

REHABILITATION AND RESTORATION OF RIVERS AND FLOODPLAINS

OBJECTIVE

Emphasising the natural function of rivers and reducing floods risk.

DESCRIPTION

The rehabilitation and restoration of floodplains and river wetlands provides seasonal aquatic habitats, creates corridors of native riparian forests and creates shaded riverine and terrestrial habitats. Creation of buffer strips.

EXPECTED RESULTS

It helps to retain and slowly release discharge from water bodies as well as to facilitate groundwater recharge and improves water quality. Moreover, river wetlands can help to maintain the functioning of estuarine and delta ecosystems and create natural land features that act as storm buffers, thus protecting people and property from flood damages, also related to sea level rise and storm surges.

RESULT INDICATORS

Floods return time [$T=1/p$; years]

INVOLVED ACTORS

River managers, farmers, inhabitants of villages and all figures related to land use and land properties.

EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)
- Medium term (5-10 years)
- Long term (> 10 years)

BEST PRACTICES

- Smoylan - Bulgaria
- Belgium
- Isola Vicentina - Italy
- Prov. Antwerpen (BE), Zeeland (NL)
- East Anglia - UK
- Netherlands
- Hungary
- Poland
- Munich - Germany
- Kruibeke Bazel Rupelmonde - Belgium
- Nijmegen - Netherlands
- Germany

- Sandomierz – Poland
- Bulgaria and Romania

CRITICALITIES

Negative effects on navigation, and varying effects (both positive and negative) on tourism, agriculture and drainage.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Green

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Biodiversity / Conservation of ecosystems
- Urban settlement
- Water resource management

CLIMATE IMPACTS

- Drought
- Floods
- Other

IMPLEMENTATION SCALE

- Association of municipalities
- Municipality
- Region / Country

SOURCE

<https://climate-adapt.eea.europa.eu/metadata/adaptation-options/rehabilitation-and-restoration-of-rivers>