

SUMMARY DESCRIPTION OF THE PROJECT (Max. 3 pages; to be completed in English)**Rhine wetlands near Rastatt**

Covering some 4000 ha, the project area includes part of the Rhine wetlands in Baden-Württemberg (rural district of Rastatt and urban district of Baden-Baden) and is part of the following European conservation areas:

- pSCI (FFH) area: DE 7015-341: Rhine flats between Wintersdorf and Karlsruhe
- SPA (bird protection) areas:
 - DE 7015-441: Rhine flats Elchesheim - Karlsruhe
 - DE 7114-441: Rhine flats between mouth of Rench and mouth of Murg

and it is also part of the transnational RAMSAR Upper Rhine site ("Oberrhein / Rhin supérieur").

The project area covers the southernmost section of the non-controlled retention area of the Upper Rhine and the mouth of the river Murg. It has a flood-plain up to one kilometre wide and is therefore of major importance for the protection of wetland-type habitats and species.

Project objectives:

The aims of the project are as follows:

- To restore near-natural wetlands with extensive flood-plains and a richly-structured water bed on a hitherto canalised, unnatural section of the Murg which is the largest tributary flowing into the Rhine in the project area. This should restore the natural site conditions for the 91E0* and 91F0 alluvial forests - some of them priority habitats - and for the stitchwort/oak/hornbeam forest (FFH LRT 9160) and significantly improve conditions for the water courses of plain to montane levels with aquatic vegetation (FFH habitat type 3260).
- To restore the structure of near-natural river banks and watercourses on the Rhine. The plan is to redress the current lack of morphological structures in selected bodies of water. This should create attractive breeding and rest areas for birds of the species listed in Annex I of the Birds Directive (e.g. common tern Birds Directive species code A193) and for migratory bird species (e.g. common sandpiper Birds Directive species code A168, little ringed plover) and suitable spawning and rearing habitats for fish of the species listed in Annex II of the FFH Directive (especially long-distance migrating species, e.g. the sea lamprey, FFH species code 1095).
- To sustain and improve stagnant waters along the Rhine in the long term as a habitat of natural eutrophic lakes (FFH habitat type 3150) and as a habitat for fish of the species listed in Annex II of the FFH Directive (e.g. spined loach, FFH species code 1149 and bitterling, FFH species code 1134).
- To restore the water courses of plain to montane levels with aquatic vegetation (FFH habitat type 3260) through near-natural redevelopment of extended bodies of water (Ried canal) and through linking in an old body of flowing water which has silted up (Hofwaldschlut) and also by promoting water-related habitat types (priority habitat of alluvial forests with alder, ash, willow FFH habitat type 91E0*, hydrophilous tall herb fringe communities of plains and of the montane to alpine levels FFH habitat type 6430).
- To restore grassland habitats of the type listed in Annex I of the FFH Directive (Molinia meadows FFH habitat type 6410, lowland hay meadows FFH habitat type 6510) and to promote typical species as types listed in Annex II of the FFH Directive

(e.g. *Maculinea nausithous* (dusky large blue butterfly), FFH species code 1061).

- To optimise ditches as habitats for the species listed in Annex II of the FFH Directive (weather loach, FFH species code 1145, southern damselfly, FFH species code 1044) as sites of hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (FFH habitat type 6430) and as a sustainable contribution to the coherence of the conservation initiative Natura 2000 (biotope conservation network).
- To raise public awareness of nature conservation issues in general and of the Natura 2000 network in particular.

Actions and means involved:

As with the LIFE Project "Living Rhine floodplain near Karlsruhe" (reference number: LIFE04/NAT/D/000025), which is currently running very successfully, the application was jointly worded or agreed in consultation with relevant bodies and groups in the area (e.g. councils, local authorities, associations). Local councils and associations are involved in co-financing arrangements for the majority of initiatives. The initiatives listed below have therefore met with widespread acceptance at local level.

- Near-natural flood-plains on the river Murg to be redeveloped by moving back large stretches of embankment, and also by initiating natural morphodynamic processes in the main channel, prioritising alluvial forests with alder, ash and willow (FFH habitat type 91E0*), alluvial hardwood forests (FFH habitat type 91F0), and relinking abandoned oxbow lakes.
- Near-natural structures to be provided on the banks of the Rhine mainly by lowering and flattening sections of the bank which is currently reveted well above the mean water level all the way along. Change of substrate to reinstate near-natural gravel banks and gravel islands as characteristic features of the natural landscape in the project area and as important breeding habitats for native bird species.
- Suitable measures to be put in place to preserve and enhance waters along the sides of the Rhine (e.g. improving link to the Rhine and thereby scaling up nutrient yield or fishing management).
- Water courses of plain to montane levels with aquatic vegetation (FFH habitat type 3260) to be restored by linking in an old loop of the river Murg which has silted up and by reshaping the course of a body of water in a near-natural way.
- Shrub clearance, ploughing and sowing of new areas with threshings from biodiverse meadow grasslands planned to redevelop and sustain grassland habitat types.
- Ditches to be optimised mainly by increasing their width and leaving their depth unchanged.

Expected results (outputs and quantified achievements):

The project is expected to make a substantial contribution to the restoration of typical wetland biotopes and habitats for species, some of them priority habitats. It is expected to lead to an improvement in ecosystems in the Rhine wetlands as one of the most important ecological corridors in Central Europe and an important link for the coherence of the Natura 2000 network. It will also support the goals of the European Water Framework Directive and thus has the potential to bring particularly high value-added for Europe.

The following results are targeted and expected:

- Near-natural wetland habitat mosaic with priority alluvial softwood forest (FFH habitat type 91E0*), alluvial hardwood forest (FFH habitat type 91F0), stitchwort/oak/hornbeam forest (FFH habitat type 9160), muddy river banks (FFH habitat type 3270) and hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (FFH habitat type 6430) on an area of more than 50 ha along the river Murg. Promotion of several species listed in Annex II of the FFH Directive (e.g. sea lamprey, FFH species code 1095).
- Near-natural gravel bank and sands as well as islands and gravel banks rising above

the mean water level in a sheltered position for a stretch of about one river kilometre along the right bank of the Rhine, natural local dynamics and long-term conservation of deep wetland pioneer stages up to and including softwood alluvial forest through natural shifting processes when water levels are high. Preparation of breeding grounds in natural habitats for bird species typically found in the locality and for bird species afforded special protection under article 4 of the Birds Directive (e.g. common sandpiper Birds Directive species code A168, common tern Birds Directive species code A193) and for several species as listed in Annex II of the FFH Directive (e.g. spined loach, FFH species code 1149).

- Long-term conservation of the natural eutrophic lake habitat (FFH habitat type 3150) on an area of some 6 ha.
- Restoration of water courses of plain to montane levels with aquatic vegetation (FFH habitat type 3260) in a former loop of the river Murg cut off from the flow for more than 200 years as well as a technically regulated flowing water over a total length of approximately 2.8 km.
- Restoration of lowland hay meadows (FFH habitat type 6510) over an area of approx. 8.9 ha and restoration of Molinia meadows (FFH habitat type 6410) over an area of approx. 3.9 ha.
- Broad and shallow lowering with a slow controlled flow over a stretch of approx. 2000 m with hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (FFH habitat type 6430) and reeds as habitat for species listed in Annex II to the FFH Directive (e.g. weather loach, FFH species code 1145, and Desmoulin's whorl snail, FFH species code 1016) in stable population networks.

Can the project be considered to be a climate change adaptation project?

Yes ☐

No ☒