

Summary

Life-Project Lavant – Habitats network for endangered small fish species

The Lavant river is located in the east of the province Carinthia in Austria, flowing from north to south and leading in the Drau-river. It was historically known as the richest in fish river of Carinthia – referring to the occurrence of fish species as well as to their density. Through massive interventions in the water ecology (energy-economic use, straightening of waters course, disconnection of tributaries, reduction of the river width, bed and bank stabilisation, continues interruptions, inflow of sewage) only remaining of historical fish stocks is present today. The remaining of historical fish stocks limits themselves to the still remaining close to natural river segment: the canyon courses segment above Lavamünd, which is designated as **Natura 2000 area „Lower Lavant“**.

Due to the low population rate and the absence of exchange, the remaining stocks of the especially rare fish species in the Natura 2000 area "Lower Lavant" are also threatened in the long term to extinction.

Project objectives:

- Restoration of the continuity especially for swimming and jumping weak small and demersal fish species, which have special demands to flow velocities and choriotope conditions in the fish bypasses
- Restoration of the freshwater habitats, corresponding to the habitat diversity and dynamics of historic Lavant river
- Reconnection of oxbow lakes and tributaries to the Lavant river to expand the habitat offer for the fish species
- Improvement of the ecological situation in the surroundings through the creation of new alluvial forest areas and alluvial waters
- Enlargement of the Natura 2000 area from 86.91 ha to 131.59 ha, purchase of 4.33 ha agricultural land for the purpose of nature conservation
- Public awareness for local people: The Lavant as an ecological, experiential and dynamic river.

Protected goods in the European protected area „Untere Lavant“

Habitats according to Annex I of the FFH-directive: 91E0 (Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)), 6510 (Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)), 3150 (Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation), 3220 (Alpine rivers and the herbaceous vegetation along their banks).

Species according to Annex II of the FFH-directive: 1122 (*Gobio uranoscopus*), 1160 (*Zingel streber*), 1136 (*Barbus petenyi* Gr.), 1114 (*Rutilus pigus*), 1163 (*Cottus gobio*), 1098 (*Eudontomyzon mariae*), 1134 (*Rhodeus amarus*), 1124 (*Romanogobio vladykovi*), 1159 (*Zingel zingel*), 1193 (*Bombina variegata*), 1037 (*Ophiogomphus cecilia*).

Actions and results:

During the project period from October 2011 to December 2015 numerous actions for ecological improvement were implemented within and along the Lavant river.

- Purchase of 4.33 ha farming land for the creation of new water habitats and floodplain forests (FFH-Habitat types 3220, 3150, 91E0, 6510)
- Reconstruction of three drop structures to draining ramps
- Removal of one drop structure, bypassing of another drop structure
- Construction of a new dynamic river course over a length of 400 m
- Renaturation of regulated, straightened river segments over a total length of 440 m
- Reconnection of six tributaries and two oxbows (325 m) to the Lavant river
- Construction of a side channel of Lavant river (length: ca. 300 m)
- Resettlement of the German tamarisk (*Myricaria germanica*)
- Construction of five rest and information areas along the Lavant cycle-route incl. one observation tower
- Public relations: design of a logo, website, exhibition of posters, folder, series of postcards, LIFE-information boards, laymen's report, action days (kick-off-, puncture- and closing event), nine excursions and workshops
- Networking: Exchanging experiences with experts (international fish migration workshop, excursion of the project team to comparable projects on Isar (Germany) and Salzach (Salzburg), visit to other life projects on Mur river)
- Monitoring: before/after study of the project's impacts in the field of fish, amphibians, dragonflies, habitats
- Management plan for the European protected area "Untere Lavant", including an action plan for further development of the area

The implemented actions lead to passability in the river for fish – especially for small species with low swimming and jumping capability – from the mouth to 21 km upstreams and enhanced the habitats in this river section. Thus, the living conditions for the protective goods in the European protected area "Untere Lavant" have improved significantly and made a remarkable contribution to the achievement of protection objectives.

The project was the reason for the enlargement of the protected area from 86.91 ha to 131.59 ha, or the length of the protected river from 13.35 km to 20.25 km.

With the project implementation, the essential threats which risk to achieve the protection objectives, have been significantly reduced.

Financing

The total cost of the project was ca. 3.53 Mio. Euro. Ca. 1.54 Mio. came from the LIFE-Nature Fund of the EU. The Wasserverband Lavant, the Regional Government of Carinthia and the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management financed the rest.

Project partner und organisation

Coordination beneficiary of the project was the Wasserverband Lavant, who assigned the department 8, environment, water and nature protection of the Regional Government of Carinthia, to operate the project. Concurrently the department 8 was project partner with representatives of water management, nature protection and water ecology in the steering group. The project was coordinated by the eb&p Umweltbuero GmbH.

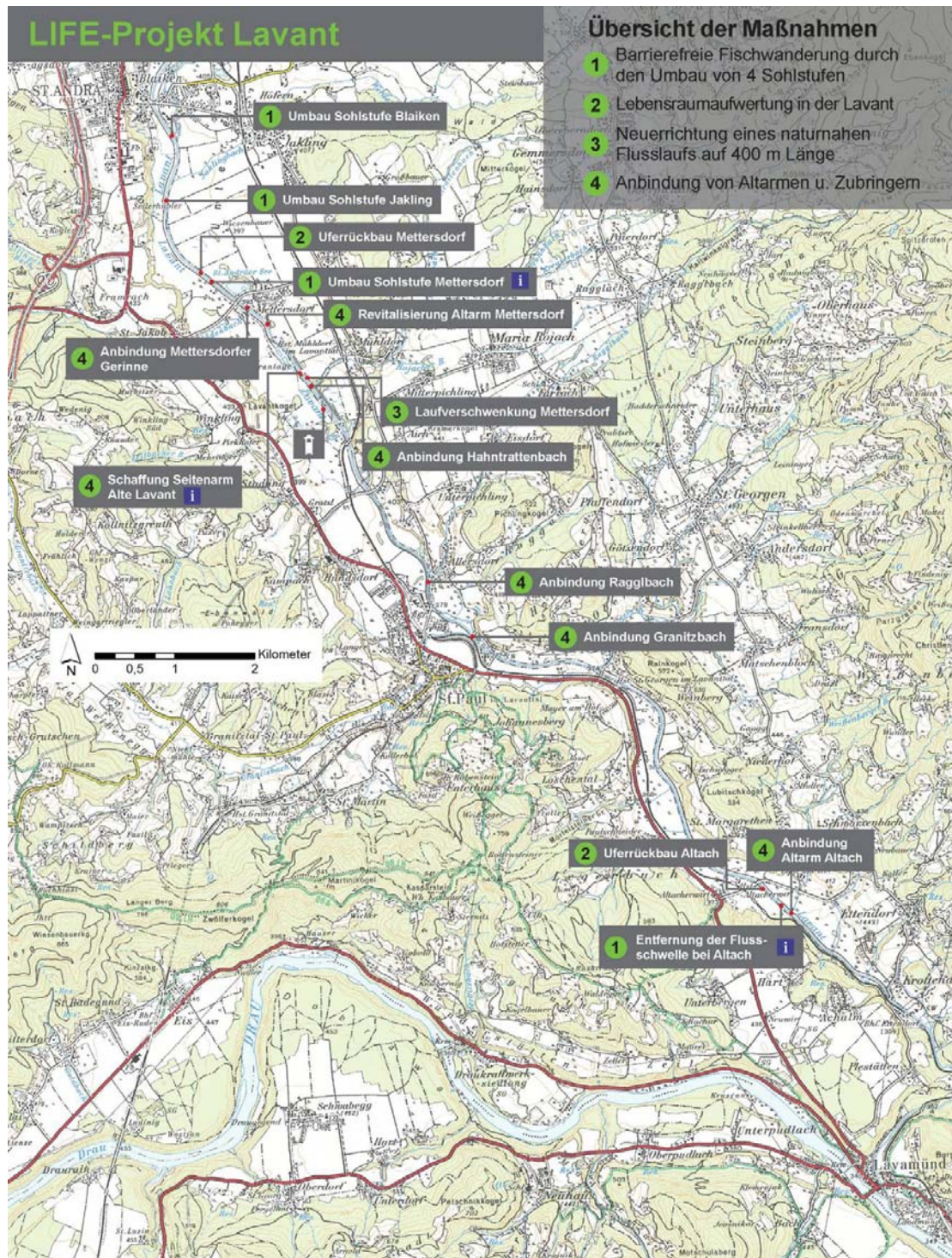


Abbildung 1: Action plan Life Project Lavant