The Drin River Basin

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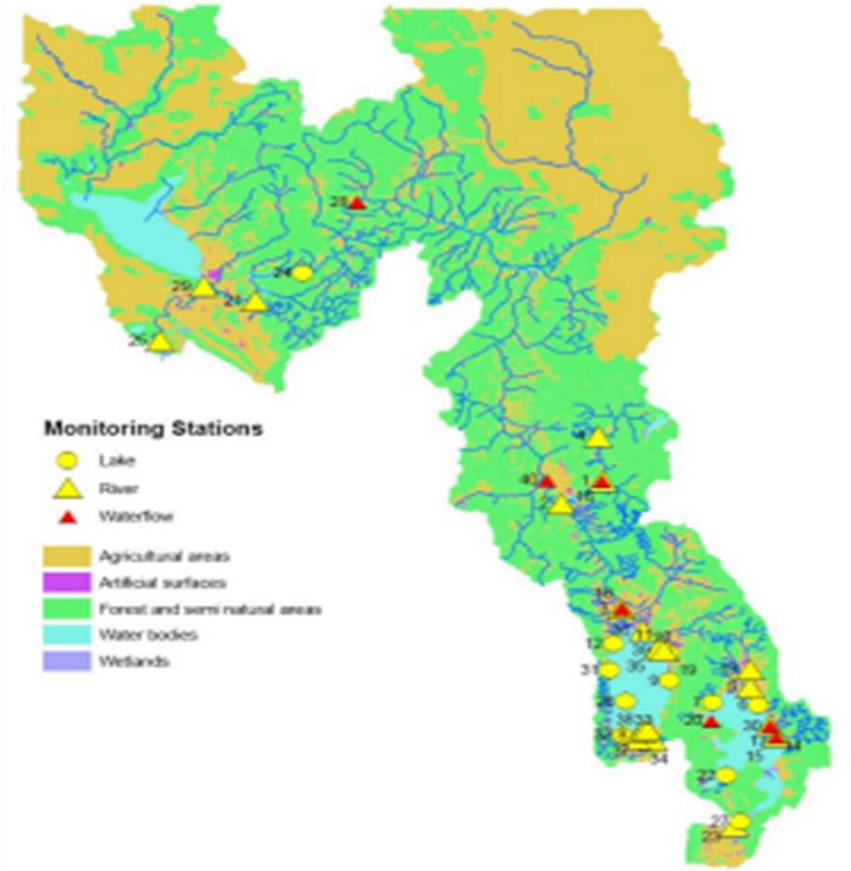
The “connecting agent” of the hydrological system in the South Western Balkan Peninsula

Figure 1: Land-cover in the “extended” Drin River Basin



Note: the map shows also the stations for surface water quality and quantity used for the DRIMPOL project – more information in Annex 5.

Source: Borevang S. et al. , 2008

Figure 2: The Albanian Drin River Basin

Source: Hoxha, Hasa, 2008

General features

General features

- The topography

mountainous relief

flat land

(mean average height of 971 m above the sea level)

Zadrima, Dajci, Velipoja

- The basin covers an area of 8,200 km2
- The average annual flow of Drin in its estuary is 350 m3 /sec
- The Drin is 285 km long with a catchment area of 19,582 km²

Hydroelectricity production

- In Albania three hydropower plants are installed: the Vau I Dejes, the Fierza, and the Koman hydropower plant
- In total 1350 MW- 85 percent of hydropower

- Two major dams and associated reservoirs (Globochica and Spilja) have been constructed in
- the Black Drin at FYR Macedonia with the main purpose of hydroelectric power generation.

Pressures and Impacts

Construction of the dams ⇒ *coastal erosion, disturbances to the ecosystems*

Pressures and Impacts

- Heavy metal pollution (iron, copper and other) ---> *discharge of waste water, the leaching of "inert" materials*
- Unsustainable agricultural practices and inefficient irrigation systems ---> *increase of non-point pollution (nutrient and pesticide) and erosion*
- Nitrogen and phosphorus in the river system derived from agriculture
- Unsustainable management of domestic liquid and solid waste
- High erosion in the Drin basin, land degradation, flooding etc

Because of:

- Poor management practices
- Weak institutional structures
- Lack of regulation and law enforcement
- Lack of a comprehensive common vision for management of the basin

Recommended priority actions

- A water balance for the entire River watershed is needed in order to develop a rational basis and scenarios for water allocation decisions
- Approval of laws and regulations for water users and suppliers in harmony with EU laws and regulations
- Approval of strategic plans in emergency cases
- Public awareness and education for the rational use of water resources
- Monitoring of water quality and quantity
- Extension of the sewage system in urban and rural areas
- Increasing the number of wastewater treatment plants

References

- Drin River Sub-basin — TWRM-Med
- Drin Core Group – Memorandum of Understanding for the Management of the Drin Basin
- Draft Status Report Management of the “extended” Transboundary Drin Basin (Athens, 2008)


Thank you!