Auf dem Weg zu neuen Ufern:
Naturschutz an der Unteren Donau in den beiden EU-Beitrittsländern Rumänien und Bulgarien

Cross-border conservation and restoration along the Lower Danube Green Corridor, Romania-Bulgaria

Final Project Report

DBU Az 23839

17 February 2012

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Table of content

Figures and tables:

Annexes 1 to 12: see table 1 on page 11/12, on CD attached

Appendixes:

Introduction

The Lower Danube Green Corridor is the most ambitious wetland protection and restoration initiative in Europe. After squeezing through the Iron Gates gorge and dams between Serbia and Romania, the Danube flows free for 1,000 kilometers through Romania, Bulgaria, Moldova and Ukraine before emptying into the Black Sea. The Lower Danube is one of the longest free-flowing stretches of river in Europe. In 2000, the governments of Bulgaria, Romania, Ukraine and Moldova pledged to work together to establish a green corridor along the entire length of the Lower Danube River. The Lower Danube Green Corridor Agreement commits Bulgaria, Romania, Ukraine and Moldova to preserve a total of 935,000 ha, including enhanced protection for 775,000 ha of existing protected areas, and new protection for another 160,000 ha, and to restore 224,000 ha of former wetland areas. The four countries also pledged to promote sustainable development along the Lower Danube.

The project ,,Cross-border conservation and restoration along the Lower Danube Green Corridor" implemented by WWF Germany, Romania and Bulgaria with support from DBU is a direct contribution to achieving these goals. From this perspective, the project aimed at building cross-border communication and partnership as well as strengthening the relations between different stakeholders.

The project has been implemented over a period of more than five years, a significant extension of the initial plan but being necessary mainly to finalize the implementation of complex activities (e.g. restoration, approval of Management Plans, development of the visitors centre, etc). In the latest extension period some additional activities were carried out to prepare ground for future conservation work, summarized in a special annual report for 2011 (see **Appendix 1**).

The partnership established during project implementation was proven to be effective and continues beyond the end of the project through other projects which emerged from this partnership. The project design allowed for adaptability in implementation in a way that the initially planned activities were generating additional ones, giving complexity and added value to the whole project.

In May 2011, a final meeting took place in Ruse, Bulgaria, bringing together all partners, key stakeholders and the representative of DBU (concluding presentation as **Appendix 2**). On this occasion, the foundation of the new visitor centre of Rusenski Lom Nature Park was marked, the concept and design of the centre being a result of this project.

Major Achievements of the project

Conservation and management

Cama-Dinu-Păsărica and Rusenski Lom Nature Park designated as Natura 2000 areas (Special Protection areas and Sites of Community Importance

Management Plan of Cama-Dinu-Pasarica Nature Reserve developed and approved by the Ministry of Environment

Enlargement of Rusenski Lom Nature Park supported by local community
Conservation measures for the Egyptian vulture initiated (two feeding places built)

Increased public awareness of the local communities on the natural values of the area and on opportunities for sustainable development

Restoration

River restoration along Lom River at Ivanovo and Batakliyata (BG)

Feasibility study for the restoration of Garla Pasarea

Pre-feasibility studies for the restoration of Srebarna (BG) and Balta Greaca (RO)

Awareness raising

Concept and design of the visitor centre of Rusenski Lom Nature Park

Project structure and management

The initial project area (**Fig. 1**) includes Danube River and its floodplain in Romania and Bulgaria, between Rkm 495 – 540, corresponding to the areas of Giurgiu (RO) and Ruse (BG) counties.

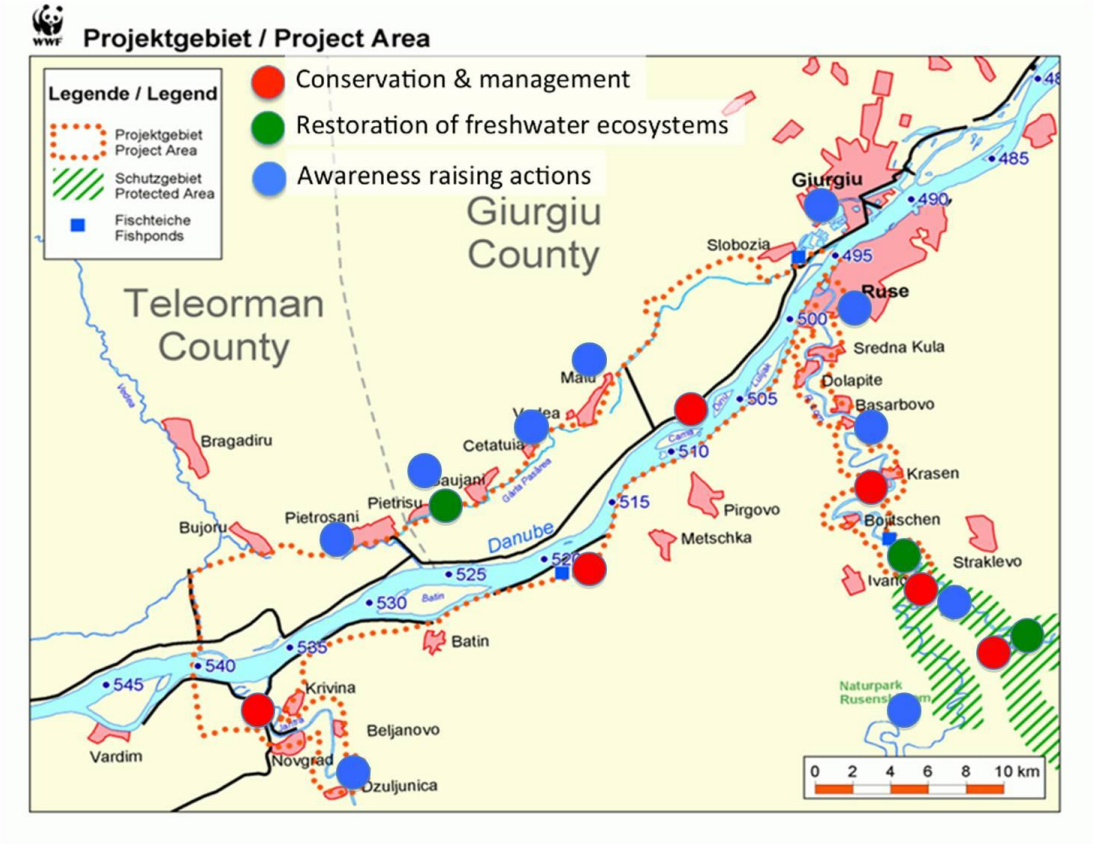

Fig. 1 – Map of the project area

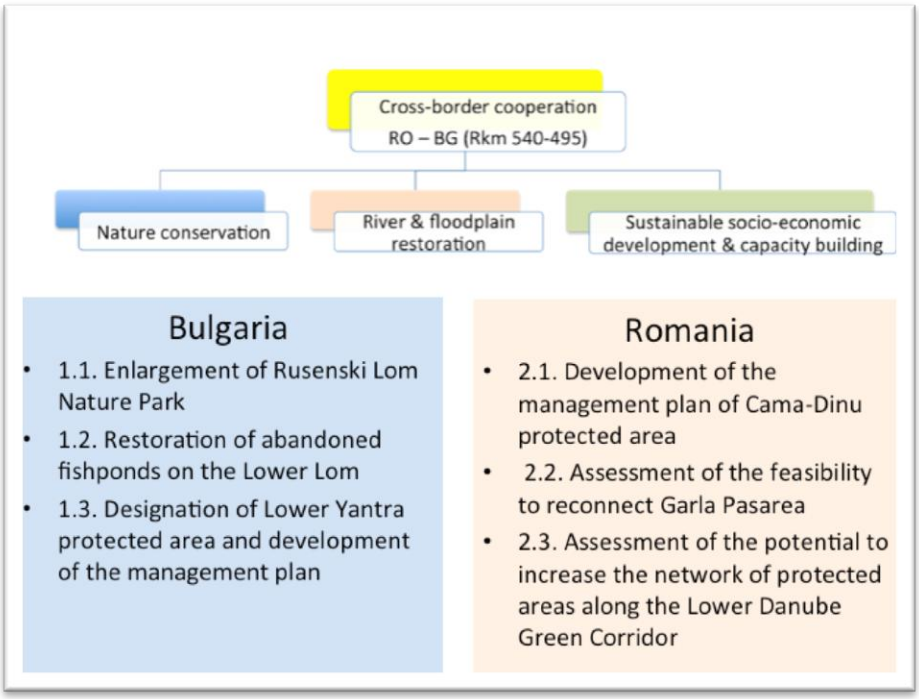

Fig. 2 – Project structure

During the project implementation the project area was extended further upstream reaching Persina Island (as part of the inland navigation study) and downstream to the Balta Greaca and Srebarna Lake (pre-feasibility studies).
The project comprises three components,

responding to the needs for conservation and management of protected areas
restoration of lost/degraded floodplain areas and
capacity building/awareness raising in the area targeted (**Fig. 2**).

Under each component of the project, mirror actions were planned in both countries and have been to a significant extent implemented. The project implementation team consisted of WWF staff from WWF Germany, Romania and Bulgaria supported by local partners (Rusenski Lom Nature Park, Friends of Rusenski Lom, Environmental Protection Agency Giurgiu and others). During project implementation, other key stakeholders were involved in different activities as follows:

- In Romania:
  - Giurgiu County Council
  - Romania Water Authority Arges – Vedea River District
  - National Agency for Land Reclamation Giurgiu branch
  - Mayors of 8 villages included in the project area
- In Bulgaria:
  - Regional Environmental Inspectorate – Ruse
  - Regional Forestry Agency – Ruse
  - State Forestry Unit Dunav-Ruse
  - Municipalities of Ruse, Ivanovo Tzar Kaloyan, Vetovo and Tzenovo

Project Progress and Deliverables

In order to describe the project progress and impact, the results of each activity were assessed against the initial project objectives (**Table 1**). Deliverables corresponding to each activity are included in the Annexes attached to this report.

Table 1 – Project progress

Project Objectives	Expected Results	Project main activities	Progress vs. objectives	Deliverables
1. Protection and restoration of Lower Lom and Lower Yantra River in Bulgaria	Lower Lom and Lower Yantra rivers are protected and key sites restored	Enlarge the boundaries of „Rusenski Lom Nature Park (RLNP)“ to include other important sites for biodiversity conservation and mouth of Lom River	Scientific studies to document the enlargement of the RLNP developed and proposal submitted to the Ministry of Environment	**Annex 1** 1-1 Protected area Rusenski Lom 1-2 Proposal for enlargement of RLNP 1-3 Studies Rusenski Lom
		Restore former fishponds in the area of „Rusenski Lom Nature Park“	Feasibility studies for the restoration of Mechka and Ivanovo fishponds developed; Restoration of Ivanovo fishponds (8 ha) implemented	**Annex 2** 2-1 Restoration of Rusenski Lom and Mechka 2-2 Feasibility studies on Mechka and Ivanovo fishponds
		Designate Lower Yantra as protected area and prevent deterioration of river connectivity	Scientific studies to support designation developed; Proposal submitted to the Ministry of Environment; Feasibility of restoring river connectivity assessed	**Annex 3** 3-1 Protection of Yantra River 3-2 Studies Yantra 3-3 Proposal for designation of Lower Yantra protected area; 3-4 Report on improvement of river connectivity and ecological conditions; 3-5 Cost benefit analysis of Lower Yantra barrage
2. Protection and restoration of the Danube floodplains in the Giurgiu area (km 495 – 538), Romania	Conditions for effective management of Cama-Dinu-Păsărica protected area established and potential for restoration and enhanced protection of the Danube Floodplain in the area, assessed	Develop the Management Plan of the Cama-Dinu-Păsărica protected area	Management plan for Cama-Dinu-Păsărica nature reserve developed and submitted to the Ministry of Environment	**Annex 4** 4-1 Management plan with Annexes
		Assess the potential of designation of new protected areas within the project area as important component of the Lower Danube Green Corridor	Cama-Dinu-Păsărica Nature reserve included in a larger area (22.874 ha) designated as Natura 2000 site (SPA)	**Annex 5** 5-1 Map of the ROSPA Dunăre- Vedea
		Assess the land use in the project area and propose alternatives for sustainable socio-economic activities	Using GIS tools and based on current and historical land use in the area, alternatives for sustainable development were proposed	**Annex 6** 6-1 GIS tool; 6-2 Socio-economic study of the project area

Project Objectives	Expected Results	Project main activities	Progress vs. objectives	Deliverables
3. Raise awareness and build capacity of key project partners for medium and long-term conservation and wetlands restoration actions in the project area, Romania and Bulgaria	Relevant institutions/organisations enabled to successfully implement nature conservation and wetlands restoration actions	Develop feasibility study for the restoration of important habitats in the project area	Feasibility study to restore the connectivity of Gârla Pasărea developed	**Annex 7** 7-1 Feasibility study Gârla Pasărea
		Organise trainings for key project partners in the field of protected areas management and fundraising for nature conservation	4 cross-border thematic seminars organised	**Annex 8** 8-1 Seminar 2006; 8-2 trainings farmers RL 2006 8-2 Seminars 2007, 2008 8-4 Seminar 2009; 8-5 Final Seminar 2011
		Address key challenges for conservation in the project area (species conservation, protected areas management, floodplain restoration, navigation development, floods)	Overview of the status of the Lower Danube Green Corridor implementation focusing on protected areas management developed for RO and BG; Assessment of the conservation status of two flagship species for RLNP: Black Stork and Egyptian vulture; Shadow EIA of the planned interventions to improve navigation conditions at two critical points (Belene, Batin and Cama-Dinu islands); Assessment of the impact of floods and water pollution in the Lom River basin and proposed sustainable mitigation measures	**Annex 9** 9-1 Overview of LDGC implementation; 9-2 Reports on key species conservation status in Rusenski Lom; 9-3 Shadow EIA on inland navigation; 9-4 Flood risk mitigation and water pollution assessment in the Lom River basin 9-5 Studies on caviar trade
		Raise awareness of a wide range of stakeholders through communication actions and information materials	Information materials printed, information panels installed at restoration sites, events organised with children from the local communities, technical support provided to design RLNP Visitor Centre	**Annex 10** 10-1 Visitor center Nisovo - concept 10-2 Factsheet Kalimok and Srebarna; 10-3 River brochure (RO, BG, EN); 10-4 Posters RLNP; 10-5 Puzzles and 3D model wetland; 10-6 Lower Danube photo album; 10-7 Colour book; 10-8. Brochure and info panels CamaDinu;
	Preparation and communication of new project concepts for wetland restoration	Feasibility studies in RO and BG Baseline study for future restoration projects and prioritization	Feasibility studies for restoration of flood-plain in Balta Greaca and Srebarna Lake Assessment of information with GIS database	**Annex 11** 11-1 Feasibility Study Srebarna; 11-2 Feasibility study Greaca. **Annex 12** 12 Assessment of baseline information
4. Project monitoring and evaluation			Final consultation of all stakeholders in the project area and transfer of project results	**Annex 8** 8-5 Final Seminar 2011;

In Bulgaria

An important component of the project was the cooperation with local communities and other key stakeholders. The focus of this component in 2008 was to raise awareness of the local people by developing an active consultation process with the stakeholders and by providing information about the implications of the enlargement of the Park boundaries. Meetings were organised with the mayors of villages located within the park territory (including the enlarged area). This process was conducted by the Nature Park Administration and the Friends of Rusenski Lom Association. The common agreement was that the area would entirely cover the N2000 zone and some additional areas. The final proposal was communicated to the stakeholders and officially submitted to the Ruse district authority. The Ruse district authority dedicated two special sessions to discuss the enlargement proposal, which was finally accepted and was submitted for endorsement to the Ministry of Environment.

Within the Rusenski Lom Nature Park the project supported the implementation of specific conservation measures for endangered species. Two feeding places were established for the Egyptian vulture in the western part of the extended territory and are regularly monitored. Information materials were produced to raise awareness of the local communities on the importance of the conservation measures for the survival of this threatened species.
The area is also important for conservation of other priority species, e.g. Black stork, Otter, European souslik and specific measures targeting these species were integrated in a package of agri-environmental measures and submitted for financing under the National Rural Development Plan.

For the restoration of Rusenski Lom River a feasibility study was conducted. A territory at the fishpond close to Ivanovo was selected as the first potential restoration site along Rusenski Lom River. The consultation process with the local stakeholders was complicated because the main stakeholder is the Ministry of Culture and several meetings were necessary in order to explain the aim and necessity of the restoration works.The Ministry of Culture accepted the restoration proposal and this activity could be implemented in 2009?.
Another site (Batakliyata), without land ownership difficulties was selected to demonstrate restoration. The works included the removal of the dykes and reconnection the fishpond to the Lom River. It is expected that for the two restoration sites in the first stages of succession the territories will be converted into temporal wetlands and later the natural processes will transform them into wet meadow or floodplain forest typical for the region.
The pre-feasibility study for the restoration of Mechka fishpond discovered major obstacles for a reasonable improvement. There are two possible solutions: 1) refurbishment of hydrotechnical structures (very expensive) and 2) removal/opening of a section of the dyke along the Danube. The second option is currently also unfeasible due to high compensatory costs requested by the owners of the fishpond. Therefore the work at this site was limited to motivating the owners to prepare an aqua-environmental plan to access compensatory payments for damages produced by fish-eating birds (herons and cormorants, including the endangered Pygmy Cormorant).

In 2011 (in the framework of the final extension period) a pre-feasibility study for improving the water regime of Lake Srebarna was carried out. The aim of this study was to explain the problems arising from past interventions in the reserve, as well as to analyse the current issues. As part of this study an analysis of the existing data and information about the area was conducted and information gaps were identified which will serve as baseline for future development plans.

The proposal for the designation of Lower Yantra as protected areas was submitted to the Ministry of Environment for endorsement. The local authorities and NGOs stopped the plan for the construction of a new hydropower plant on Lower Yantra River.

A new visitors and research center of the Rusenski Lom Nature Park is under construction in the village of Nisovo since spring 2011. The concept of the center and the technical assistance for the fundraising were provided through this project funding. To a large extent the centre is practically the continuation of the project work. At present, the Park Directorate supported by WWF is fundraising for the furnishings and exhibition.

In **Romania**

Under the first project component, the development of the Management Plan for Cama-Dinu-Păsărica Nature Reserve was carried out in an extensive participatory manner, including all stakeholders. It was a successful but also a learning experience on how to engage stakeholders with different opinions and how to ensure that conservation objectives for the area remain a priority. As a result, the Ministry of Environment approved the management plan in 2009. The reserve is now part of a larger Natura 2000 site including the Special Protection Area "Dunare-Vedea" and the Site of Community Importance "Gura Vedei – Saica - Slobozia", which fulfills another important activity of the project, the enlargement of the area under protection. An additional activity generated by the project, was the draft management guidelines developed for these Natura 2000 sites, which will serve as a basis for the Management Plans of the two sites.

In order to have a basis for discussion with different stakeholders and for communication purposes, a vision for the area was generated, including elements like reviving traditional practises, using the opportunity of being part of the territory of Natura 2000 sites, thereby getting access to payments by agri-enviornmental schemes. The vision was based on GIS analysis of historical and current land use in the area, interviews in the local communities with different population categories and expert advice. The interviews offered a good sample of people's perception about the past, present and future of their area, especially in terms of land use and small business opportunities.

The implementation of the second component, the restoration of parts of the floodplain, was not fully implemented. The sites targeted by the project were Garla - Pasarea, a stream moving along the terrace and fed by groundwater, used by the communities to water the animals and to breed domestic birds, and to operate fishponds (Slobozia). While for the fishpond the obstacle were the ownership rights shared by different stakeholders and the complicated and time-consuming dialogues without leading to concrete results, the first site has a high potential for restoration, supported by the local communities. The feasibility study conducted as part of the project identified feasible but costly solutions: dismantling of the dykes fragmenting the water body and restoration of the longitudinal connectivity. Funding sources were identified in the Structural Operational Programme on Environment.

Training of the key stakeholders, especially cross-border workshops were regularly organized. Through these meetings, the results of the project were transferred, partnerships were built and experiences shared. Good examples in this sense are Comana Nature Park and Rusenski Lom Nature Park, which are implementing now in partnership two cross-border projects.

The project had a significant impact through the awareness raising activities implemented in the two countries. Information materials (printed and online puzzles with species characteristic for the project area, posters, leaflets, brochures, information panels), virtual models ("3D model wetland" – an interactive tool available online and on CD presenting natural processes related to river and floodplain), Coloring books (a number of aquatic birds identified in the project are sketched in order to be colored by pupils from local schools) and thematic events ("Stork festival" – in 2008 and 2009 an event for local schools was organized having as main topic the stork) were produced as part of this project.

Project added value

The project was a good framework to lever commitment of a wide range of stakeholders in the area, both in Romania and Bulgaria. People from the project area were also invited to participate in other activities, like seminars, workshops organized by WWF DCP on sustainable agriculture, fisheries and tourism.

The project also created a good framework for increased cross-border cooperation between different stakeholders in Romania and Bulgaria and for improved capacity to implement nature conservation projects. Two project proposals were submitted to raise additional funds for such activities:

1. Rusenski Lom Nature Park Authority submitted a proposal under the National Operational Programme on Environment: "Rusenski Lom centre for rock nesting birds".
2. Rusenski Lom Nature Park Authority (Bulgaria) and Comana Nature Park Authority (Romania), supported by the project team, submitted a proposal under the Romania-Bulgaria Cross-Border Cooperation Operational Programme 2007-2013, addressing sustainable management of natural ecosystems as a way to adapt to climate changes and to improve the livelihood of the local communities.

One of the most important results of this project is the change of practice and the setting of a precedent. The project was running in parallel with the preparation of new management plans for the river basins in accordance with the Water Framework Directive. The restoration activities implemented as part of the project were included as best practice in the programs of measures in the Danube River basin management plan. The current project paved the way for all subsequent restoration projects and for applying the concept of more space to rivers.

The successful implementation of the restoration projects in Bulgaria along with active communication, were captured with interest by other stakeholders opening windows of opportunities for other similar projects (e.g. Srebarna, for which the prefeasibility study was developed as part of this project). In Romania, the Ministry of Environment is committed to implement a large-scale restoration project as a pilot for future similar projects. The pre-feasibility study developed for Balta Greaca as part of this project will be used as a basis for discussion for such a pilot site.

Recommendations for future actions

The project has built up capacity and experience in wetlands restoration and conservation in Romania and Bulgaria. There are already implemented projects, as well as planned future ones, in which the Bulgarian and Romanian governments are involved. Funding sources for wetlands restoration projects can be accessed, however, co-financing remains one major stumbling block, not only for NGOs but for public authorities as well. We find it is very important that the implementation of these projects is monitored by NGOs and the state institutions are supported in the implementation and fundraising. Here the role of the NGOs and partner networks like the one created within the current project will be of key importance in maintaining the interest in this topic and the transfer of knowledge and experience, and not least generating ideas of new sites and approaches.

The results of this project, especially the study of the Danube river bed and its tributaries Yantra, Rusenski Lom and Vedea helped identifying the major threats to the rivers in the two countries: connectivity (river barrages, small Hydro Power Plants and others), destruction of river habitats and disappearance of species (fish). It turns out that while there is progress in improving the water quality, the problems related to hydromorphology and to the protection of rivers in this area remain to a large extent unsolved. The enforcement of EU and national legislation is very poor and examples of good practice on local level or guidelines are not available. As part of the project, the above-mentioned problems were pointed out to the authorities dealing with the river basin management plans, but the preparation of operative plans and their implementation is still a challenge. Using the good experience of the current project, exchange of experience and best practice examples from Germany and other EU member states on how to address these threats, helps to improve the enforcement of the EU legislation.

Continuation of restoration activities remains a priority of WWF's conservation work in the area, therefore leveraging funds for pilot projects.

Main arguments:

- Interest from environment and water authorities at national level to implement restoration projects as a contribution to the implementation of the Water Framework and Nature Directives andto learn on Climate Change Adaptation Measures
- Funds are available for wetland restoration through Structural Operational Programme on Environment, particularly in Romania, but the Feasibility Studies should be made available together with the project proposal and not part of it, which requires additional funding sources.
- Higher attention to such solutions to mitigate floods and droughts, as these events will become more frequent and may have unexpected impacts over the next period of time

The EU Life+ Programme is designed to finance projects contributing to biodiversity conservation and management, policy and communication and environment. Though it is an attractive funding source, the co-financing required is many times an obstacle for the submission of proposals. Funds as from DBU may play an important role.

Based on this extensive positive project experience and with the help of the additional pre-feasibility studies following restoration projects in the Lower Danube Green Corridor area are considered as priorities:

- Demonstrating restoration of river connectivity, riparian habitats and freshwater species on the Danube tributaries. The activity includes the transfer of know-how and demonstration of removal of unused barrages and/or construction of fish passes. New approaches for the protection of riparian forest (currently the riparian forests in the region are treated only as obstacle for the conduction of the high waters). Restoration/reintroduction of extinct fish species.
- Restoration of Srebarna Nature Reserve, one of the most important wetland areas in Bulgaria, still lacking effective management and being under threat of degradation in the absence of restoration measures to restore the connectivity to the Danube river system; The Managing Body, the Regional Environmental Inspectorate, is in general supporting this approach, however, detailed discussions and planning are still necessary to come to a common agreement;
- Restoration of Greaca polder, as provided by the pre-feasibility study has a high potential, the main stumbling block being the land use and ownership, especially in the eastern side of the area. The polder is also proposed by the Romanian Ministry of Environment as a pilot large-scale restoration project; High feasibility but implementation will be possible over a longer period of time, possible 3-5 years.
- Restoration of Bistret (western part of Romania, if fully restored – 25.000 ha), the approach is benefiting from strong local and national support, especially because it was the first flooded area during the extreme Danube flood of 2006. Though the cheapest solution will only restore 6.000 ha, the project could be a pilot for floodplain restoration and could be implemented over a shorter period of time, 2.5 – 3 years.