



РЕПУБЛИКА СРБИЈА
Министарство пољопривреде и
заштите животне средине
REPUBLIC OF SERBIA
Ministry of Agriculture and
Environmental Protection



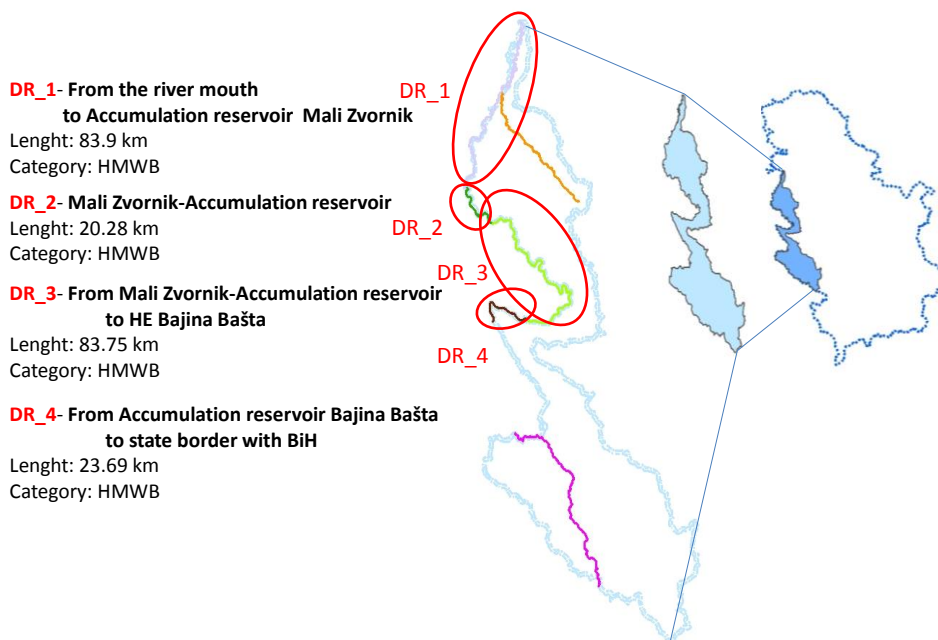
Агенција за заштиту животне средине



E(nvironmental)and C(limat) R(egional) A(ccession) N(etwork)

Regional Workshop

15 - 17 February 2016,
Podgorica, Montenegro



Status of the Water Bodies on the Drina River

Characteristics and location	TYPE	Aimed class	Biological elements					Phys. Chem. Param.			Total physico chemical paramet.	Specific pollutants		Total ecological status	Confidence level	Class of environmental potential	Chemical status	
			Fish	macrophytes Benthic invertebrates	Phytobenthos and Phytoplankton	Total biobio-status	Confidence level	HMWB-High status	Oxygen parameters	Acidity	Nutrients	Other specific pollutants	Confidence level				Class of chemical status	Confidence level
DR_1	2	3	3		2	3	L	NO	2	2	2	2	M	3	L	2	2	L
DR_2	2	3	3		2	3	L	NO				2	M	3	L	2	2	L
DR_3	2	3	3		2	3	L	NO	2	2	2	2	M	3	L	2	2	L
DR_4	2	3	3		3	3	L	NO				2	M	3	L	2	3	L

- Low confidence level due to lack of parameters than have to be measured
- SEPA does not have capacity (analytical equipment) for HYMO: fish, macrophytes and phytobenthos, and some chemical parameters;
- Status is defined according to the parameters that are monitored;
- Full capacity for status definition is expected by 2018;

Directions for the sustainable development of the water management in the Republic of Serbia

- Water management Strategy (draft), 2015
- **Long term goal:** reaching the integrated water management within the whole territory of the republic of Serbia, which will ensure maximum of environmental, economical and social effects with respect to the international treaties;
- **The first priority:** Establishment of the appropriate water management system which will enable appropriate policy framework, institutional and financial capacity for fulfillment of the above mention strategic goal for the development of the water sector
- River Basin Management Plan for the Danube River in the Republic of Serbia (draft), 2015
- All River basin management plans on the whole territory of the Republic of Serbia should be in accordance with the River Basin Management Plan for the Danube River in Serbia;
- All Flood risk management plans on the whole territory of Serbia should be in accordance with Flood risk management plan for the Danube river in the Republic of Serbia;

Environmental objectives

- Protection and improvement of the HMWBs with aim to maintain and improve the good ecological potential and good chemical status;

Drina RB SWMIs –as jointly decided

First priority SWMIs

- Organic pollution: insufficient sewage and WWTPs coverage;
- Flooding;
- Hydromorphological alterations: hydropower energy facilities;
- Nutrient pollution: diffuse pollution from agriculture;
- Priority and hazardous substances: industrial emissions.

Additional SWMIs

- Sand and gravel extraction;
- Damp site used as municipal landfill;

SWMI 1 Organic pollution: insufficient sewage and WWTPs coverage

- VISION...zero emission of untreated wastewater..
- MANAGEMENT OBJECTIVES: (agreed on the Workshop, Sept 2015)
 - Specification of No of waste water collecting systems to be constructed until 2021;
 - Specification of number of WWTP to be constructed by 2021
 - Specification of treatment level (Secondary or tertiary)
 - Specification of emission reduction target;
- Strategic objective:
 - Ensure set of measures that are going to reduce/eliminate pressures of organic pollution from the municipal sewages;

MEASURES:

- Ensure full transposition of Water related EU directive, in water law and related by-laws;
- Development of municipal infrastructure have to be in accordance with water sector's Plan document in the Republic of Serbia (according to prescribed dynamic and priority development);
- ;

SWMI 2: Flooding;

- VISION...no risk or threat to the population and economy
- MANAGEMENT OBJECTIVES: (agreed on the Workshop, Sept 2015)
 - Performance of Preliminary Flood Risk Assessment for whole Drina RB
 - Preparation of flood hazard maps and flood risk maps
 - Development of Drina River catchment-based Flood Risk management Plans (P(revention), P(rotection) and P(reparedness));
 - Coordination with WFD implementation;
- MEASURES:
 - Perform hydrological study and study about sediment transport for the whole river Drina to be able to define relevant waters for further activities (maps and designing), and evaluate anthropogenic effect on the water status;
 - Involve local communities in to the process;
 - Ensure cross sectoral cooperation in flood risk management (urban planning, hydro-energy production, environmental protection, hydromet);
 - In no flooding period ensure constant maintenance and control of water structures for flood protection;
 - Establish the system for the early warning;
 - Define the specially important object that potentially require local flood protection;

SWMI 3: Hydromorphological alterations: hydropower energy facilities

- VISION: ...balanced management of past, ongoing and future structural changes of the riverine environment, so that aquatic ecosystem in the Drina RB functioning in the holistic way and is represented with all native species;
- MANAGEMENT OBJECTIVES: ***(agreed on the Workshop, Sept 2015)***
 - *Construction of the fish migration aids, with the number specified*
 - *Protection, conservation and restoration of wetlands/floodplains, with the defined steps*
 - *Implementation of the no net-loss principle*
- MEASURES:
 - Identify the deviation of the biological parameters which are caused by changes of HYMO characteristics:
 - Identify the measures for reaching good environmental potential by cross sectoral cooperation:
 - Identify measures that do not have negative impact on water use and flood protection

SWMI 4: Nutrient pollution and diffuse pollution from agriculture

- VISION:...balanced management of nutrients emission via point and diffuse source of emission
- MANAGEMENT OBJECTIVES ***(agreed on the Workshop, Sept 2015)*** :
 - Reduction of total amount of nutrient entering the river Drina;
 - Reduction/elimination of phosphate detergents
 - MO for organic pollution with focus on nutrient emission reduction
 - Create base line scenario for nutrient input
 - Define the quantitative target for nutrient reduction; (basin, sub-basin and national);
- MEASURES:
 - Ensure application of ND (276/91) and CAP, by definition of vulnerable zones and implementation of protection measures;
 - Establish monitoring and control of fertilizer and chemicals for plant protection use, especially in the protected areas;
 - Ensure adequate use of forest land;

SWMI 5: Priority and hazardous substances: industrial emissions

- VISION: ..no risk or threat to human health and aquatic ecosystem..
- MANAGEMENT OBJECTIVES (*agreed on the Workshop, Sept 2015*):
 - Elimination/reduction of total amount of hazardous substances entering the Drina river (good chemical status by 2021)
 - Implementation of BAV and BEP
 - Set up quantitative reduction objectives for pesticide emission;

MEASURES:

- Ensure reconstruction of existing WWTP in industries to reach prescribed emission standards;
- Ensure pretreatments for industrial discharge in public sewage to prevent negative impacts to human health and sewage systems;
- Ensure implementation of the prevention measures in the industries (constant leakage of hazardous substances or in case of accidental situation)
- Ensure maintenance of the water polluters cadastre;
- Raising the capacity of the national laboratory (equipment and training) to be able to monitor all relevant parameters that are required by water legislation;

Supplementary Measures According to WFD Annex VI, part B

SUPPLEMENTARY MEASURES

- Organic pollution
- Improve the sewage pipe systems condition to reduce/eliminate leakage or pollution;
- Promote implementation of separate sewage systems;
- Establish the best management practice for Public water companies which are going to manage agglomerations;
- Define the measures for evacuation of sewage water in the settlement with less than 2000 PE, and appropriate treatment technology;
- Flooding and Hydropower
- Explore the possibilities for wetland restoration and water retention in the basin;
- Evaluate the biological minimum and ecological flow
- in the river, and prescribe the mechanism for its maintenance;
- Priority substances and industrial effluent
- Implement stringent effluent criteria where is needed;
- Pretreatment
- Ensure mechanisms for emission control from the industries by independent certified laboratories;

SUPPLEMENTARY MEASURES

- Nutrient pollution:
- Creation of buffer strips;
- Adequate manure storages for farms out of scope of CAP, especially in vulnerable zones;
- Investigation of the nutrient retention capacity of the existing reservoirs
- Economics
- Gradually increasment of tariffs in the water sector;
- Implement measures for raising willingness to pay for water services
- Municipal dampsite use as landfill and send/gravel extraction
- Management of historical pollution (closing the mines)
- Removal of dumpsites and construction of new solid waste landfills;
- Ensure stringent criteria/reduce/ban the send gravel exploitation;
- Educational programs and research
- All governance level educational programs related to raising awareness about water issues;
- Ensure performance of various research, development and demonstration projects which results are going to be used in preparation of the next Plan

SUPPLEMENTARY MEASURES

- General
- Raise the capacity and ensure reorganization of local municipalities to get involved in the process of sustainable water management;
- Assess the suggested measures according to the climate change scenarios;
- Establish the communication mechanisms internally and trans boundary related to various water issues;
- Verification of trans boundary environmental bilateral agreement, to facilitate joint measures and activities

THANK YOU FOR YOUR ATTENTION

HVALA NA PAŽNJI

