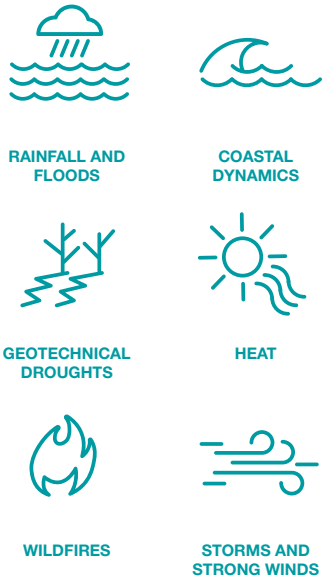
REINFORCING AND RESTORING GREEN, BLUE AND BROWN CORRIDORS

HAZARD



COST

€ € €

low **medium** high

LEVEL OF SKILL

high

Ecological corridors are reservoirs of biodiversity connected to each other by continuous or discontinuous ecological passages. Corridors are described as green, blue or brown depending on whether they concern plants, water or soil. In France, some of them are identified in regional ecological coherence plans (SRCE in French) and in national and local planning documents. Reinforcing and restoring these networks therefore involves reconnecting vegetated, aquatic and non-artificialised land areas by creating new ones to extend existing areas or by restoring sites.

IMPACTS

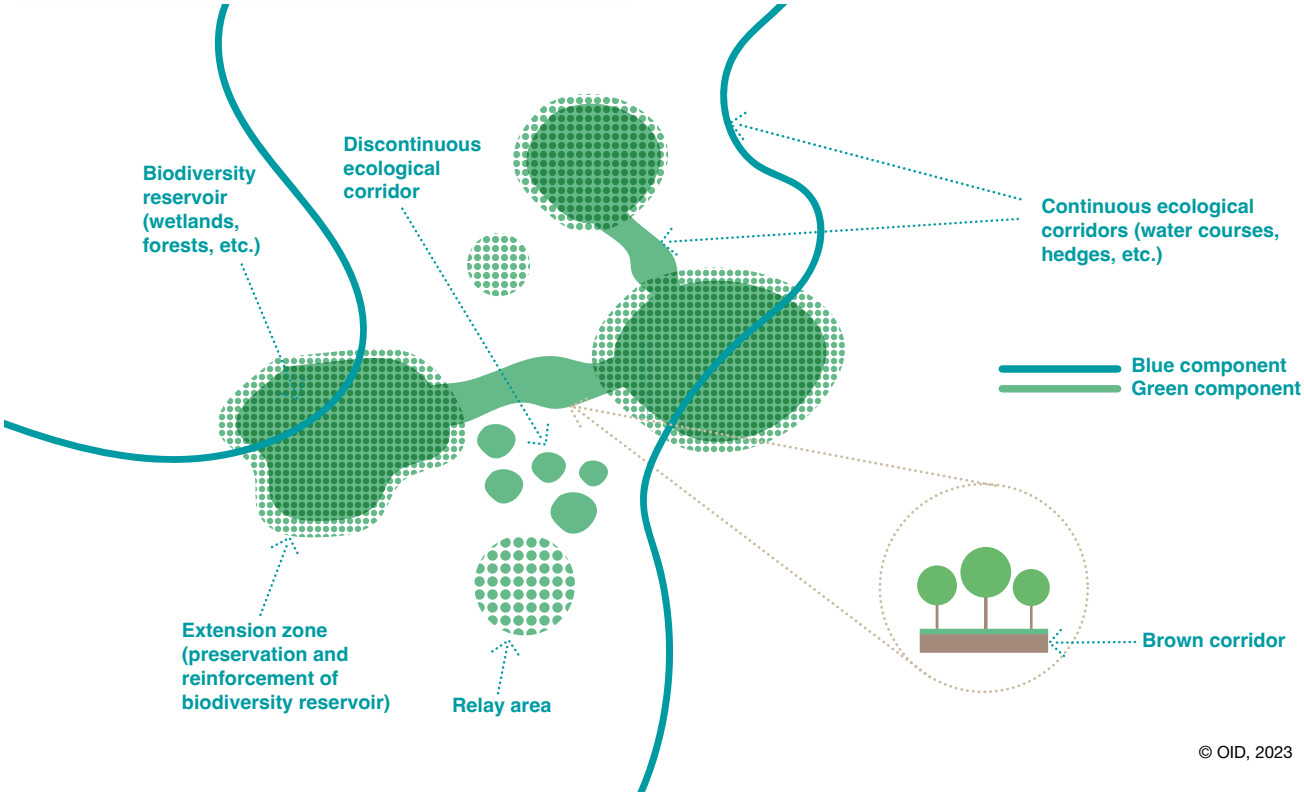
By breaking up the landscape, urban areas (towns, buildings, roads, etc.) restrict the access of living organisms to areas essential to their life cycles (feeding, reproduction, resting, etc.). Green, blue and brown corridors therefore act to **preserve** or even **restore local biodiversity** by reconnecting biodiversity reservoirs. Without continuity between environments, the **functionality** and **resilience** of ecosystems is reduced. This has a direct impact on the **ecosystem services** associated with biodiversity. The following example illustrates the interconnection between ecosystem health and ecosystem services: when the brown corridor is broken, soil biodiversity is less rich, which has a direct impact on soil porosity. Water absorption in the soil is then reduced, which increases the risk of flooding in the event of heavy rain and reduces the evapotranspiration that contributes to cooling in hot weather.

INSTALLATION GUIDE

Before reinforcing or restoring a green, blue or brown corridor, you need to carry out an **analysis**. The first step involves looking closely at urban planning documents (*SRCE, PLU* – Local Urban Plan, etc.) and identifying vegetated and aquatic areas in the vicinity of the project. A precise ecological diagnosis of the environments identified then makes it possible to establish or restore an ecosystem in the project area adapted to the environmental context and to corridors close by. As green, blue and brown corridors work together, they should be taken into account simultaneously. To minimise the impact of buildings on ecological continuity, it is essential to consider **the location of buildings on the plot** so that they don't create barriers to biodiversity. Following a study of the location of open spaces (vegetation, open ground and water points), the plot can be integrated into the corridors. **This action should be applied to all adaptation strategies** involving, in particular, vegetation around and on buildings (roofs and facades), soil desealing, the creation of ponds, etc. Given the proximity of the surrounding natural areas, particular attention should be paid to the plant palette when greening urban spaces and the plot. Using local species adapted to the future climate reduces the risk of maladaptation.

CLICK HERE TO CONSULT THE GUIDE TO ACTION FOR CLIMATE CHANGE ADAPTATION

COMPONENTS OF GREEN, BLUE AND BROWN CORRIDORS



WEAK POINTS AND STRONG POINTS

⊖ Striking a balance between mobility issues and the preservation of corridors to ensure ecological continuity can prove difficult.

⊖ These new spaces may change the habits of residents because of the increase in local biodiversity. This can be challenging for residents not used to this type of environment.

⊕ Ecologists can be employed to work on the project design.

⊕ Integrating existing corridors is easier when tackled before embarking on the project design.

⊕ Set up awareness campaigns aimed at local residents.

FIND OUT MORE

Centre de ressources pour la mise en œuvre de la Trame verte et bleue, Green and blue infrastructure

Habitat et Qualité de vie (2021), *La trame brune*

Syndicat Mixte pour le Schéma de Cohérence Territoriale du Pays de Lorient (2014), *Comment intégrer la Trame Verte et Bleue dans les documents d'urbanisme et les opérations d'aménagement ?*

Construction 21 & OID (2021), *La cohérence territoriale pour une optimisation des solutions d'adaptation*

Construction 21 (2025), Urban Biodiversity: The Role of Blue-Green Infrastructure

ScienceDirect (2021), The importance of blue and green landscape connectivity for biodiversity in urban ponds