

Pollinator friendly pedestrian (trail along the river)

Project indicative: C6.2+8.2
Project type: complex project
Project starting point: 0-5 yrs.
Project ending point: 10-15 yrs.
Linkages: C3.2, C6.1+8.1, C6.3, C6.4
Estimated costs: n.d. (can vary from 50-300K EUR)



NBS 6



NBS 8

FC Cascais Type of NBS

NBS 6 + NBS 8. The NBS aims at converting the river corridor into an ecological and green pedestrian pathway, which is valuable for the neighbourhood: connecting residents with nature and unlocking fragmented land (former agricultural areas – see C3.2 Urban agricultural areas). Making the sites accessible will drive the regeneration of the local landscape, and local economy (given community gardens and urban agricultural areas).

Description of the planned NBS interventions

Lack of land availability will require expropriations. Pedestrian pathways will be an important driver for bringing people closer to nature, thus generating local changes. The creation of the new path are in accordance with the hydrological studies of the river basin, and hydraulic projects for flood control. The maintenance of the pollinator area will require a comprehensive study of site conditions and native vegetation characteristics.

Scenarios

Do-it-all (best-case)

NBS 6: The pedestrian trail is a large intervention, changing territorial uses by facilitating new pedestrian connections of neighbourhoods. Furthermore, it opens restores and connects both river margins by managing vegetation and water quality properly. Hence, generating new uses for abandoned or misused areas in the surrounding.

NSB 8: This NBS includes landscaping the C6.1+8.1 Pollinator friendly pedestrian trail along the river. Pollinators are needed for urban agriculture success, particularly in organic farming as recommended by “Terras de Cascais”. Pollinator friendly vegetation also plays a complex role including aesthetics of the landscaping design, river margin stabilization, flood control, wind breaks, invasive vegetation control, etc. Community awareness for this vegetation is managed by “Cascais Ambiente” in several activities and workshops. Green areas and river maintenance promote vegetation protection.

Vision

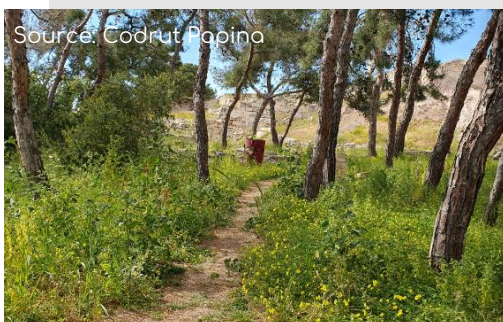


Photo current state. Source Cascais Ambiente

Study area

750m trail extension: The river represents an important ecological corridor beyond the URA from north to south. The river runs underneath the highway, acting as a major barrier for the two neighbourhoods.

The unplanned heterogeneous built environment left several abandoned former agricultural areas, some illegal buildings, rubble deposits.

The river is partially inaccessible, with invasive vegetation in its margins. Converting the riverbank into a safe, accessible pedestrian green corridor will connect the two neighbourhoods, facilitating access to the C3.2 Urban agricultural areas.



Local frameworks

According to Cascais Master Plan this should be a green area with permeable soil for river flood protection and leisure or food production purposes.

The Climate Change Adaptation Action Plan foresees River regeneration, and margins stabilization. National law allows public entities to expropriate river margins to ensure river maintenance and accessibility.

The agricultural potential can be enhanced by the Terras de Cascais program and the local Land Bank, where owners can rent plots to citizens interested in farming.

Challenges of the site

The expropriation of private land areas along the river margins is needed to implement the NBS. This requires lengthy legal and administrative procedures, managed by the municipality. Depending on the extent of the expropriation areas, small-scale green leisure areas may be included.

The barrier formed by the highway requires a bypass in the trail away from the river crossing the tunnel and the main road under the highway.

The sewage collector in the river margin must remain accessible for maintenance, according to the rules determined by the disposal company.

The area is subject to flooding. The site must be evaluated, and a retaining basin is expected to be created north of the highway in an existing land depression (ideal for pollinator friendly interventions).



Photo current state. Source Cascais Ambiente

Key considerations

The project is dependent on land availability requiring expropriations. It can result in different intervention areas and phases according to the extent of the legal procedures.

Pedestrian pathway done in conjunction with hydrology projects and construction.

Pollinator intervention requires community awareness and scientific support organized in several initiatives, e.g., local workshops.

Operational objectives

- Increase connectivity between neighbourhoods and ensure accessibility to the plots of land planned for C3.2 Urban agricultural areas.
- Eradicate invasive vegetation from the river margins.
- Create awareness about pollinators capable plants and biodiversity – working with local schools and members of the community.
- Increase the percentage of public green areas for local neighbourhoods.

Targets:

- 750m of pedestrian pathway in relation with the river and riparian vegetation
- 2250 sqm area with no invasive vegetation (including trail extension and river margins)
- 1500 sqm of green area landscaped as pollinator friendly vegetation.
- 2 events/year with local students about pollinators and biodiversity

Partners

Beneficiaries: Municipal staff coordinating the project implementation (plantations and seeding) Cascais Ambiente team coordinating activities and maintenance.

Additional Investors / "Shareholders": Local schools (part of the programme concerning pollinator areas)

Users: residents, students, future users of C3.2 Urban agricultural areas.

Design requirements

Accessibility: Implementing river crossings (bridges) – see sketch below. Ensure access to the river by removing invasive vegetation.

Landscaping: Use of a mix of riparian and pollinator friendly plants. Proposed vegetation: *Crataegus monogyna*, *Prunus spinosa*. (extracted from technical design plan realized by Cascais Ambiente)

Aesthetics: Create a natural ambiance in close relation to the river course.

Sustainability/maintenance: Low maintenance landscaped areas.

Urban furniture and equipment: Small scale leisure facilities can be accommodated depending on the extent of expropriation areas.

Technical design plan/sections. Source Cascais Ambiente

