

Assessing Nature-based Solutions for their environmental and social impact

The example of the Llobregat Riverside in Barcelona Metropolitan Area

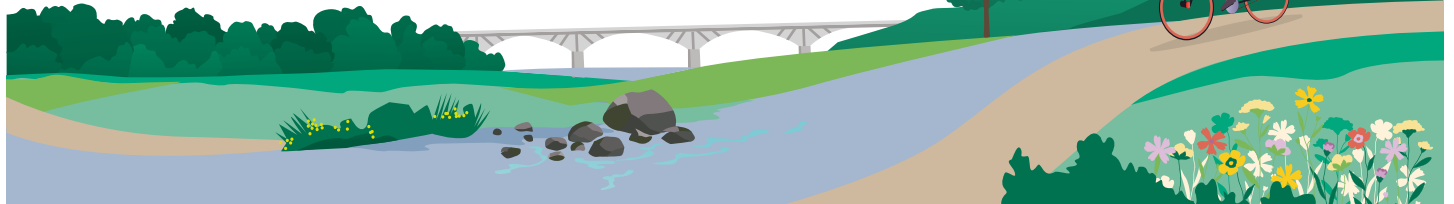
CHALLENGES TACKLED



Biodiversity Enhancement



Citizens and Business Involvement



SUMMARY

Assessing Nature-Based Solutions (NBS) for different environmental and social aspects is useful to identify the successful NBS that could be replicated somewhere else. Thus, 16 NBS from the Llobregat Riverside - a very complex periurban territory located in Barcelona Metropolitan Area - were analysed with the final goal of transforming the riverside into a socio-ecological blue connector that will offer a safe and healthy greenspace for people and biodiversity.

All assessed NBS provided **multiple ecosystem services and environmental and social benefits**. The evolution of the NBS was generally good and invites further development.

RESOURCES NEEDED



TEAM:

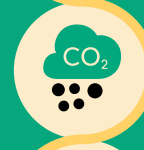
- Specialised Multi-Disciplinary Team - e.g. urban planner, landscape architect, environmentalist, biologist, agricultural engineer.

STEPS



1

Field work to inspect in situ the different NBS



2

Definition and implementation of methodology to calculate the **environmental impact of NBS** in terms of habitats, carbon capture, biodiversity, other environmental benefits



3

Definition and implementation of methodology to calculate the **social impact of NBS** in terms of sustainability education, wellness & health, perception of identity, diversity & quality of experience, social cohesion, activities, and accessibility and social connectivity



4

Writing of conclusions in terms of NBS typologies, variety, evolution, achievement of objectives, methodology applied and considering different project phases - planning, design, execution, management

MAIN LESSONS LEARNED ALONG THE WAY

- It is key to **identify and prioritize those ecosystem services to be enhanced** to outline the most suitable NBS.
- It is important to have a **deep knowledge of the territory**.
- Monitoring** NBS from the onset is key.
- NBS have a **certain experimental character - a trial and error** exercise allows one to find the best solution.
- Maintenance** is the no. 1 success factor for the vast majority of NBS.