

BELARUS

Improving water quality and promoting efficient water management

ENVIRONMENTAL PROTECTION
OF INTERNATIONAL RIVER BASINS



The project is funded
by the European Union



This project is implemented by a consortium
led by Hulla & Co. Human Dynamics KG



About the EPIRB project

Where?

The Environmental Protection of International River Basins (EPIRB) project aimed to improve the quality of water in transboundary river basins in the wider Black Sea region and Belarus.

The project strengthened cooperation on environmental protection and water resources management and promoted the principle of integrated water resources management (IWRM) in accordance with the EU Water Framework Directive (WFD).

Why?

How?

The project built capacities through a learning-by-doing approach and the co-development of river basin management plans (RBMPs) for selected pilot basins.

The project has strengthened the capacities of national authorities for monitoring the quality and quantity of water, including groundwater, and improved the availability and quality of datasets on the status of transboundary river basins. Five RBMPs have been developed for selected river basins/sub-river basins in line with the requirements of the WFD.

What?

MONITORING

Building capacity for WFD-compliant monitoring and improving the availability and quality of data

One of the key areas of EPIRB support was the training of specialists on WFD-compliant monitoring through both formal and informal courses, as well as practical on-site trainings during field surveys. Joint field surveys (JFS) included surveying, monitoring, sampling, equipment programming and evaluation. The information obtained was used to fill in data gaps, improve the classification of water bodies, and assess the degree to which designated uses have an impact on water.



RIVER BASIN MANAGEMENT PLANNING

Increasing knowledge on the development and implementation of RBMPs

The draft RBMP for the Upper Dnieper River Basin was developed following a detailed planning exercise carried out in close cooperation with the Ministry of Natural Resources and Environmental Protection and key beneficiary institutions. Stakeholders were involved at various stages of the planning process through a variety of communication channels.

The final draft plan describes the river basin and investigates the pressures that pose a threat to its water environment. The plan demonstrates the impact of these pressures on the state of the waters; identifies possible improvements; and recommends specific actions to ensure that the combined efforts achieve the improvements needed in the Upper Dnieper River Basin in Belarus.

Preparation of WFD-compliant monitoring programmes to support the implementation of the Water Code

The existing monitoring system for surface waters in Belarus does not meet WFD criteria, in particular in the area of biological sampling and the assessment of the hydromorphological parameters of lakes.

The aim of the pilot project was to prepare five methodological monitoring documents to support WFD-compliant monitoring programmes in Belarus. The documents, which have been approved by the Ministry of Natural Resources and Environmental Protection, will contribute to the realisation of Article 6 of the 2014 Water Code and will support WFD-compliant monitoring programmes in Belarus, including the Upper Dnieper River Basin.



Flood risk assessment and mapping in the Upper Dnieper River Basin

Flood hazard and risk maps are an effective tool for recording information. Dobrush, the district centre of Gomel region, was selected for the pilot project as the city most affected by flooding in the Upper Dnieper River Basin in Belarus. Dobrush is located in the watersheds of the Iput River and its tributary, the Horoput. The flood hazard and flood risk maps produced during the pilot project included the determination of high-risk areas, field surveys of critical sites, and spring and flash floods. The maps have been used to design a preliminary programme of measures to improve the flood situation in the territory of Dobrush.

PILOT PROJECT HIGHLIGHTS

Assessment of sources of pollution of potable groundwater sources supplying the Novinki region of Minsk

Groundwater is the main source of drinking water in Belarus. The Novinki well field is one of the oldest in Minsk. Groundwater monitoring has revealed the anthropogenic pollution of the aquifers, mainly by nitrates. The pilot project assessed and forecasted potential pollution pathways and elaborated groundwater protection measures to preserve drinking water quality. The work involved collecting and analysing geological and hydrogeological information on Novinki water intake; assessing the extent of groundwater protection; studying and mapping the sources of groundwater pollution; and building a mathematical model of groundwater geo-infiltration and geo-migration in the area.

Preliminary assessment of the impact of planned hydropower stations on the hydrological regime and preparation of amendments to the Upper Dnieper RBMP

Over 40 hydropower plants have recently been reconstructed in Belarus, and the construction or reconstruction of more than 34 small hydropower plants is planned for the near future. The objective of this pilot action was therefore to identify the possible impacts of the Upper Dnieper hydropower plant cascades on the surrounding territories and on the environment. This involved developing a mathematical model of the Dnieper River in Belarus and making hydrological calculations of the water regime for different hydrological conditions. Based on the results obtained, revisions and amendments were made to the programme of measures of the Upper Dnieper RBMP.



- Duration: **2012–2016**
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- Partners: **Hulla & Co. Human Dynamics KG (lead); Regional Environmental Center (Hungary); H.P. Gauff Ingenieure GmbH & Co. KG–JBG; CES Consulting Engineers Salzgitter GmbH; Crimean Republic Association Ekologiya i Mir (CRAEM); Ukrainian national environmental NGO “Mama-86”**

Browse

The EPIRB website contains a wealth of information about the river basin management planning process and the different water monitoring techniques.

Our joint field survey reports, manuals, assessment reports and technical guidelines will tell you more about the monitoring of water, including groundwater.

Read

Discover

The results of the EPIRB project are available at www.blacksea-riverbasins.net

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