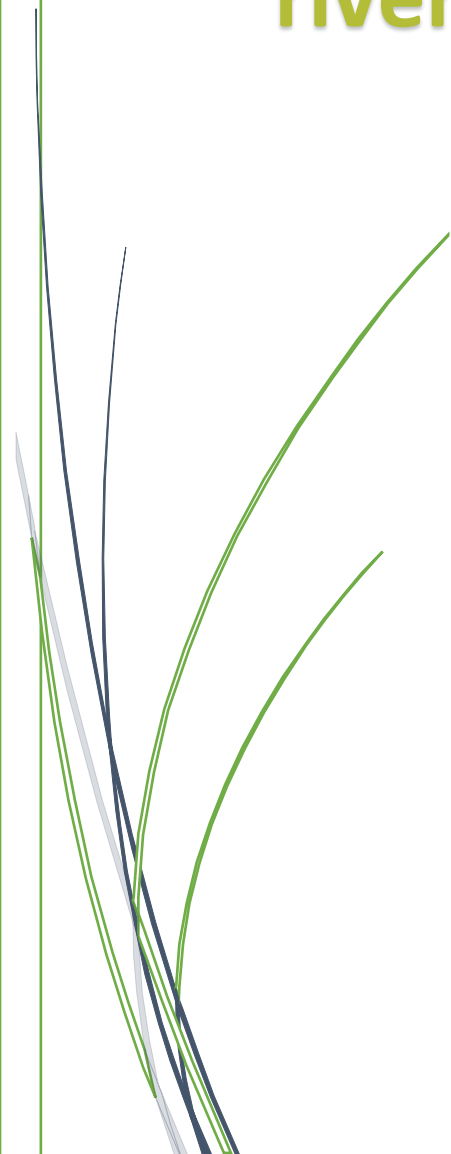


Report on renovated riparian vegetation on river Jadro and Vrljika



Project name	Improve River LIFE – Improving the conservation status of target Natura 2000 species and habitat types through improved river connectivity
Project number	LIFE22-NAT-HR-Improve River LIFE/101114250
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INTRODUCTION

This task is aligned with the conservation measures and the method of implementing conservation measures for target habitat types and species for the Jadro and Vrljika rivers prescribed by the Ordinance on conservation objectives and conservation measures for target species and habitat types in ecological network areas (OG 111/2022), and includes the restoration and maintenance of areas with aquatic vegetation and a strip of riparian vegetation at least 2 meters wide. Monitoring is carried out in accordance with *the Protocol for the Restoration and Maintenance of riparian Vegetation*. The Protocol plans the restoration of coastal vegetation through cuttings of white and brittle willow at this stage. In order to test the success of the overall project, employees of the project partner Public institution Sea and karst selected a trial location for planting cuttings on the banks of Vrljika River.

LOCATION OF THE TEST AREA

A test area of 650 m² was selected at the location "Piluni", which is located 500 m southeast of the Đogića dam (Figure 1).

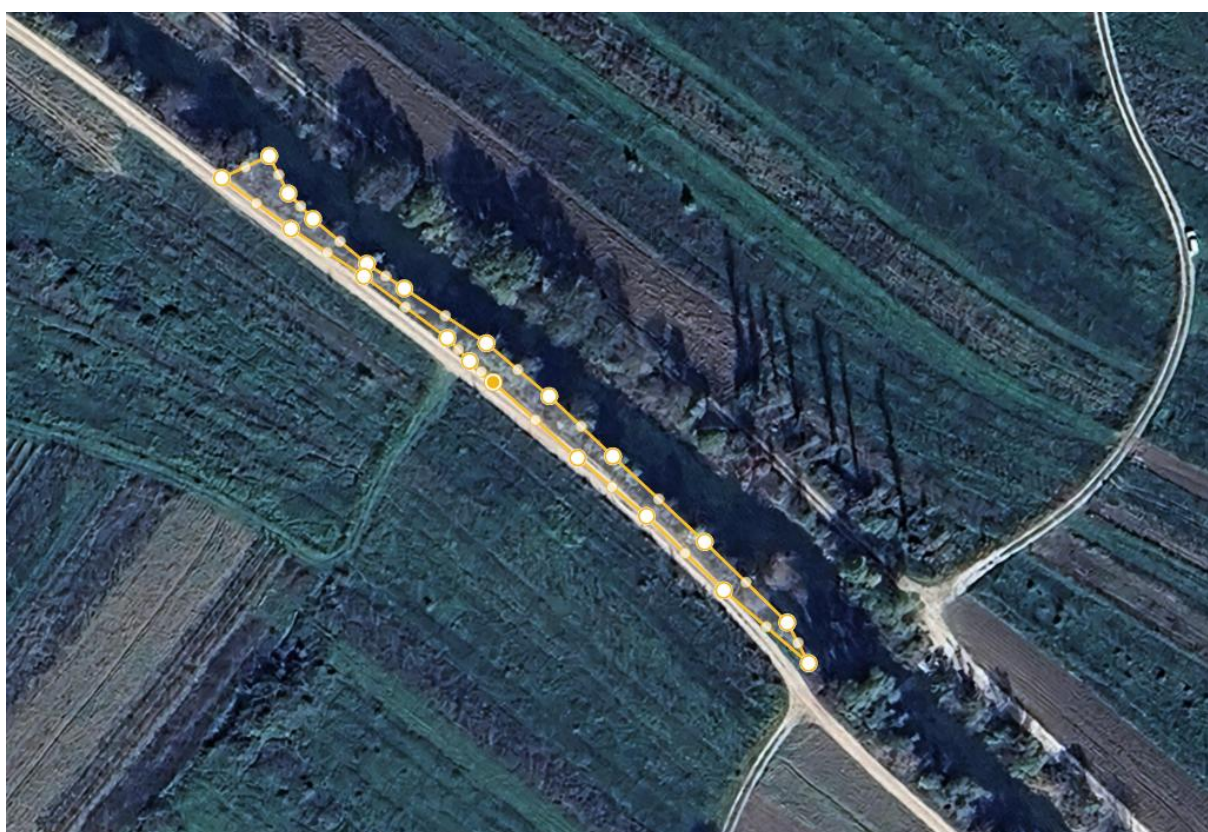


Figure 1. View of the selected test area

White willow cuttings were planted on a trial basis on the test plot. The cuttings were planted in all places where the terrain configuration and surrounding vegetation permitted. A total of 60 white willow cuttings were planted. The cuttings were planted in several zones (closer and further from the river) to see where the cuttings thrived best. The trial planting covered about 650 m² of the riverbank.

Name	X	Y	Nmv
<i>Salix alba</i>	17,225323	43,412549	264,377075
<i>Salix alba</i>	17,225435	43,412441	265,445007
<i>Salix alba</i>	17,225493	43,412411	264,962677
<i>Salix alba</i>	17,225544	43,412377	264,832031
<i>Salix alba</i>	17,225553	43,412377	264,834381
<i>Salix alba</i>	17,225578	43,412347	264,856659
<i>Salix alba</i>	17,225589	43,412342	264,870636
<i>Salix alba</i>	17,225605	43,412331	264,877777
<i>Salix alba</i>	17,225618	43,412321	264,888397
<i>Salix alba</i>	17,225633	43,4123	264,898956
<i>Salix alba</i>	17,225644	43,412292	264,905945
<i>Salix alba</i>	17,225674	43,412266	264,922974
<i>Salix alba</i>	17,225712	43,412235	264,942719
<i>Salix alba</i>	17,225734	43,412234	264,952393
<i>Salix alba</i>	17,225758	43,412229	264,968079
<i>Willow white</i>	17,225768	43,41222	264,97937

Table 1. Coordinates of planted cuttings

COLLECTION OF PLANTING MATERIAL

Collecting cuttings

Equipment used for collecting cuttings:

To collect the cuttings, two-handed scissors were used for thicker cuttings, and hand-held viticulture scissors for thinner cuttings, pictures 2 and 3 below.



Figure 2. Collecting cuttings



Figure 3. Manual plantation of the cuttings

Method

The cuttings were cut with two-handed or hand shears, depending on the thickness, approximately 50 cm long, and then planted in moist soil. Both thicker and thinner cuttings were used to avoid unnecessary waste. After the cutting was taken, the thicker end was cut sharply at a 45° angle so that it could be pushed into the soil more easily; if it was a thicker cutting, then the upper end was cut straight, so that it could be pushed in by hitting it with a hammer if the soil was harder.

MONITORING AND MAINTENANCE OF YOUNG PLANTS

Evaluation of the success of the renovation

Visual inspection revealed a high success rate of cutting survival. Of the total number of cuttings, 50, or 83%, have sprouted or budded. Monitoring continues to monitor the health of young plants and to prevent damage due to anthropogenic activities. This high success rate of cuttings is an indication that an appropriate propagation method and species selection have been selected (Figure 4).

Maintaining young plants

Employees of the project partner, Public institution Sea and Karst, regularly inspect the plants every week. So far, there has been no need for intervention in the form of mowing weedy vegetation or protection from herbivores and anthropogenic factor.



Figure 4. Examples of rooted willow cuttings