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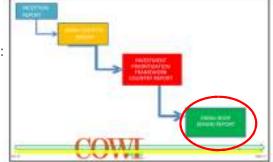


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### **Draft Roof Report for DRB**

- Presentation of the Draft Roof Report:
  - Introduction and general approach
  - · Water management and protection
  - Specific aspects and conclusions
- The version presented here is draft consultations:
  - Serbia, Belgrade, 4 July 2017
  - · BiH, Sarajevo, 5 July 2017
  - Montenegro, Podgorica, 6 July 2017
- Final version to be developed in August 2017:
  - · All received comments addressed,
  - Fulfil the objectives.







WORLD BANK - SUPPORT TO WATER RESOURCES MANAGEMENT IN THE DRINA RIVER BASIN

# **Objectives**

- The presented Roof Report has the objective to:
  - provide the overall findings of the investigations, data collections and analyses for all riparian countries related to the Water Resources Management in the Drina River Basin.
- It is a high-level document summarizing the main results of the project in a concise and synthetic view for the whole Drina River Basin and not from country optics.
- It is based on the previous reports as mentioned above for all three countries (BiH, Montenegro and Serbia) and summaries the main outcomes.





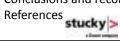


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#### Structure of the document

The structure was consulted with Focal Points and is:

- 1 Introduction
- 2 The Drina River Basin
  - 2.1 Natural setting
  - 2.2 Socio economic characteristics
  - 2.3 Proposed development scenarios
- Water management
  - 3.1 Protection against water
  - 3.2 Use of water
  - 3.3 Protection of water
  - 3.4 Monitoring
- 4 Specific issues
  - 4.1 Coherence of development scenarios
  - 4.2 Transboundary issues
- Conclusions and recommendations
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WORLD BANK - SUPPORT TO WATER RESOURCES MANAGEMENT IN THE DRINA RIVER BASIN

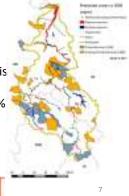
### Main natural characterisc

- Geography: Drina River is 346 km long and is the largest tributary of the Sava River Basin. DRB has a surface area of 19,680 km<sup>2</sup> and spreads over territory within principally three riparian states.
- Topography: from 82 m, ave 961 m to 2500 m a.s.l.
- Geology: in Montenegro Drina flows over few geotectonic and sedimentary Dinaric oriented units with clastic, carbonatic and silica sediments and volcania rocks; in BIH and Serbia it crosses the same geotectonic units consisting of claystones, limestones and sandstones. The rock is highly tectonised (with several thrust zones) and covered by neogene or quarternary sedimens like gravel, sand, sandy clay and marl.
- Climate and Hydrology: DRB has complex climate, influenced by Mediterranea and humid climate up to Foča, continental climate prevails with warm summer and moderately cold winters.
- Groundwater sources provide the main water supply to rural communities from boreholes, dug wells and from springs. They are sufficient in quantity and quality. stucky >



# **Biodiversity and Protected areas**

- DRB has a very complex and high diversity of ecosystems and still hosts many species and habitats of outstanding ecological value and unique importance for biodiversity:
  - Wetlands, alluvial forests and meanders,
  - Very diverse flora and fauna,
  - Number of endemic plant species exceeds 130,
  - Morre than 50 fish species,
  - Presence of over 230 species of birds and a large variety of mammal species.
- Protected areas:
  - Number of natural parks and protected areas covered the DRB and the landscape is dotted with unique glacial lakes and canyons,
  - Still, only 5.44% of the DRB is protected (under 3% in BiH, 5.5 % in Serbia and 7.9 % in Montenegro), that is far under the European average.









WORLD BANK - SUPPORT TO WATER RESOURCES MANAGEMENT IN THE DRINA RIVER BASIN

#### Socio economic characteristics

- Natural resources:
  - rich in natural resources (agricultural land dominates in the Lower Drina Region, forestland and forests can be found in the Upper Drina Region),
  - the use insufficiently planned: insufficient exploration of mineral resources, inappropriate use from the standpoint of the welfare (water, minerals and forests), unsustainable the use of agricultural land (reducing the amount and worthiness) and forests (more the cutting than increase),
  - lack of a cooperative management of the gravel extraction.
- Demography:
  - 56 local government units with app 1.100.000 inhabitants and negative growth
- Cultural heritage and monuments:
  - Cultural and historical capital of DRB is heterogeneous with many evidences from different periods,
  - Many protected cultural heritage sites in the DRB (138 in Serbia, 258 in BiH and 38 in Montenegro).



## **Challenges**

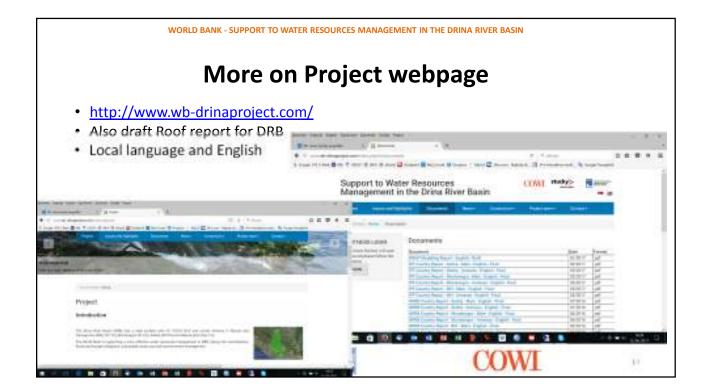
- An important problem in the DRB is the lack of harmonization of interests of various subjects regarding the hydropower water usage.
- During the last few years (and especially in the years 2010 and 2014) the problems with protection against flood waves (sometimes called flood surges) in the Drina River were noticed.
- The existing reservoir storage upstream of Bajina Basta and on the Drina River tributaries do not have the capacity to mitigate floods of this magnitude.
- In the Drina River catchment there are problems related to the protection of water resources from pollution due to wastewater discharge and solid waste.
- In the DRB there are a large number of national parks (e.g. "Tara", "Sutjeska", etc.) that can be considered to be areas of exceptional beauty are protected.
- Drina River is also actively used for recreation purposes (e.g. rafting, fishing, etc.).











### **Thank You for Your Attention!**





