



Danube River Basin Management Plan – Update 2015

Contribution by DANUBE PARKS – Danube River Network of Protected Areas

within the Public Consultation Process

Orth an der Donau, 13th July 2015

Introduction

The Danube River forms the lifeline for our joint Danube natural heritage and is the blue bend connecting all Danube Protected Areas. The Danube River Basin Management Plan – update 2015 prepares the framework for the next years' work and defines priorities of activities in its basin. Consequently, it is of fundamental importance for the Danube region, for the work of the Danube Protected Areas and for the wise management of the Danube region and its 80 million inhabitants.

Facing this relevance, DANUBE PARKS highly welcomes the efforts of the ICPDR to elaborate a suitable tool and useful document and stresses the high quality of the draft version.

Already in December 2014, in the frame of the ICPDR ordinary meeting, a first statement on the DRBMP was endorsed by DANUBE PARKS together with several NGOs, all active as Observer at the ICPDR. This first statement welcomes the stronger focus of the updated DRBMP on integration and its focus on biodiversity. DANUBE PARKS together with NGOs acknowledge that natural water retention measures are highlighted as sustainable option for managing flood risks. However, the position paper from December 2014 also underlines the missing progress on certain issues and hopes to address them when revising the draft plans during the public participation process (e.g. the missing priority ranking of river restoration and green infrastructure in the Programme of Measures, the need for correction of the designation of the Lower Danube and sections of the Sava as "heavily modified", the missing investments to overcome Interruption of River and Habitat Continuity, the slow progress on sustainable hydropower and inland navigation, the need for cooperation with the EU Strategy for the Danube Region to develop a biodiversity conservation plan).

DANUBE PARKS Contribution

After careful study of the draft document by DANUBE PARKS experts from several Danube-countries, we would like to contribute the following comments to the DRBMP - update 2015. These contributions from the perspective of Danube Protected Areas should ensure to adequate anchoring of biodiversity, integration, river morphology and other aspects relevant for the efficient management of Danube natural assets in the frame of the DRBMP:

1) Disconnected adjacent wetlands/floodplains

1 a) Most Danube Protected Areas preserve floodplains and wetlands which are still fully or partly connected with river. Mostly, the existing connectivity is one the factors for their outstanding natural value and, consequently, the reason for high level of protection (National Parks, Nature Reserves etc.).

However, due to hydro-morphological alterations, nearly all (most valuable) natural sites and Protected Areas are facing **damaged, insufficient and bad connectivity between river and floodplains** (should be added in chapter 8.1.4.2.1). Limited morphological processes at the river (no new side branches and meanders, limited side erosion etc.) lead to sedimentation and succession in the floodplains and cause increasing dis-connectivity. Consequently, also in the Joint Programme of Measures (JPM) wetlands/floodplains which are still connected with the river but loosing step by step their connectivity should be taken into consideration. Therefore, we propose to add in chapter 8.1.4.2.1:

→ Improvement of connectivity between rivers and their wetlands/floodplains which are caused by alteration of river morphology (caused by bed and bank reinforcement for erosion control, the straightening and deepening of the river channel or by river substrate manipulation)

- Specification of number, location and area of wetlands/floodplains that connection will be improved by 2021 by each country.

- Ensuring exchange with relevant experts on the implications of the measures for sustainable flood risk management.

1 b) The **connectivity between the river and the floodplains** is a key factor for the long term functioning of aquatic and semi-aquatic ecosystems. Consequently, it is of crucial relevance for the efficient management of Danube Protected Areas.

Facing the high relevance of better connectivity for flood prevention and biodiversity conservation – in the Upper and in Middle Danube as well as in the Lower Danube – we see figure 25 “Area of DRBD wetlands which are reconnected or with reconnection potential” as misleading and, partly, counterproductive.

Definitely, the graph is right to show the large areas with potential for reconnection at the Lower Danube. However, considering e.g. the growing importance of natural water retention measures as contribution to flood prevention, DANUBEPARKS experts identified also the potential and the need for large-scale reconnection measures at the Upper and the Middle Danube (possible also on areas > 500 ha). Innovative techniques (e.g. opening or relocation of flood prevent dykes) have to be considered to realize this potential also at the Upper Danube and Middle Danube.

In this content, we refer to studies elaborated by the WWF (Assessment of the restoration potential along the Danube and main tributaries (2010, Schwarz); Assessment of the Restoration Potential in the Transboundary UNESCO Biosphere Reserve “Mura-Drava-Danube” (2012, Schwarz) and offer the expertise of the Danube Protected Areas to identify the restoration capacity in each Protected Area along the Danube.

Furthermore, we see in graph 25 some coherence in the interpretation of “totally” or “partly” reconnected.

2) The role of Biodiversity conservation within the WFD and in the DRBMP

The draft document stresses the need for coordination of the WFD with other Directives like Birds Directive and Habitats Directive (page 66). The high relevance of biodiversity conservation is underlined in the Danube River Basin Management Plan (e.g. chapter 6.3). Both aspects are highly supported by DANUBEPARKS.

Consequently, we would see the need to stronger consider and integrate biodiversity aspects into several chapters:

2 a) The **interruption of river continuity and morphological alterations** are main drivers for the loss of characteristic species of river habitats and, consequently, for the loss of biodiversity on a larger scale.

Due to the high relevance of river continuity for morphological processes and, furthermore, for the conservation of characteristic species of river habitats, the definition of the vision in chapter 8.1.4.1 “Interruption of river continuity and morphological alterations” should consider river dynamics as factor for biodiversity conservation. The strong impact of transversal structures on river morphology, downstream and upstream, should be highlighted.

DANUBEPARKS highly welcomes all efforts to make transversal structures passable for fish and sturgeons and support this vision for these group of species defined in the draft document of the DRBMP update 2015. However, the crucial value of longitudinal and transversal river continuity should be highlighted, independently of fish and sturgeon migration which cover only one aspect of continuity.

2 b) Based on the results of the JDS 3, chapter 2.1.4 describes very well the quality of the Danube River in terms of **river morphology**. Considering the intention of the DRBMP to strengthen the coordination between the WFD and the Birds and Habitat Directive and facing the key role of biodiversity conservation in this context, DANUBEPARKS would like to stress the results of the JDS 3 on riparian bird species as indicators for rivers morphology which show a significant relationship between absence and presence of indicator species and the hydro-morphological class as the predictor: only river sections which are slightly modified (class 2) or even in a better ecological status show to full “biological potential” in terms of indicator species. Stronger hydro-morphological alterations reduce this ecological value, consequently, class 2 can be seen as a threshold for a good status in terms of biodiversity. This conclusion could be described in chapter 4.1.2.1 respectively in chapter 4.1.2.2 and should be considered in the vision and management objectives for hydromorphological alterations (8.1.4.1.1).

3) Alteration of river continuity for fish migration

The interruption of the longitudinal continuity for fish migration is evident and well stressed in the draft version of the DRBMP update 2015. DANUBE PARKS highly welcomes the progress on this issue and the permanent experience exchange of fish migration experts to make sure that measures on restoration of river continuity for fish migration are as efficient as possible, e.g. in the ICPDR technical paper “Measures for ensuring fish migration at transversal structures”.

However, influence of barriers and interruption often cannot be compensated for the full quantity of fish, not for all species, and often downstream migration is still limited. These aspects should be mentioned in the DRBMP to avoid the mis-leading picture of full compensation of barriers by fish ladders. A careful evaluation and further studies on infrastructure to overcome alterations of river continuity for fish migration is needed.

4) From “Interruption of river continuity and morphological alterations” (chapter 8.1.4.1.) towards a Danube River Habitat Corridor

The vision and management objective of the updated DRBMP definitely should stress the high relevance of the Danube River as habitat corridor of European relevance, not only in aquatic habitats (fish, sturgeons), but also in semi-aquatic and terrestrial habitats and as flyway for water-related organisms. According to the priorities defined in the Action Plan for the EU Strategy for the Danube Region and the draft operational program of the upcoming Danube Transnational Cooperation Program, DANUBE PARKS propose to include in chapter 8.1.4.1.3 the clear objective to develop the Danube as habitat corridor.

5) Designation of Heavily Modified Water Bodies

All Danube-wide monitoring schemes implemented by DANUBE PARKS underline the high ecological quality of the Lower Danube and its floodplains: The study on “Riparian bird species as indicator for River Dynamics and Morphology” – implemented in the frame of the Joint Danube Survey 3 – clearly shows the outstanding value of the Lower Danube. The definition of these sections and water bodies as heavily modified is in clear contradiction to scientific results.

Additionally, these results also shows the extreme high ecological value of some sections at the Sava River, e.g. the highest abundance of Sand Martin - an indicator bird species for intact river morphology - of all rivers investigated in the Danube-river basin. Consequently, DANUBEPARKS sees a clear need to review the methodologies for water body designation: The categorization should not neglect scientific results of Danube-wide monitoring schemes implemented in the frame of the JDS and EU-funded programs, but has to reflect the outstanding ecological value of sections of the Lower Danube and the Sava River.

6) Sediment and sustainable Hydropower

The draft version illustrates very well the disturbed and altered situation of sediment quantity at most large rivers within the Danube River Basin and stresses the need for actions by an integrated approach with hydropower and other sectors.

Taking this fact into consideration, in chapter 6.5 Sustainable hydropower it should be highlighted that sedimentation and transport of sediments play a key role when it comes to the sustainability of hydropower.

7) Sediment and hydro-morphological alterations

DANUBEPARKS welcomes the strong focus of the DRBMP on the sediment issue and fully supports the initiative for a Danube-wide project to improve sediment management stressed in the draft document.

Considering the key importance of sediment management and riverbed incision as significant problem, a clear statement is missing in the DRBMP to tackle this issue: Specific actions are needed to balance the sediment regime in a) the last free flowing sections in the Upper Danube (in particular east of Vienna), b) downstream Gabciovo dam and c) downstream the Iron Gate dams. According to the different morphological situation and local frame conditions, detailed concepts have to be developed. However, the general perspective should be formulated in the management plan.

Beside the focus on the crucial aspect of sediment quantity and transport in the main river channel, also the accumulation of fine sediments in the floodplains due to hydro-morphological alterations should be stressed in chapter 2.1.5. Active measures are necessary to counteract this factor for the increasing dis-connectivity between river and wetlands.

Taking this fact into consideration, restoration of hydro-morphological alterations gain higher priority, to be underlined in Joint Programme of Measures (JPM) for Hydromorphological alterations (chapter 8.1.4)

8) Protected Areas in the DRBD

The draft document fulfills the requirement of the WFD to register protected areas. However, from our perspective, unsurprisingly, we see Protected Areas in an important role for many aspects listed in the DRBMP and, therefore, would welcome to have some additional points listed, to stress the proactive role of Protected Areas in the Danube River Basin:

- The Danube is the most international river of the world. Consequently, the harmonization of the Protected Areas' management and transnational cooperation is strongly needed, to ensure coherence among all Protected Areas. This requirement should be stressed. In this content, the Danube River Network of Protected Areas could be mentioned as unique instrument to build a platform for the Protected Areas along the most international river and as good practice for other river systems, as stressed by winning the Natura 2000 Award 2015.
- Protected Areas are active on many integration issues, in particular at the interface of river basin management and nature protection. Therefore, a link to chapter 6.3 should be included.
- After a first look of MAP 15, we would recommend a careful check whether all relevant Protected Areas are included (e.g. in Austria the Natura 2000 site "Tullner Auen" or the "Wachau" are not included).
- In point 4 of this statement, we propose to add (in chapter 8.1.4.1.3) the development of the Danube as habitat corridor as objective of the DRBMP, to counteract the "Interruption of river continuity and morphological alterations". In this bio-corridor, Danube Protected Areas act as core areas, a role which should be stressed in chapter 3 of the DRBMP.
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9) Cooperation with the EU Strategy for the Danube Region

The DRBMP stresses the high relevance of integration of different sectors, an aspect which is welcomed by DANUBE PARKS.

The EU Strategy for the Danube Region has been launched as policy framework to ensure the equal representation and a balance of different sectors and Priority Areas in this macro-region. Consequently, DANUBE PARKS would

welcome to anchor the approach of EUSDR PA 6 – e.g. biodiversity conservation, initiatives towards a Danube Habitat Corridor with strong Protected Areas as core areas – in the DRBMP update 2015.

10) Organic pollution & lateral connectivity

Floodplains are multifunctional and deliver a wide range of ecosystem services, including natural retention and purification of organic loads

Considering the ecosystem services of intact floodplains and the loss of floodplain habitats in the past, the restoration of floodplains on agricultural land and to banish intensive agriculture from active floodplains should be stressed in the chapter 2.1.1.2 “Organic pollution from industry and agricultural point sources”.

11) Hydropeaking

The pressure by hydropeaking is well illustrated in the DRBMP. The difficulty to overcome this impact in particular at the Upper Danube is stressed.

To have a good starting point for the documentation of the current situation and expected improvements by 2021 (chapter JPM 8.1.4.3.3) a careful description of the present situation is necessary: For Germany, graph 28 shows an “unspecified magnitude”, but data are available and should be included (e.g. five hydropower plants between Bertoldsheim to Vohburg operate with a magnitude of 1.5 m twice a day).

12) Focus on floodplains

DANUBE PARKS highly welcomes all steps to reach the vision to reconnect and restore Danube floodplains and wetlands (chapter 8.1.4.2.1). Facing the loss of floodplains in the Danube River Basin in the past and considering the unfavorable condition of numerous wetlands, the no net-loss principle can be seen only as first step, but a pro-active approach towards restoration has to be stressed.

In this context, DANUBE PARKS would see the need to have a stronger focus of ICPDR activities (e.g. within the next Joint Danube Survey JDS4) on the conditions of floodplains, not exclusively on the river itself.



13) **Minor technical comment**

page 38, box Integrated River Engineering Project: the official English wording is Donau-Auen National Park (instead of National Park "Donau-Auen")

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