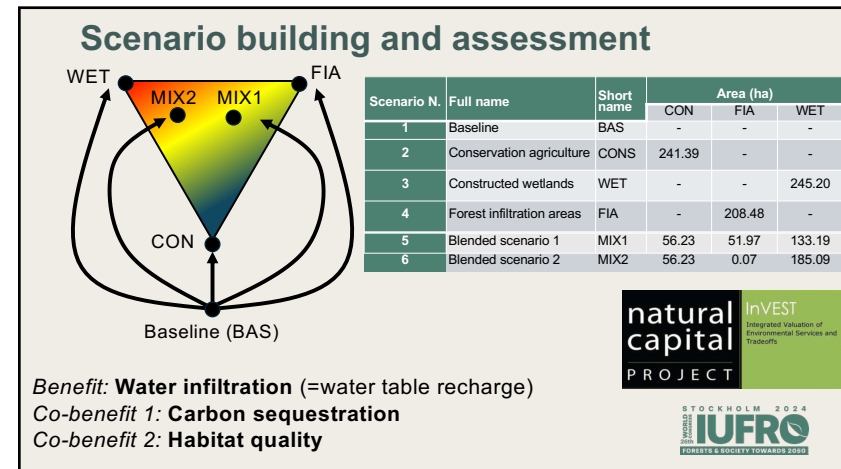
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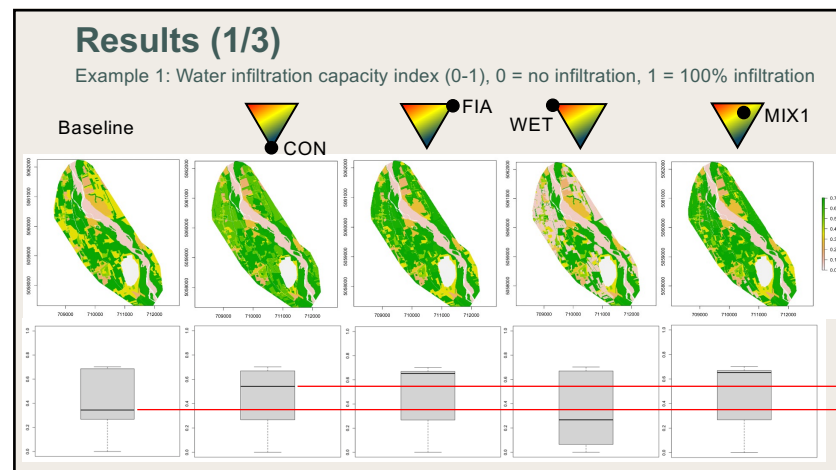
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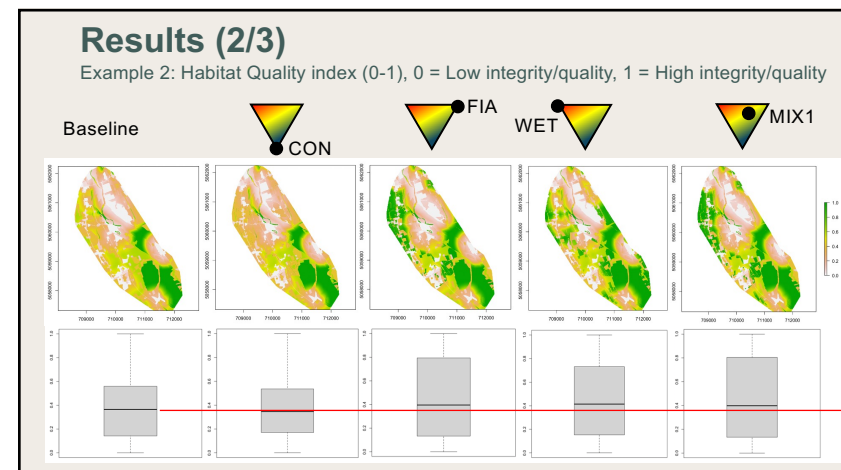
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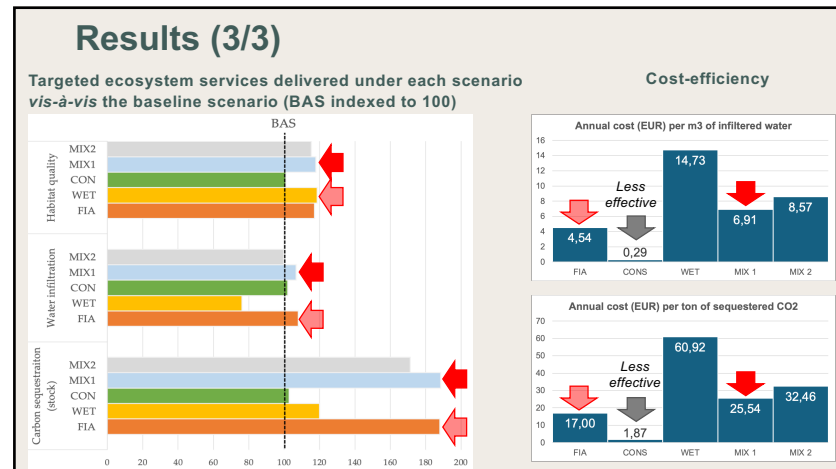
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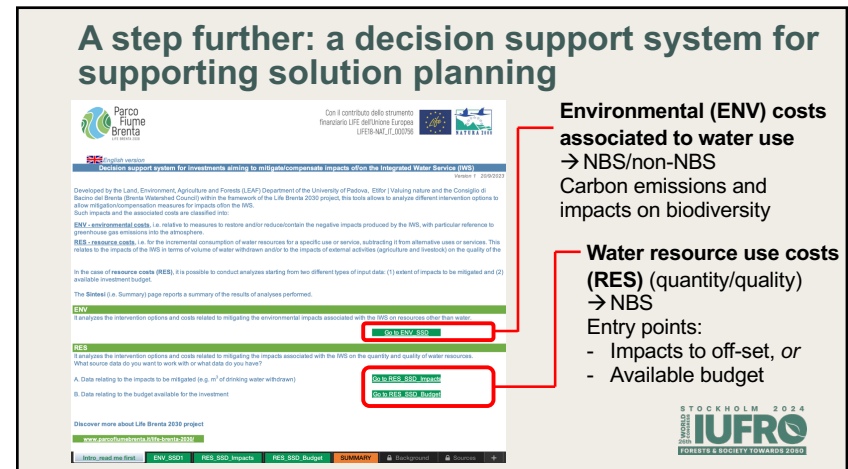
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Final considerations

- Multiple **environmental** and **resource costs (ERC)** faced
- Multiple benefits** (beyond water) **possible**
- FIA** most **effective/efficient** single NBS for **multiple benefits, WET for biodiversity**
- Blended solutions** (e.g., MIX 1) **more effective/efficient** in delivering multiple benefits
- A preliminary exercise to be further consolidated, tested and up-scaled
- Side activities:** communication, environmental education, waste collection and management, improved governance mechanisms...
- Possible support to **ERC recovery** according to the EU WFD, art. 9 → NBS and restoration financed via water tariff (first case in Italy)

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