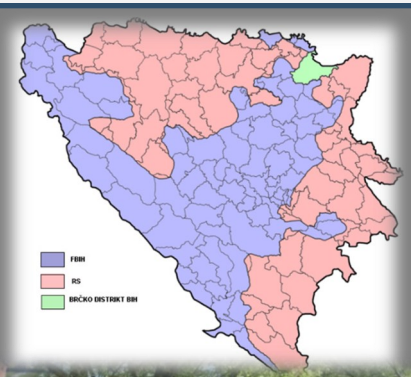
INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)

Bosnia and Herzegovina faces various challenges regarding water resources, making integrated **water resource management** essential to ensure the long-term availability of clean drinking water, water for agriculture, industry, and ecosystems.

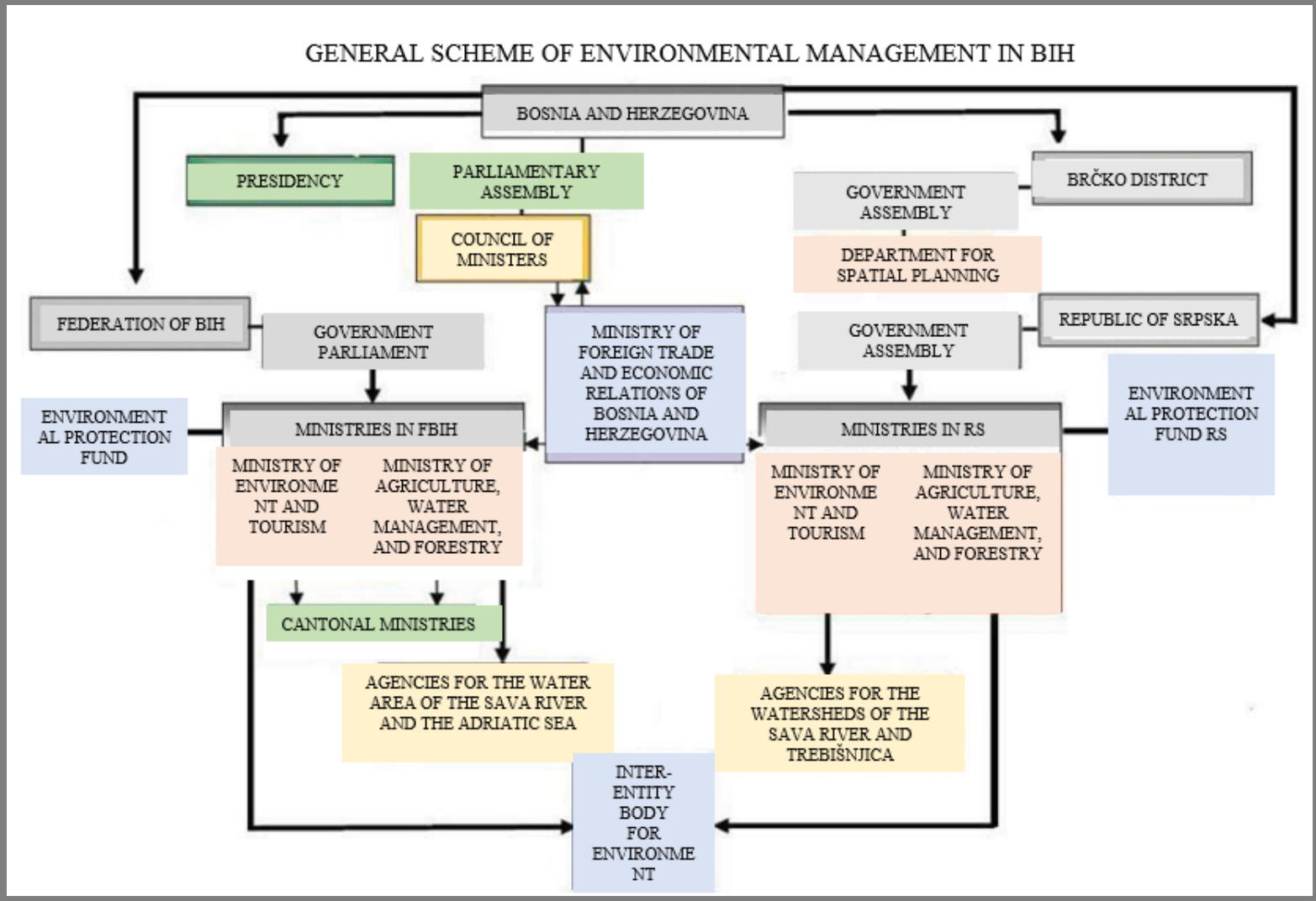


* Bosnia and Herzegovina consists of two entities, the Federation of Bosnia and Herzegovina and the Republic of Srpska, as well as the Brčko District, which leads to a complex system of water resource management.
* Bosnia and Herzegovina is rich in water resources, but uneven distribution and seasonal changes lead to management challenges, especially during drought.
* Water ecosystems in Bosnia and Herzegovina face significant threats due to pollution, overexploitation, and climate change.
* Climate change is already affecting the distribution and quality of water resources in Bosnia and Herzegovina, as evidenced by the increasing frequency of droughts, floods, and the reduction of snowfall that feeds rivers.

Lecture by a guest expert in the field of IWRM.

Dr Alma Imamović,
Federal Ministry of Agriculture, Water Management, and Forestry

Water Management Strategy in BiH – Current Projects



HYDROLOGICAL DATA

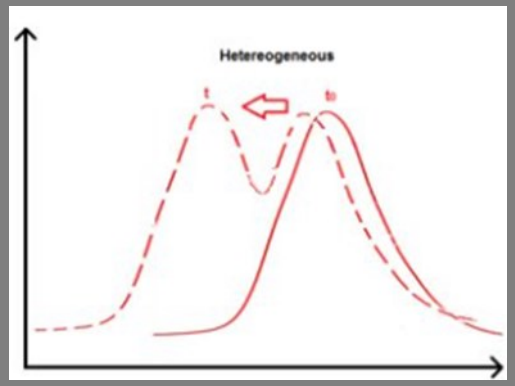
Non-centralized data collection and analysis

Short series of observations

Discharge curve extrapolation

Discrete measurments

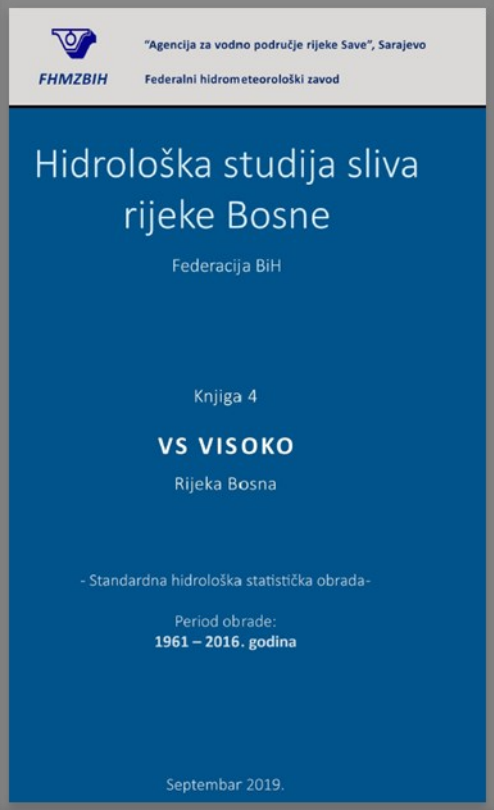
Gap in data

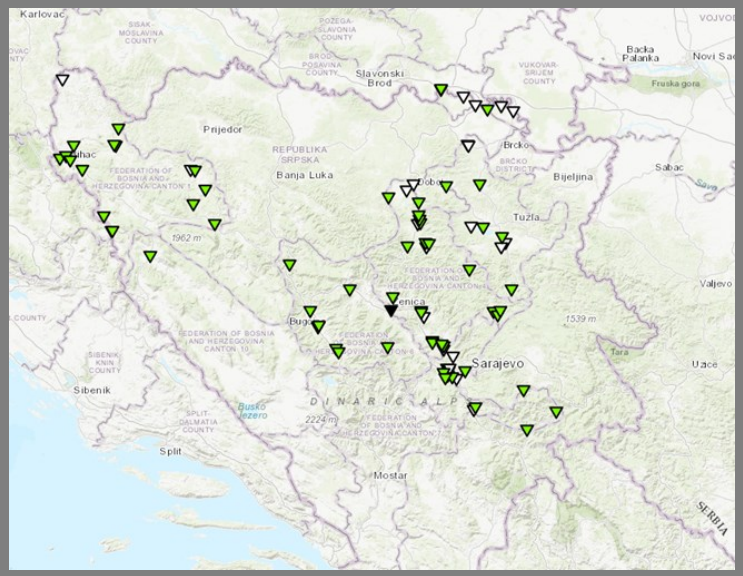


Climat changes—usability of historic data for future projections?

DATA OWNER

- FBiH
  - FHMZ
  - AVP SAVA
  - AVP JADRAN
- RS
  - RHMZ
  - JU "VODE SRPSKE"
- Other companies

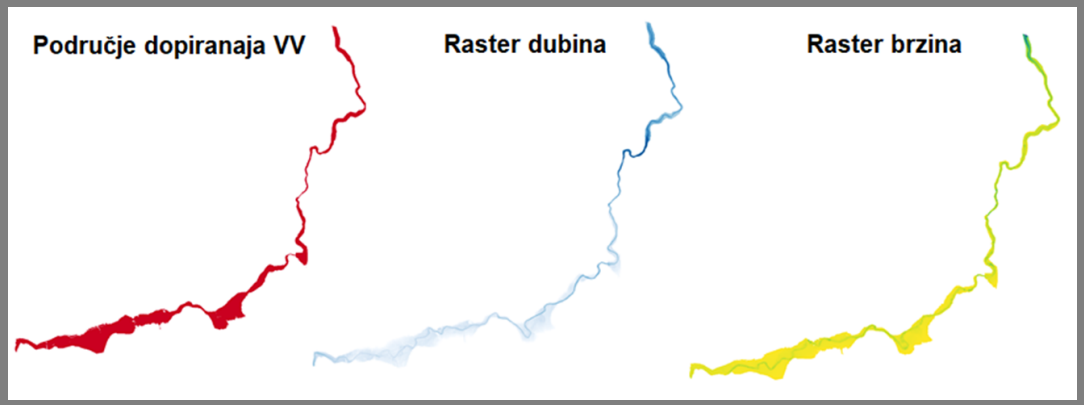


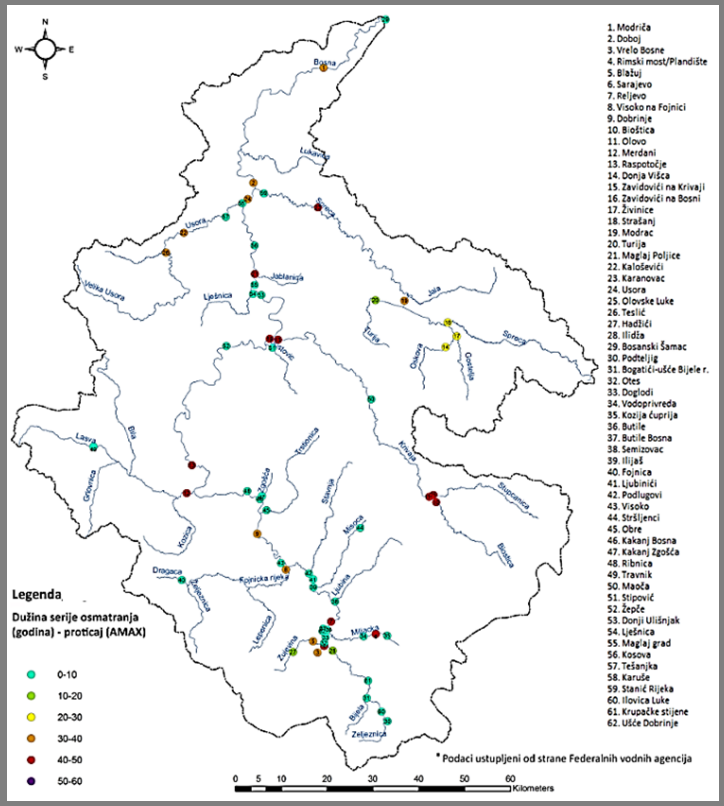


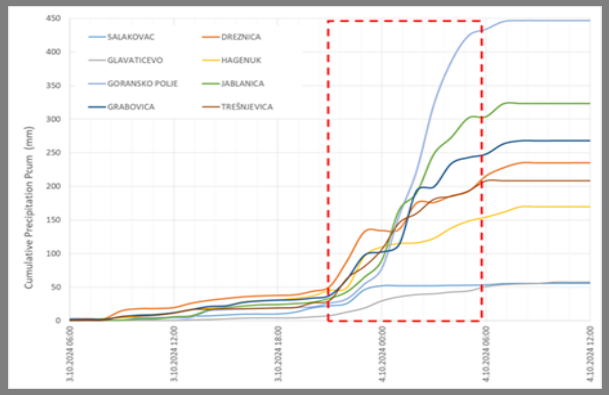
HIS—Hydrological studies for gauge station

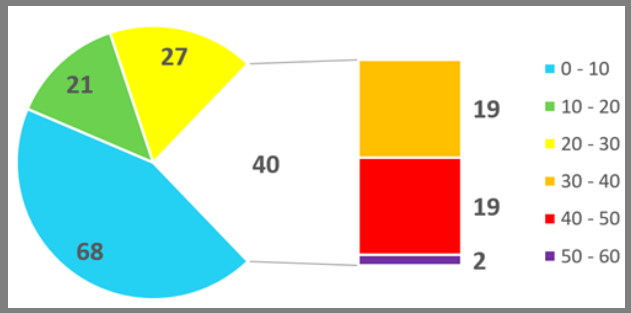
HYDROLOGICAL DATA

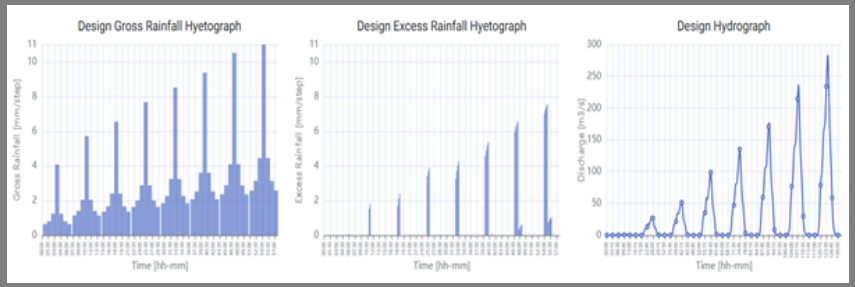
- 1/4 gauged stations
- Flood Directive— Flood Hazard and Flood risk Maps











GAUGED BASINS
(N>30 (50))

- Statistical methods
  - **Annual maxima series**

PARTLY UNGAUGED
(10<N< 30)

- Statistical method
  - Peak over treshold

UNGAUGED BASINS

- Regionalization methods
  - Regression, anvelope, maps
  - **Index-flood method**
- **Hydrological models**