



**DANUBE RIVER BASIN DISTRICT MANAGEMENT PLAN –
2015 UPDATE
STATEMENT, COMMENTS OF WWF DCP AND WWF ADRIA**

WWF as observer to the ICPDR meetings, followed and contributed to the development of the DRBMP. We fully acknowledge and appreciate the huge efforts and capacity invested in data, information collection, discussions among different experts and representatives of the countries and formulation of the draft plan!

In our statement paper we intent to point out some key issues for further improvement.

- **2.1.4 Hydromorphological alterations**

Deepening of the riverbed was significant in the 20th century. It was more than 1,5 meter in 100 year in some sections of the Hungarian Danube, and more than 1,0 meter/100 year on the Croatian-Hungarian Drava, also some parts of the Tisza suffers from riverbed incision (source: László Rákóczi and János Szekeres, VITUKI: “Environmental effects of industrial dredging on alluvial riverbeds”.)

The significance of riverbed incision need to be emphasized properly in this chapter since it has broad consequences on the river ecosystem and a key factor to design future measures.

- **4.1.4 Designation of heavily modified and artificial water bodies**

In case of several water bodies – *like Drava upstream Barcs, free-flowing Sava, Lower Danube* – the HMWB designation is questionable. The Joint Danube Survey 3 results give sufficient indications, for example, that the Lower Danube is not heavily modified. These sections are one of the best conditioned stretches in the region and comparing to other sections, we don't see the proper justification of this decision even if in case of Drava hydropeaking or flood protection dykes along the Lower Danube are considered.

The revision of these designations are recommended.

In Croatia HMWB are still not defined, only candidates exist, because of lack of data that disabled final valorisation of water bodies.

- **2.1.4.4 Future infrastructure measures + annex, map**

- In the annex, there are future infrastructure projects listed where neither EIA, nor SEA were elaborated and at the same time no deterioration is expected.

We would like to ask for an explanation how “no deterioration” is justified if no environmental analysis was done.

Also a question for the future how to select FIPs for the DRBM. If any independent body or institution should check/verify the justifications for the statements in the annex (e.g. no deterioration). We would also like to repeat our call for making art 4.7 studies available on the ICPDR intranet in order share information and procedures.

- This chapter mainly includes projects that are under implementation and less future ones. We have information about some *planned dams which pose a significant risk of deterioration and transboundary effect* is expected (like in Bratislava, Slovakia, in Slovenia on the Mura, or 3 dams on the Drava upstream Osijek), but they are *not listed in the annex. What is the reason?*

- **2.1.5.1 Quality and quantity aspects of sediments**

- There are/were different industrial activities along the Danube and its tributaries, which deposited hazardous substances, sediments along the rivers, usually very close to the main course. The red sludge catastrophe on Torna creek and river Marcal in 2010 is an example that shows the volume of the risk of reservoirs, where polluted sediments are deposited. There are further red sludge deposits along the Danube, which can either cause accidental catastrophe or effect sediment and water quality. Reservoirs of metal mines on upper Tisza are also risks on the sub-basin. At the beginning of the years 2000, the cyanid catastrophe at Baia Mare also underpin the importance of the subject. .

We suggest to refer to hazardous substances in this chapter as risk factors to the sediment quality.

- Concerning the sediment quantity the Danube is highlighted, but other rivers are not mentioned. We suggest at least to **list other main rivers, where the lack of sediment is a significant problem and also the main root causes** like dams, excavations, river regulation.

- **4. Monitoring networks and status assessment + maps**

In the status assessment we saw inconsistent approaches between countries e.g. in case of Mura and Drava. The level of modification significantly change at the border while the natural conditions don't underpin this. (At-Slo border it is significant: Mura is heavily modified in Austria, natural in Slovenia. The same situation exist on the Croatian-Hungarian border on river Drava, on the Romanian-Hungarian border on rivers Körös/Cricul and Berettyó/Barcau, and on the Hungarian –Slovakian border on river Bodrog.

- **6.1 Interlinkage between river basin management and flood risk management**

In order to achieve the maximum synergies and reduce the potential conflicts, the following key conditions, activities are necessary:

Developed measures under the WFD and FD processes have to be the result of a **joint planning or at least iterative feedback loops between the planners of the RBMP and FRMP. Relevant water bodies have to be analysed in parallel from both directives point of view.** Analysis should be done of different measure scenarios for the water bodies and the most effective ones chosen from the point of view of reaching environmental objectives, reducing flood risk and fulfilling cost-effectiveness.

As a principle, apart from non-structural measures, in case of field interventions NWRM (which help to achieve WFD objectives) should be considered first as priority for flood risk mitigation. If these measures cannot fully reduce the flood risk to the required level, then traditional engineering measures could be considered as supplement, ensuring combined solutions. Keep purely structural, traditional engineering measures with deterioration potential to a minimum.

More concretely, it is suggested to overlay Flood hazardous and risk maps with RBMP floodplain restoration maps in order to do the following:

- **From a flood risk management perspective, analyse and consider floodplains earmarked for restoration under the DRBMP as first choice flood risk management measures.** In places where floodplain restoration is not sufficient or not an option, other flood risk management solutions such as polders, reservoirs on the floodplain should be planned in a way that they support the WFD objectives e.g. by maintaining or increasing the area of wetlands within the polder and adapting the land use practises according to it (like grazing wet meadows, managing reed). Base these decisions on a cost-benefit analysis or multi-criteria analysis that give sufficient weight to WFD benefits (like nutrient reduction, fish production, biodiversity).
- From a water management perspective, **make those floodplain restoration sites a priority for action that respond best to flood risk mitigation objectives.** Reconsider adding areas to the list of floodplain sites to be reconnected if they are urgently needed flood retention areas. Base these decisions on a cost-benefit analysis or multi-criteria analysis that give sufficient weight to flood, water retention benefits.
- **Land use values at risk from flood damage should be scrutinised in order to analyse whether (harmful) subsidies favour a land use type that is not favourable to WFD implementation and whether a shift of subsidies to WFD compliant land use makes a NWRM profitable.** For example, wheat production on a floodplain area not favourable for this type of production might only be profitable because the farmer receives CAP funds. This pushes up the value of land and thus might favour a polder solution when in fact a floodplain restoration measure would have more benefits from a WFD and FD perspective. Shifting CAP funds to measures that support farmers in changing their land use in response to restoration might provide a higher return both for the individual farmer and society.
- Additionally land use change and the wide range of landownership requires special knowledge on **proper stakeholder involvement for which trainings and capacity building for planners and responsible bodies are necessary.**

- **The communication of flood related issues should be well balanced . Flood is not only a risk, but a positive , natural phenomenon**, a service and resource for people and nature. From ecological point of view floods are vital. Floods supply floodplains, connected wetlands with water ensuring fish reproduction, nutrient reduction, groundwater recharge, etc.

Suggested checklist for main flood risk mitigation measures that contribute to WFD objectives:

- restoration of former wetlands/floodplain areas, increasing their size, demolition of existing dykes (like summer-dykes) or dyke relocation
- creation of new wetlands
- restoration of meandering capacity of rivers
- restoration of side-branches
- restoration of oxbows and lakes, use them for water storage
- elimination of invasive species on the active floodplain
- reforestation on catchment
- retention of water, precipitation and sewage
- controlled inundation of morphological floodplains, natural depressions outside the flood protection dykes
- regulations in land use (e.g. no new buildings on floodplains, increase area of grasslands/wet meadows next to the main channel instead of low profitable arable lands)
- change land use that is resistant to floods (e.g. to grasslands/wet meadows on the floodplain instead of sensitive crops)
- modify agriculture subsidy systems in order to ensure incentives for nature friendly land use change (e.g. change to wet meadows, grazing areas like grasslands, reed management, bee keeping)

- **Integration issues: 6.6 Sturgeons in the Danube River Basin District**

- We welcome the great acknowledgement of the importance of Sturgeon conservation. Additionally to the already mentioned problems and measures, we recommend *to add the need for more effective enforcement of sturgeon conservation legislation and in order to reduce incentives for poaching, to involve relevant actors in developing alternative income for fishermen.*
- In *connection with navigation improvement, measures or requirements to protect Sturgeon habitats* are also suggested.
- We recommend to *properly highlight in the chapter the strong need for enhanced research and monitoring of Sturgeon status and distributions as well as key habitats* as key prerequisites of any future measures for Sturgeon conservation.

- **Integration issues: 6.7 Water scarcity and drought**

We suggest to *include in the chapter the reference to river regulations* in the 20th century, which cut many oxbows, side-arms and floodplains from the rivers. The water

retention capacity of rivers and adjacent habitats significantly reduced, which can become a *factor of water scarcity*.

- **8.1.2 JPM: Nutrient pollution**

Improvement of intersectoral working relationship with the agriculture sector and better allocation of CAP funds (strengthen CAP pillar II.) are strongly recommended and supported. Shifting of CAP funds to more effectively finance WFD compatible measures to achieve good status are key prerequisites for either nutrient reduction or floodplain restoration.

- **8.1.4.3 JPM: Hydrological alterations**

- Hydropeaking: In case of several rivers downstream of the dams there is no or very limited information about the water discharge parameters to be released.

Measures to improve the monitoring and real time data from the flows to downstream would considerably supplement measures targeting ecological status improvement and flood protection , and measures that should mitigate and buffer hydropeaking, like implementation of e-flow, based on holistic e-flow assessment.

- The chapter doesn't show the link with riverbed incision and sediment balance. Not only hydropeaking, but *“regular operations of hydropower plants* cause water level fluctuations, which can cause considerable pressures on freshwater habitats. Dams are sediment traps and enhance riverbed incision downstream effecting biodiversity, agriculture, forestry, and water supply. We suggest to *add this link to the text*.

- **8.1.4.4 JPM: Future infrastructure projects**

- The Guiding Principles on Sustainable Hydropower Development in the Danube Basin was adopted in 2013 June. In the last two years little progress is detected in the implementation including especially defining, designating and mapping exclusion zones for new hydropower, according to scientifically sound ecological, cultural and social criteria. (See former NGO HP position paper as reference.)

We recommend to agree on joint actions to define obstacles, difficulties of implementation (considering all relevant stakeholders and authorities) and define the proper tools how to target them.

- We strongly support stakeholder involvement during the pre-planning of projects. Additionally we suggest to add that also concrete planning phases should be observed by stakeholders, *establishment of stakeholder fora to all infrastructure projects that fall under the ICPDR definition for FIP would be necessary*. (This platform would have a kind of supervisory role with permanent members of different stakeholder groups. The costs of this forum should be covered by project budgets. This model worked well during the planning phase of e.g. the navigation route development project on the Serbian Danube.)

- There is unclarity about what an art. 4.7 analysis should entail. *We recommend to develop a more detailed 4.7 guidance document for future infrastructure projects.*
- **8.1.4.1 JPM: Interruption of river continuity and morphological alterations**
 - *Improving monitoring of fish pass functioning and effectiveness is crucial.*
We recognized an inconsistent approach to restoring river continuity. While some countries like Romania assume that GES is already reached or apply art 4.5 for most dams, meantime other countries assume that much more restoration is possible / needs to be done.
We suggest as potential measure for the next period to harmonise the approaches of the countries.
- **8.1.4.2 JPM: Disconnected adjacent wetlands/floodplains + maps**
 - We support the *prioritization of the potential sites to be restored* and also the approach to choose sites as *first priority which have multiple benefits* (like biodiversity improvement, flood mitigation, nutrient reduction, drought/water scarcity mitigation, climate change adaptation, etc.). Desired actions and results need to be integrated into other relevant plans (e.g. Flood Risk or Natura2000 management plans).
 - Compared to the first plan, the *wetland reconnection potential is drastically reduced* in the 2nd draft DRBMP *in the Lower Danube, Prut and Upper Tisza* and *would like to ask what is the reason for this lower level of ambition.*
 - *WWF provided two restoration potential analyses* and here would like to offer them again for further use. We would appreciate a lot if the DRBMP could mention them as potential recommended resource documents:
 - 1.) Assessment of the Restoration Potential in the Transboundary UNESCO *Biosphere Reserve “Mura-Drava-Danube”* ; Vienna, October 2012; Ulrich Schwarz, FLUVIUS (commissioned by WWF)
 - 2.) Assessment of the restoration potential *along the Danube and main tributaries*; Vienna, July 2010; Ulrich Schwarz, FLUVIUS (commissioned by WWF)
 - We would like to highlight again also under the wetland restoration chapter that *improvement of intersectorial working relationship with agriculture sector and better allocation of CAP funds (strengthen CAP pillar II.) are strongly recommended and supported. Shifting of CAP funds to more effectively finance WFD compatible measures to achieve good status are key prerequisites for either floodplain restoration or nutrient reduction.*
- **8.5 Financing the JPM**

As a contribution to accelerate the floodplain restorations in the region, WWF prepared a summary about the main EU funds eligible for different elements of floodplain/wetland restoration processes. Please find attached the document for further use. The brochure is available under this link: http://wwf.panda.org/what_we_do/where_we_work/black_sea_basin/danube_carpathian/publications/?248615/EU-funding-opportunities-for-wetland-and-floodplain-restoration

- **9. JPM: Public information and consultation**

In order to strengthen the WFD-FD linkage in the countries, we suggest a stronger highlight for the need to manage *joint public consultation processes between RBMP and FRMP* in the future.

Contact person:

Laurice Ereifej

Head of WWF DCP Freshwater Programme

laurice.ereifej@wwf.hu