Invited project – Experiences from ULL –REGREEN and CONEXUS

CONE – 1st Workshop - Training of trainers

ONLINE | 3 of March 2025

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Experiences from ULL – REGREEN and CONEXUS

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Research focus: Green infrastructur, NBS, experiences

CONEXUS

REGREEN
NATURE-BASED SOLUTIONS

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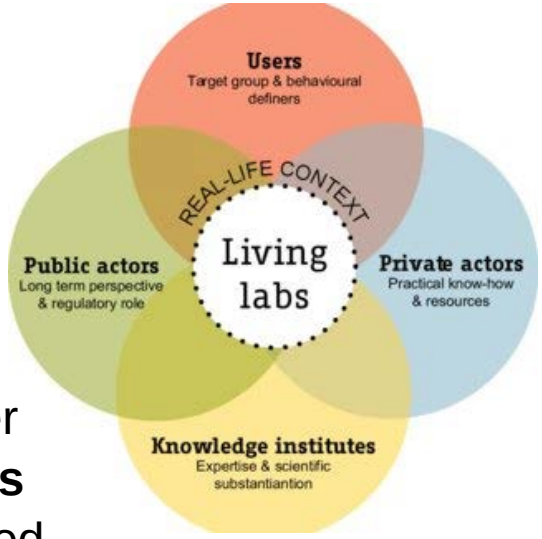
Living Labs



- ”Urban Living Labs are purposefully intended to bring together multiple actors that seek to intervene in order to **address contemporary sustainability challenges** and foster learning through forms of open and engaged experimentation.” (Bulkeley et al., 2016)
- Living Labs are “**user-centered, open innovation ecosystems** based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings”. (The European Network of Living Labs (ENoLL))
- Core characteristics of RWLs: “**contribution to transformation**; experiments as core research method; transdisciplinarity as core research mode; long-term orientation, scalability, and transferability of results; learning and reflexivity”. (Schäpke et al., 2018)

EU – fostering NBS and the ULL approach

Within the FP8 Horizon 2020 Research and Innovation Program (for the years 2014-2020) and the subsequently on-going FP9 Horizon Europe Program (for the years 2021-2027), several research projects have been carried out focusing on NBS and involving hundreds of cities across Europe through an ULL approach (al-Sayah et al. 2022).

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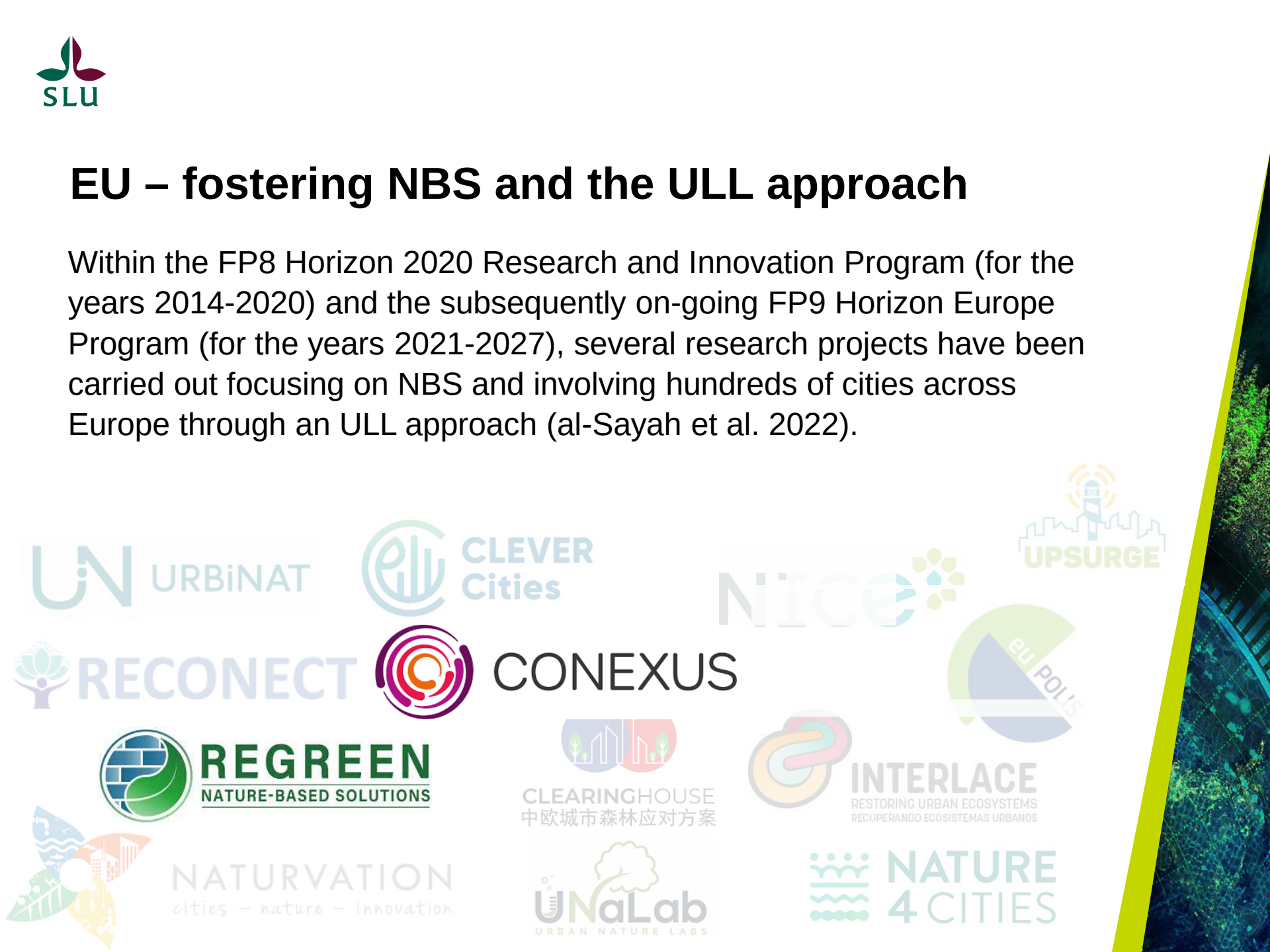


REGREEN
NATURE-BASED SOLUTIONS

Year 2019 -2024. Coordinated by M. Zandersen Aarhus University

Aim:

To integrate **knowledge and evidence on benefits** from NBS to address urban challenges; **develop and test tools to guide, design and plan** NBS; **consolidate business and investment models** for NBS and promote NBS **awareness and institutionalisation** in education, governance, and planning

ULL where represented by:

- **Local government organisations** in Europe
- **Academic partners** in China

Applications in ULL

- Modelling benefits of NBS
- Visualisation of data and communication
- Pedagogic material to encourage engagement in NBS

Greenopolis educational platform (online)

City Explorer Toolkit (online)

Nature Solutions Platform (online)

Depavement & renaturing (tool & guidance)

Field E-book

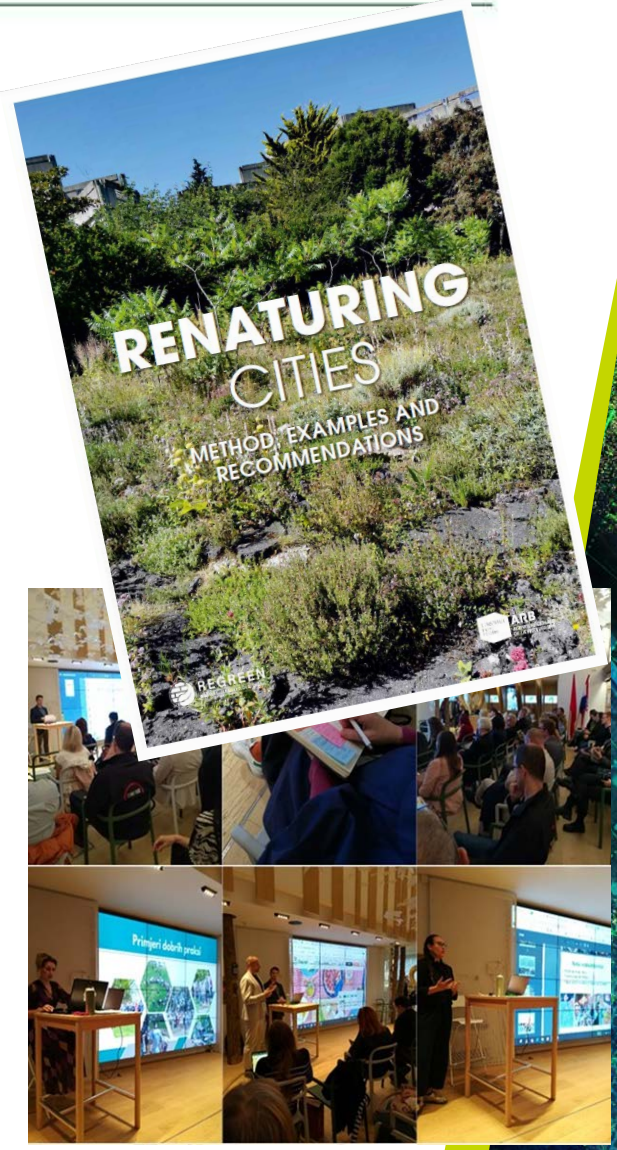
Walkable Floor map (guidance)

Applications in ULL

Acceleration of NBS agenda in all three ULLs!

Strategic actions
- Velika Gorica – first green structure plan
- Paris Region – depavement and renaturing strategy
- Aarhus – development and input into range of planning documents

Physical interventions
- Velika Gorica – financing of co-developed GI within the city
- Paris Region – Micro forest ideation
- Aarhus - NBS business model for SME on NBS (developed further in new EU-project)



ÎLE-DE-FRANCE REGIONAL AGENCY FOR BIODIVERSITY

FIELD REPORT 6

RENATURING RIVERBANKS VIA PLANT-BASED ENGINEERING TECHNIQUES (ÎLE-DE-FRANCE)

In brief: renaturing and managing the banks of the Seine by a social and work integration association.

The heart of the Paris Region has miles of artificial riverbanks (riprap, concrete dykes, sheet piling), especially along the Seine. The decline of natural riverbanks has led to a loss of wildlife habitats. Since 1995, the association Espaces [25] has been renaturing the banks of the Seine to restore ecological corridors and the functions of these ecosystems (i.e.

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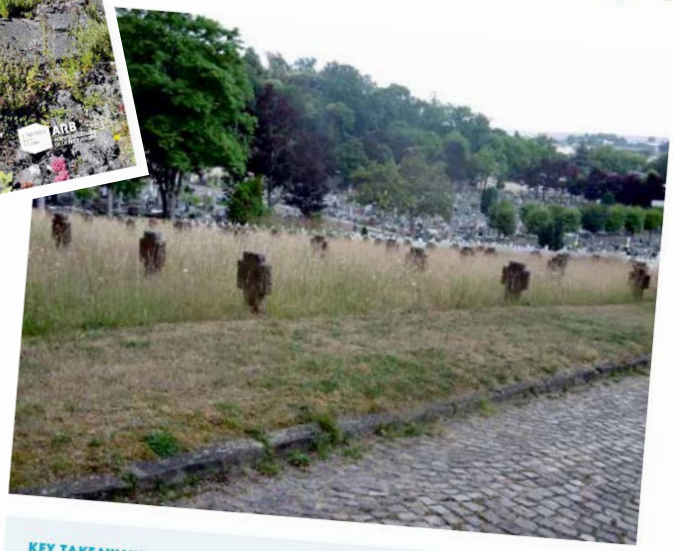
Willow spiling by Association Espaces on the Île Saint-Germain at Issy-les- Moulineaux to stabilise and replant the riverbank. ©Association Espaces

FIELD REPORT 8

RENATURING A CEMETERY IN VERSAILLES TO IMPROVE CONDITIONS FOR WILDLIFE (ÎLE-DE-FRANCE)

In brief: renaturing various sealed areas of a cemetery (paths and spaces between graves), planting local species and setting up a monitoring programme via participatory science protocols.

France, cemeteries are very stark environments
th little room for spontaneous flora, of which users
en disapprove. Rows of marble gravestones and
crete crypts criss-crossed by schist or gravel
s occupy most of the space, to the detriment of
ation. Herbicides have long been the most prac-
olution for weed control. With increased anxiety
to biocides and the prohibition of certain pesticides pursuant to the Labbé Act of 2019, local councils are increasingly inclined to reduce or halt the use of pesticides and to renature cemeteries. This is the case in Versailles, which in 2009 halted the use of such chemicals in four cemeteries with a total surface area of 18.5 hectares. In the Les Gonards cemetery, the council has renatured several areas where there was no greenery to make the place more wildlife-friendly. Some of the main paths have been desealed, as have the smaller paths and spaces between the graves. Work has been carried out to create areas of open meadow, to plant a range of local species and to monitor wildlife via the Propage and Florilèges Prairies participatory protocols (see p. 99). These operations have also improved acceptance of ecological management techniques by actively communicating with residents. The Versailles cemeteries were awarded the EcoJardin label in 2012, reflecting the quality of their ecological management approach.



The first cemetery to receive the Ec
oJardin label (2012), Les Gonards has become an integral part of the urban green grid ©Marie Wagner

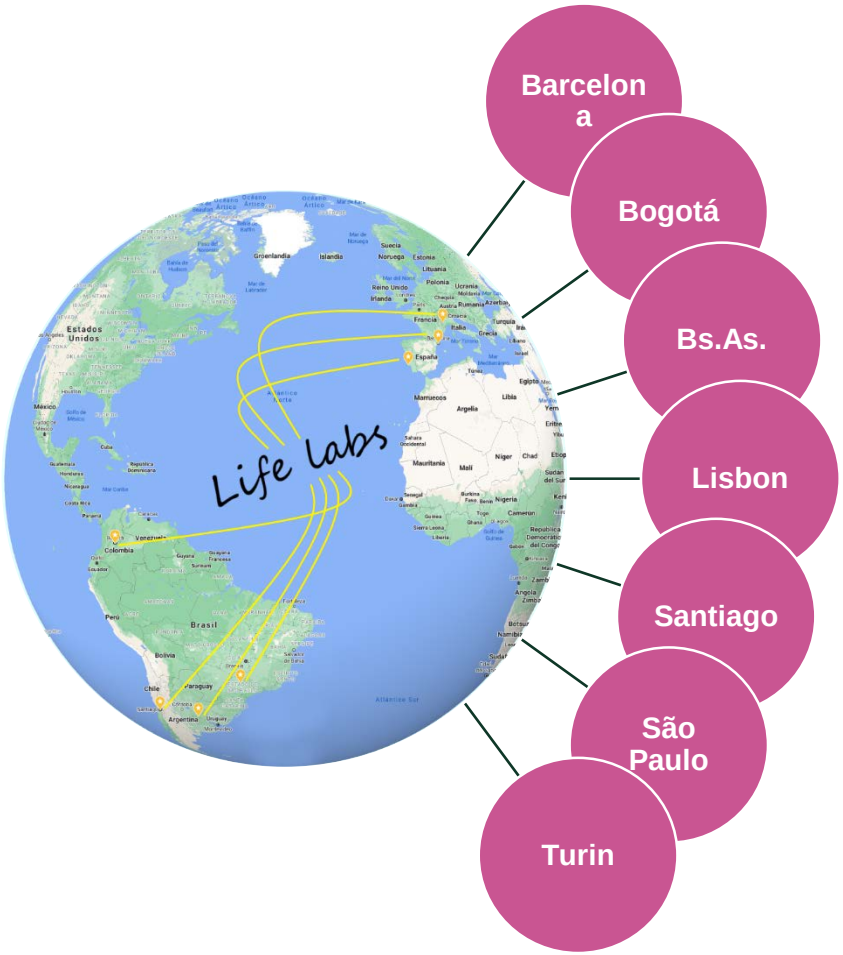
KEY TAKEAWAYS

- The management of renatured areas is equally essential for restoring and enriching biodiversity. The idea is to adopt an ecological management method or even an unmanaged approach. This decision will depend on the site in question and must go hand in hand with appropriate communication. Not communicating on management practices can result in rejection by residents.
- Scientific monitoring makes it possible to assess your renaturing project and the impact of its management plan on species. It is possible to set up simplified protocols that do not require extensive naturalist skills, such as those offered by the French Natural History Museum in its participatory science pro-

https://en.institutparisregion.fr/fileadmin/NewEtudes/000pack4/Etude_2999/ARB-idF_-_Renaturing_Cities_EN_-_WEB.pdf

Year 2020 -2024. Coordinated by T. Wild, University of Sheffield

CONEXUS

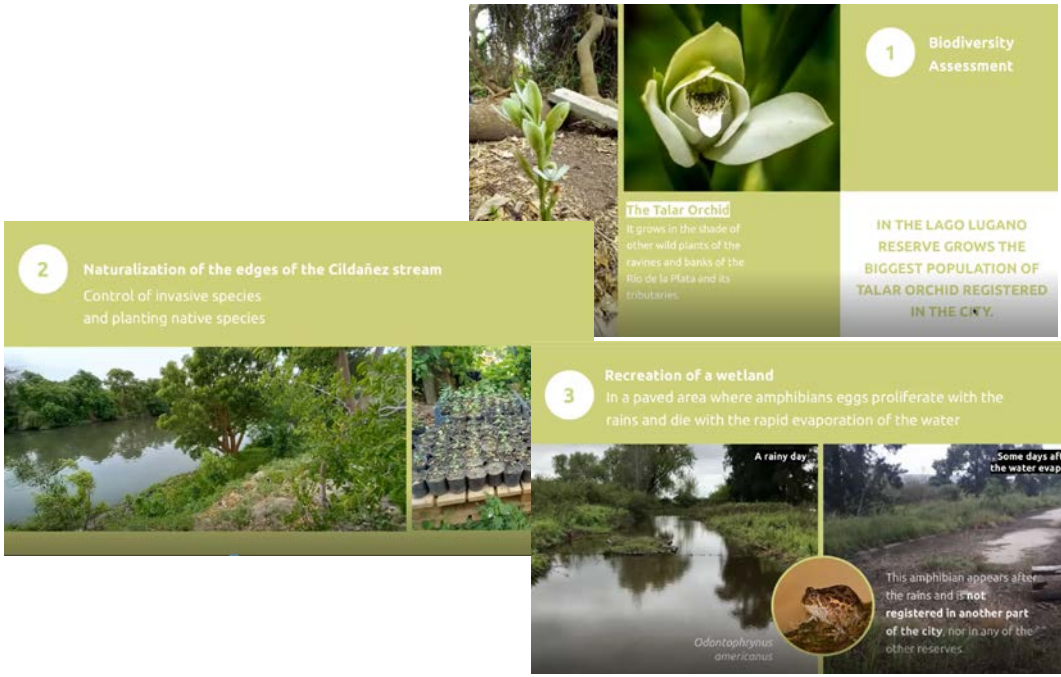


- The CONEXUS project aim is to providing accessible knowledge on how to restore natural ecosystems, to improve the quality of life in and around cities, and to support collaboration between Latin America and Europe (www.conexusnbs.com).
- CONEXUS LLs formed through agreements between local governments, academic institutions and NGOs. Within CONEXUS, an important part of the project was the development of pilots within each LL that also differed from REGREEN's LLs, where no such interventions were part of the project.

Buenos Aires

Lugano Lake Restoring wetlands for stormwater phytoremediation

- ✓ Social dimension: Stakeholders involvement focus on schools and NGOs to raise awareness about ES aquatic ecosystems provide.
  - ✓ Stakeholder mapping
  - ✓ Identification of key actors
  - ✓ Building a strategy (currently)
- ✓ Biophysical dimension: Recreation of natural environments lost by urbanization within the Lake Lugano Ecological Reserve.
  - ✓ Biodiversity assessment
  - ✓ Naturalization of Cildañez stream edges
  - ✓ Recreation of a wetland (May2022)



Buenos Aires

Medrano Stream NBS approach to storm water management, storm water quality and flood control

- Seeks to deliver Sustainable Urban Drainage System and/or rainwater gardens around the culverted Medrano Stream in proximity to Illia Avenue.
- It will test a new NBS approach to stormwater quality control and will form part of a future vision for deculverting and other Blue-Green Infrastructure interventions for the Medrano Stream Basin.
- The wider aim is to demonstrate how NBS can offer an economical and equally or more effective alternative to the traditional grey infrastructure approaches to flood control.

Sustainable Urban Drainage System design

Currently testing the design in two streets: Francia and Pilar

Turin

Valdocco Vivibile: to develop a demonstration of different green infrastructure solutions in a consolidated urban context.

- Valdocco Vivibile is now part of a major strategy called “Resilient districts” where NBS gain more importance

- Positive Alliance with schools and students built: Students are currently working on dissemination and communication tools

✓ Podcast;
✓ Educational modules;
✓ Videoclips;
✓ Guided tours;
✓ Informational material.

Lessons learned

- Realizing the important role of the knowledge broker/contact person, and the mandate and role they have in local government to act and communicate

- discussing early on goals, expectations and time-lines within the consortium with regard to the role and engagement of local government and other actors

- Adaptating output targeting local governments in the ULLs; making results available through formats and in a language that is accessible by stakeholders working in the organisation and in practice at large.

Lessons learned

- Establishing a genuine co-creation process for change-making with shared and respected results through continuous communication in form of learning feedback loops as iterative knowledge integration.

- Shaping of a common language for communicating objectives and concepts between the domains of policy, practice and society

- Introducing physical interventions and experimentation to observe and understand complex mechanisms and systematic relations to be able to transfer and upscale knowledge.

Sang, Å. O., Vogel, N., & Mercado, G. (2024). What are the potentials for local governments when participating in research on knowledge co-creation through nature-based solutions?. *Socio-Ecological Practice Research*, 1-13.

Thank you for listening! Questions?

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