



Ministry of Infrastructure
and Water Management



Schweizerische Eidgenossenschaft
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Office fédéral de l'environnement OFEV
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UNECE

**Seventh meeting of the
Global network of basins working on climate change adaptation
“Adapting to climate change in transboundary basins: linkages to global processes and
actions on-the-ground on climate, droughts and wetlands”
Thursday 25th – Friday 26th May 2023, Geneva**

**Climate change impact on Water Resources Management
in North Macedonia
- Flood Risk Management in the Drin River Basin**

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Ministry of Environment and Physical Planning**

Legal, policy and Institutional framework on climate change

The country has no law on climate change issues, they are incorporated into the **Law on Environment** .

The law on climate action is under preparation

The **Ministry of Environment and Physical Planning (MoEPP)** is the designated National Focal Point for UNFCCC and the key governmental body responsible for **policymaking** with regard to climate change issues.

Gap - **very limited** institutional and human capacities for the role. In 2000, the Climate Change **Office** was set up.

The **National Climate Change Committee (NCCC)** was established in 2000 as an advisory body (32 members) for policymaking related to climate change issues in the country.

Three (3) developed **National Communication on Climate Change**, has contributed to address climate change issues and were submitted to the UNFCCC Secretariat in 2003, 2008, and 2014.

There is no dedicated **Strategy for adaptation to climate change**, the National plans on climate change serve as **strategic documents for adaptation to climate change**.

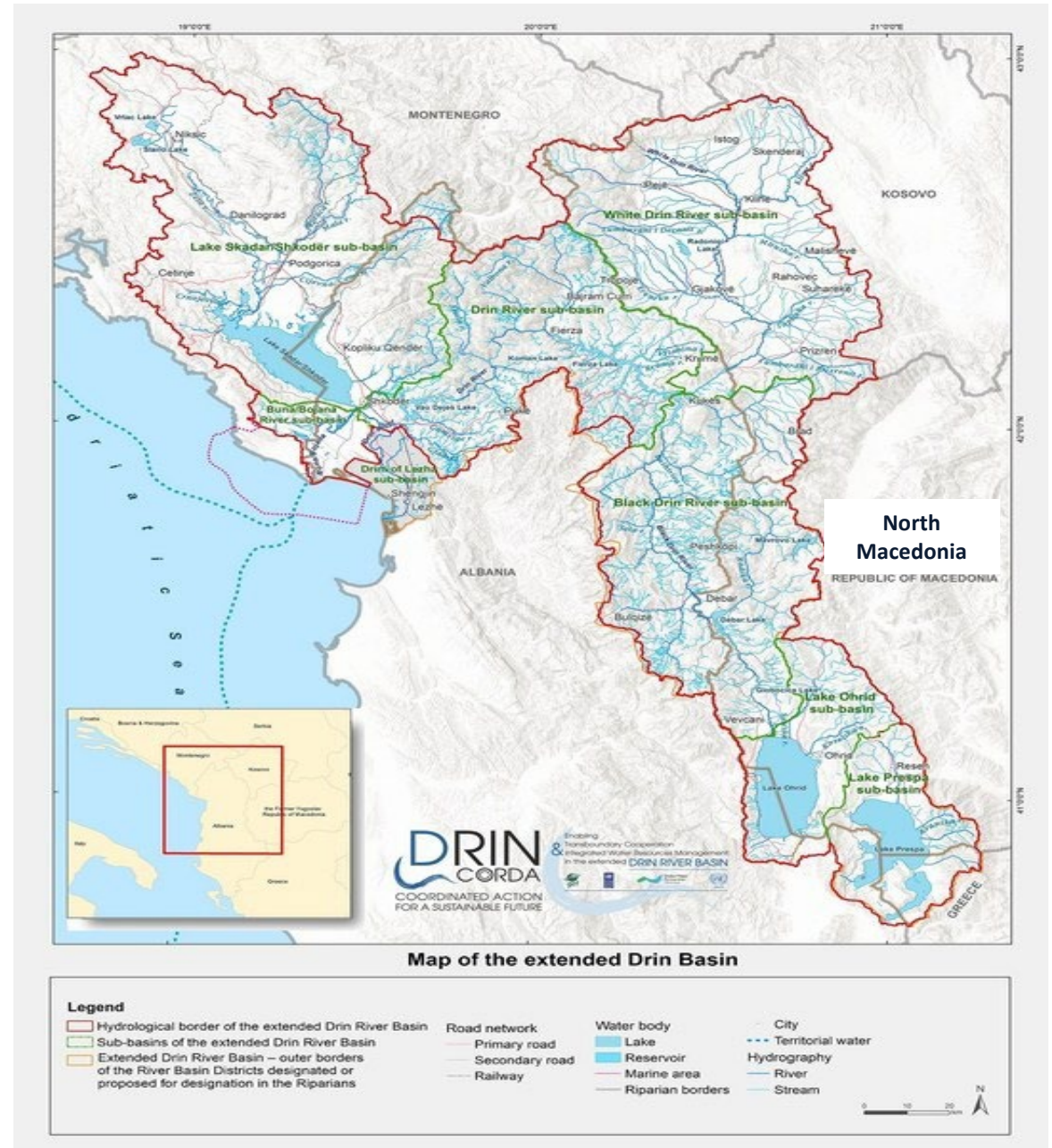
In addition, three Biennial Update Reports (BURs) have been carried out (BUR 3 was submitted in June 2021)

Flood Risk Management in The Drin River Basin

The Drin River Basin is located in the Western Balkans And shared between North Macedonia, Albania, Kosovo, Greece and Montenegro.

According to the National Communications to UNFCCC from Albania, Montenegro and North Macedonia, as well as to the report 'The state of water in Kosovo', Flood risk in riparian countries of the Drin Basin are increasingly exposed to the impact of climate change.

They are experiencing increased periods of extreme heat in the summer and increased rainfall during the cooler seasons.



Adaptation fund / UNDP project

“Integrated climate-resilient transboundary flood risk management in the Drin River basin in the Western Balkans”

The objective : to assist the riparian's in the implementation of an **Integrated climate-resilient river basin flood risk management** approach in order to improve their existing capacity to manage flood risk **at regional, national and local levels.**

The project works on:

- **strengthening of the current flood forecasting and early warning system**
- **developing and implementing transboundary integrated FRM strategies,**
- capacity development of national and regional institutions,
- **support stakeholders** (sharing climate information, knowledge and best practices).
- **invest in the priority structural and community-based non-structural measures.**

Overview of project progress, main achievements

- During the inception phase of the project, the effective **project governance structure was established** with the Drin Core Group (DCG) in the role of the Regional Project Board;
- The capacities of the HydroMet Service in North Macedonia have been strengthened through **extension of the national network** of hydrological and meteorological stations (26) in the Drin River Basin;
- UNDP has signed a **Memorandum of Understanding** with HydroMet Service;
- The spatial data infrastructure was established with collection, review and post processing of all available historic data;
- Development of comprehensive hydrological and hydraulic model for the Drin River Basin have progressed well;
- Restoration of Sateska river and diversion in its natural riverbed was completed.
- The flood risk in the urban part of the City of Struga were decreased through the **clean-up of the sediment from the outlet of Drini River from the Ohrid Lake** and from the riverbed of Drini River.

Pilot project: “The diversion of Sateska River”

Sateska River is located in the south-west of the North Macedonia. Currently a tributary of Lake Ohrid, it originally flowed directly into the River Crn Drim but was re-routed in 1961/2.

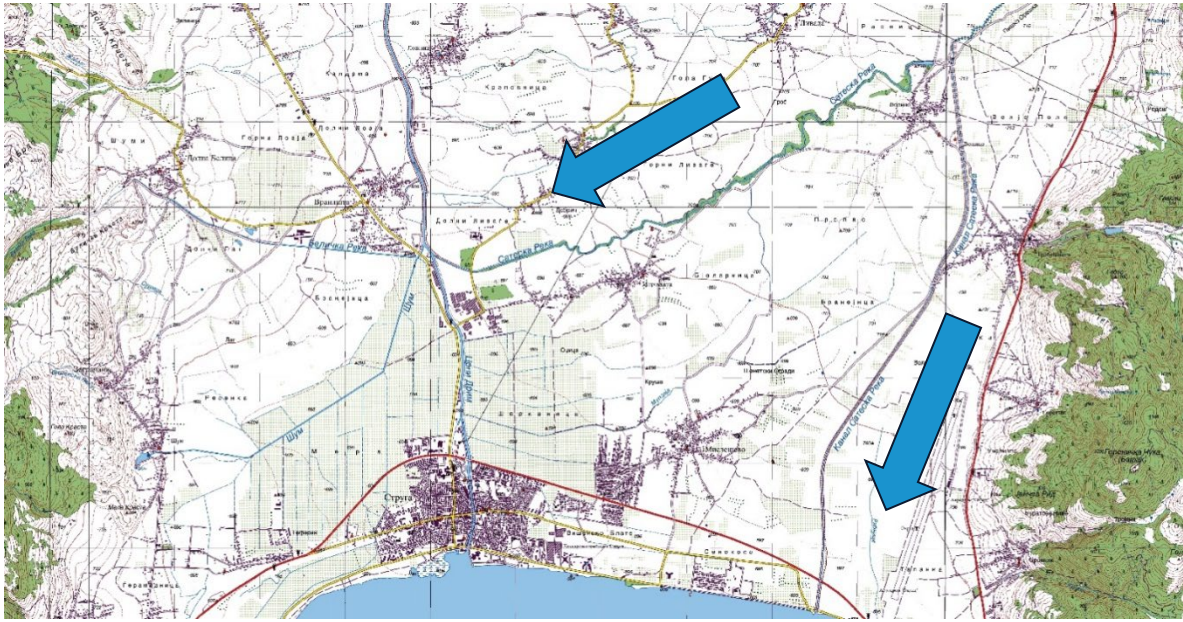
The Sateska river redirection **from** its natural flow in the River Crn Drim **to** the Lake Ohrid, was motivated by three main reasons:

- To decrease the sediment load on the artificial reservoir Globocica and the hydropower plant Globocica;
- To ensure the hydro potential of the hydropower plants on the River Crn Drim;
- To drain the Struga wetland/marshland.

The diversion of Sateska River caused a huge sediment to Ohrid Lake which is negatively affecting the habitats and the entire ecosystem in the littoral part of the Ohrid Lake. It brings 39% of phosphorus load to the Lake Ohrid which on a long run will increase the eutrophication of the Lake.

The sediment that Sateska is bringing is **significantly increasing the river bed level and decreasing the storage and conveyance capacity of the river** especially during extreme weather events and/or intensive rainfalls.

This pilot project is in final stage of realization.



Sateska River



Next steps

1. Realization of the planned activities under the **Adaptation fund / UNDP project**

“Integrated climate-resilient transboundary flood risk management in the Drin River basin” with focus on:

- (1) exchange of flood risk knowledge and climate information;
- (2) basin level climate change adaptation and flood risk management strategy and plans;
- (3) combination of structural and non-structural flood risk reduction interventions;
- (4) institutional capacity.

2. Implementation of the “**Strategic Action Plan**” (**SAP**) developed in frame of the GEF supported project “Enabling Transboundary Cooperation and Integrated Water Resources Management in the Extended Drin River Basin” (**GEF Drin Project**) through the new GEF project “Implementing the Strategic Action Programme of the Drin Basin to strengthen transboundary cooperation and enable integrated natural resources management” (planned to start by end of 2023).



**Thank you
for your attention!**