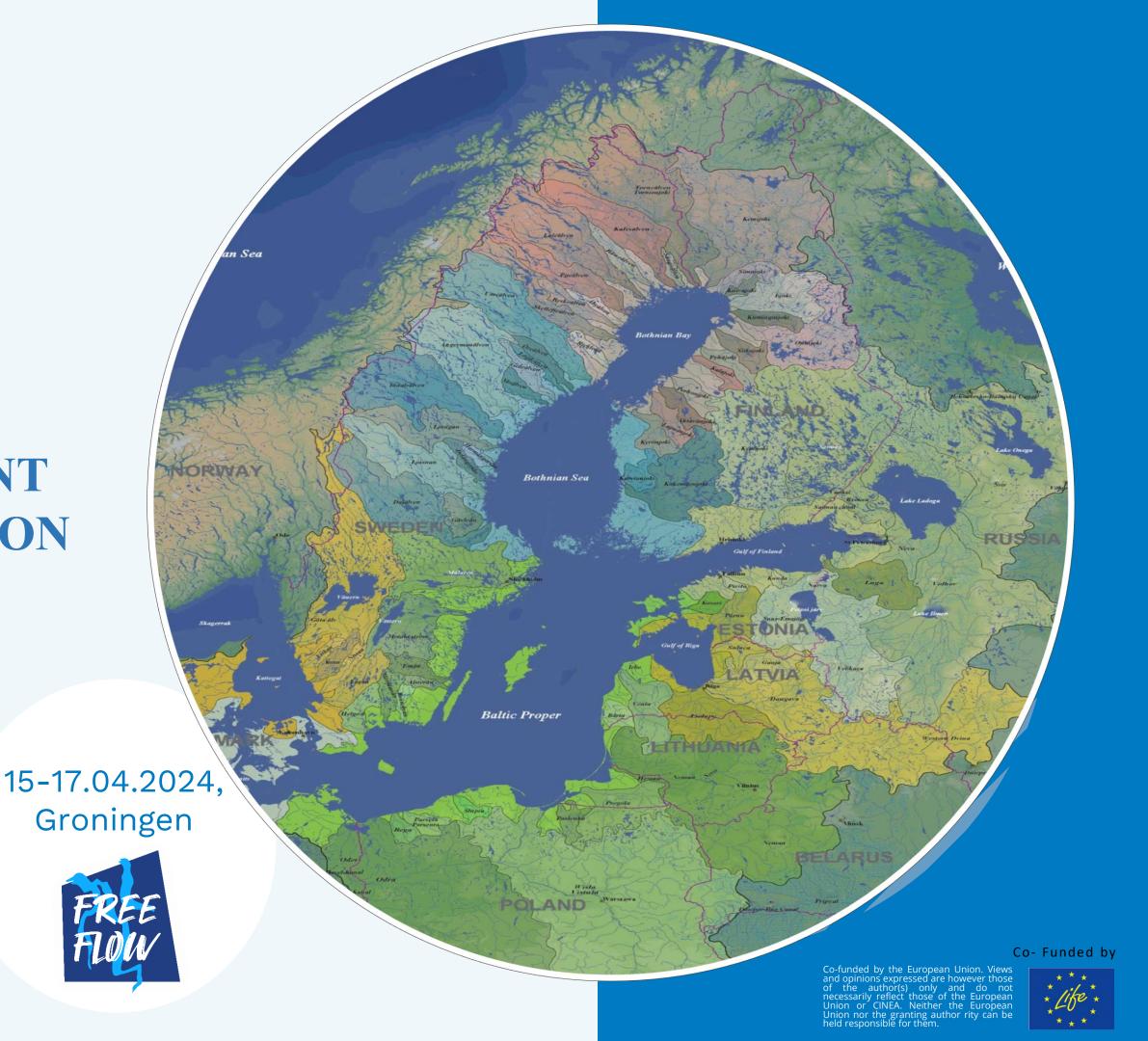




THE GREATEST CHALLENGES OF WATER MANAGEMENT IN THE BALTIC SEA REGION

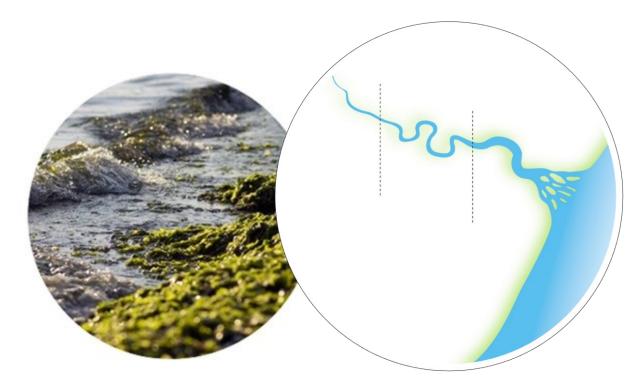
Ewa Leś (ed.), Ilona Biedroń, Adrian and Petro Hrytsyshyn, Tatiana Ivanova, Maret Merisaar, Thyge Nygaard, Mia Svedäng, Uladzimir Zuyeu







Vision of CCB is to achieve good condition/ecological status of the Baltic Sea, ensuring biodiversity of land and marine ecosystems, supporting sustainable development in the whole Baltic Sea region.



The main goal of the Working Area Eutrophication is to work towards natural and clean rivers and the reduction of eutrophication in the Baltic Sea.





Good Ecological Status in the Baltic is strongly dependent on Good Ecological Status of the rivers in the catchment

FOCUS of our research analysis:

the challenges that individual countries face in terms of integrated water management;

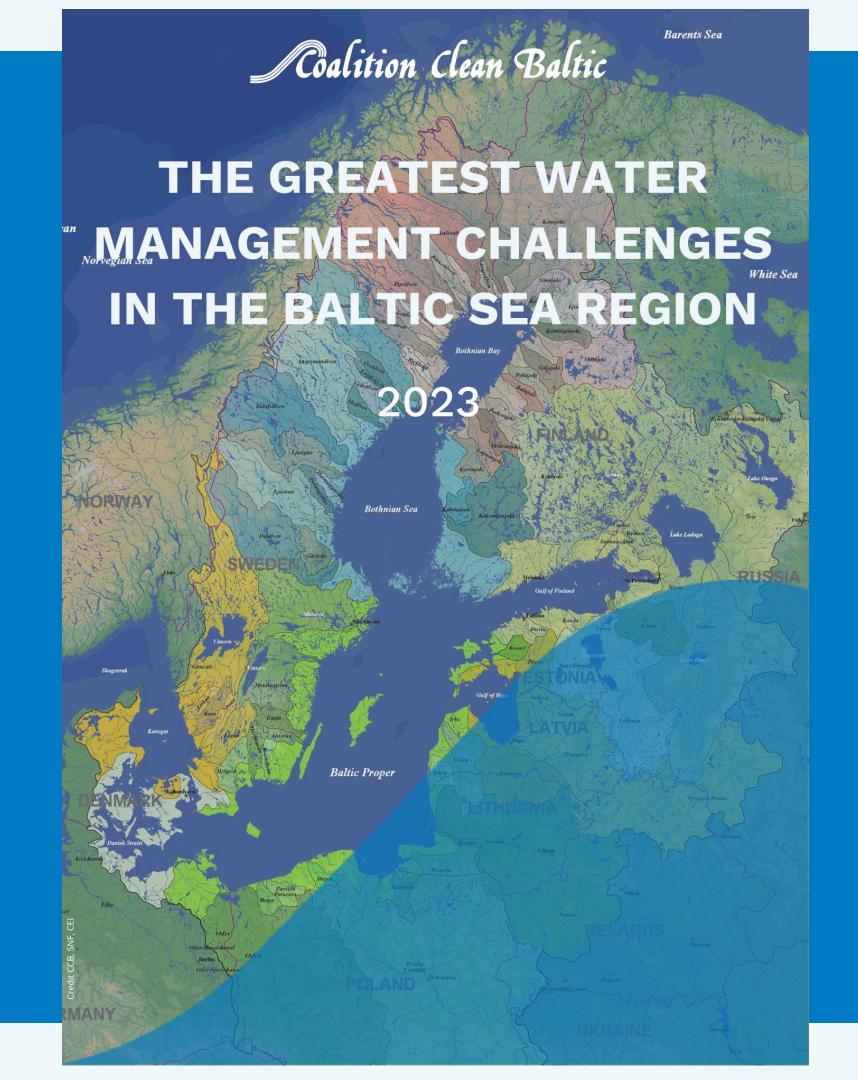
describing the status of natural retention, how efficient water management planning is and what action areas are particularly needed;

addressing the essence of restoration of natural retention as a remedy for current water management problems.

AIM:

to support and foster positive changes in integrated water management in the Baltic Sea Region;

to remind about the Source-to-Sea approach, highlighting the impact of inland waters on the Baltic Sea condition.



How the analysis was shaped? / methodology

1

An assessment of the current situation of water management in a particular country of the BSR - what are the main challenges?

2

An assessment of the country's water resources and discussion of planning approaches in water management

3

Directions of proposed changes in water management, incl. consideration of surface water restoration needs and efforts being made to naturalize waters

4

Identification of key elements for achieving the desired change in the current water management scheme, indicating key issues that need to be changed

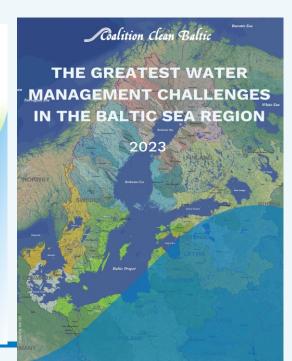
5

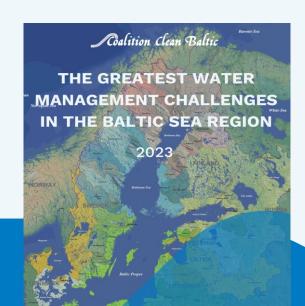
Directional actions of the European Union in the field of the restoration of aquatic ecosystems: e.g. what is the number of dams to remove in the country, is there a database/assessment of barriers present?

6

EU and non-EU countries' water management within BSR, including transboundary river issues







FINDINGS

indicates the main pains of water management in the countries of the Baltic Sea Region, but also the needs and proposed directions of changes important for the good condition of waters and for us, citizens:



EUTROPHICATION,
HYDROMORPHOLOGICAL
PRESSURE,
WATER POLLUTION,

• • •

- urgent and massive restoration of the water ecosystems and focus on restoration of natural processes, as well as massive and immediate cessation of drainage;
- reduction of maintenance activities on rivers;
- land availability: more land must be available to protect the water bodies (the need of common buffer zones in BSR) and to provide restoration;
- the need for restoration measures is huge but a big challenge is the lack of financing;
- education of the water administration in terms of NBS, restoration and good practices; education of society
- Improved transboundary cooperation is vital (Odra environmental catastrophe example)

~ more than 91% of rivers are in need of restoration

~ widely used hydrotechnical solutions;

~ significant impact of coal mining on the high salinity of Poland's main rivers;

~ lack of complete and reliable official data on hydromorphological pressures

~ the 'National Programme for Surface' Water Restoration', the 'Strategy for Wetland Protection in Poland for the Years 2022-2032', 'Good practices of rivers maintenance manual'.



~ significant deterioration of water resources, sewage treatment, water pollution, proper monitoring of water

~ since 2022, the main damage to water resources has been caused by Russia's aggression (¾ of Ukraine's territory);

~ to formulate water management plans (2024/25);

- ~ to assess war damage and pollution;
- ~ to improve water monitoring
 - → To meet the requirements of the **EU Water Directive**



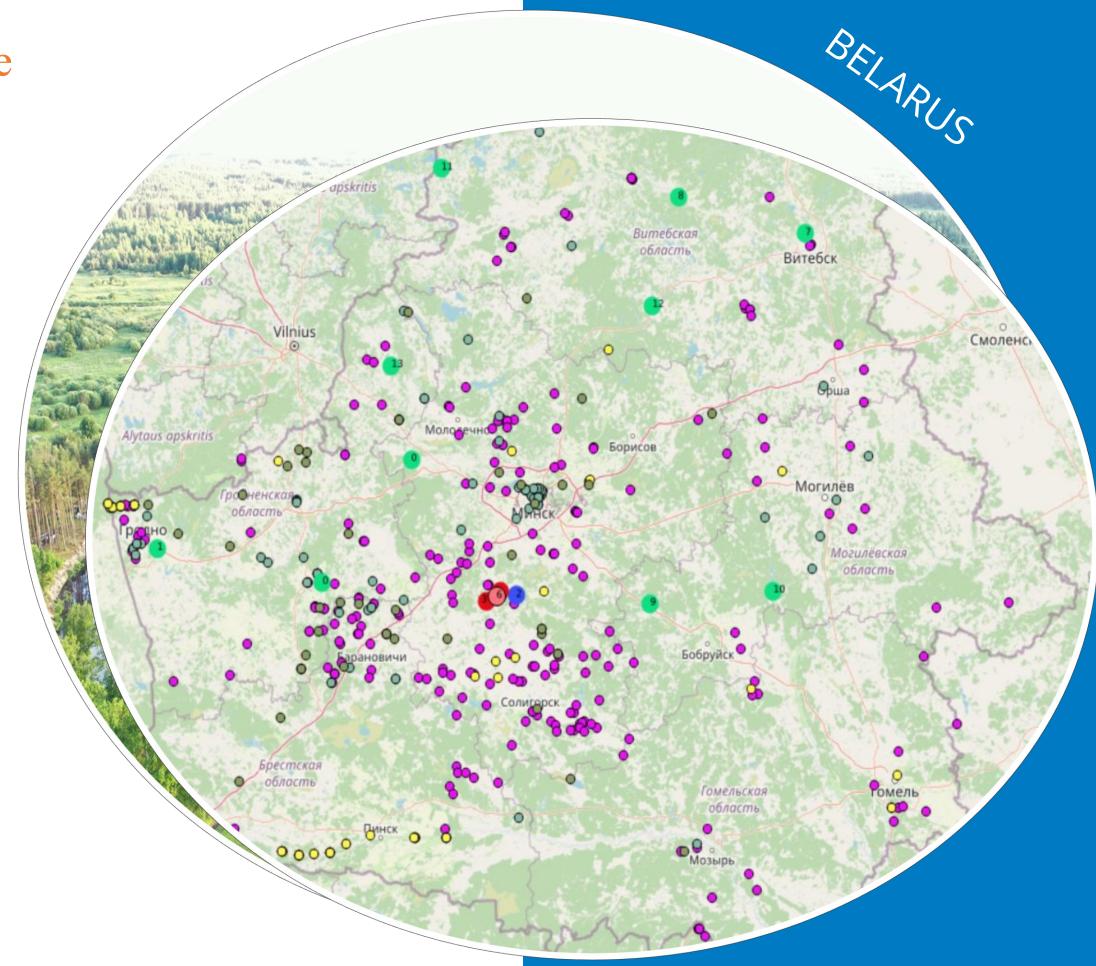
~ Modernization of the water and sewage sector;

~ conflicts of economic development vs. Water Strategy 2030

~ no RBMPs for the rivers of the Baltic Sea catchment area;

~ a regional register of hydraulic structures and <u>river barriers map</u> by BY NGO (2022)

~ restrictions on dredging, straightening and construction of hydrotechnical structures on rivers (in protected areas);



Natural meander of Shchara river fot. Uladzimir Zuyeu

~ Financing: the wastewater treatment sector requires reconstruction;

~ strengthening cross-border cooperation

~ Use of cohesion funds for large-scale restoration (Sindi Dam);

~ an inventory of fish migration barriers

~ Practicing dismantling dams on rivers;

~ Undertaking the restoration of 3,500 ha of peat bogs destroyed as a result of economic activity.



~ Most rivers are regulated, all in poor chemical condition \rightarrow significant hydromorphological transformations (HP);

~ eutrophication;

~ application of law;

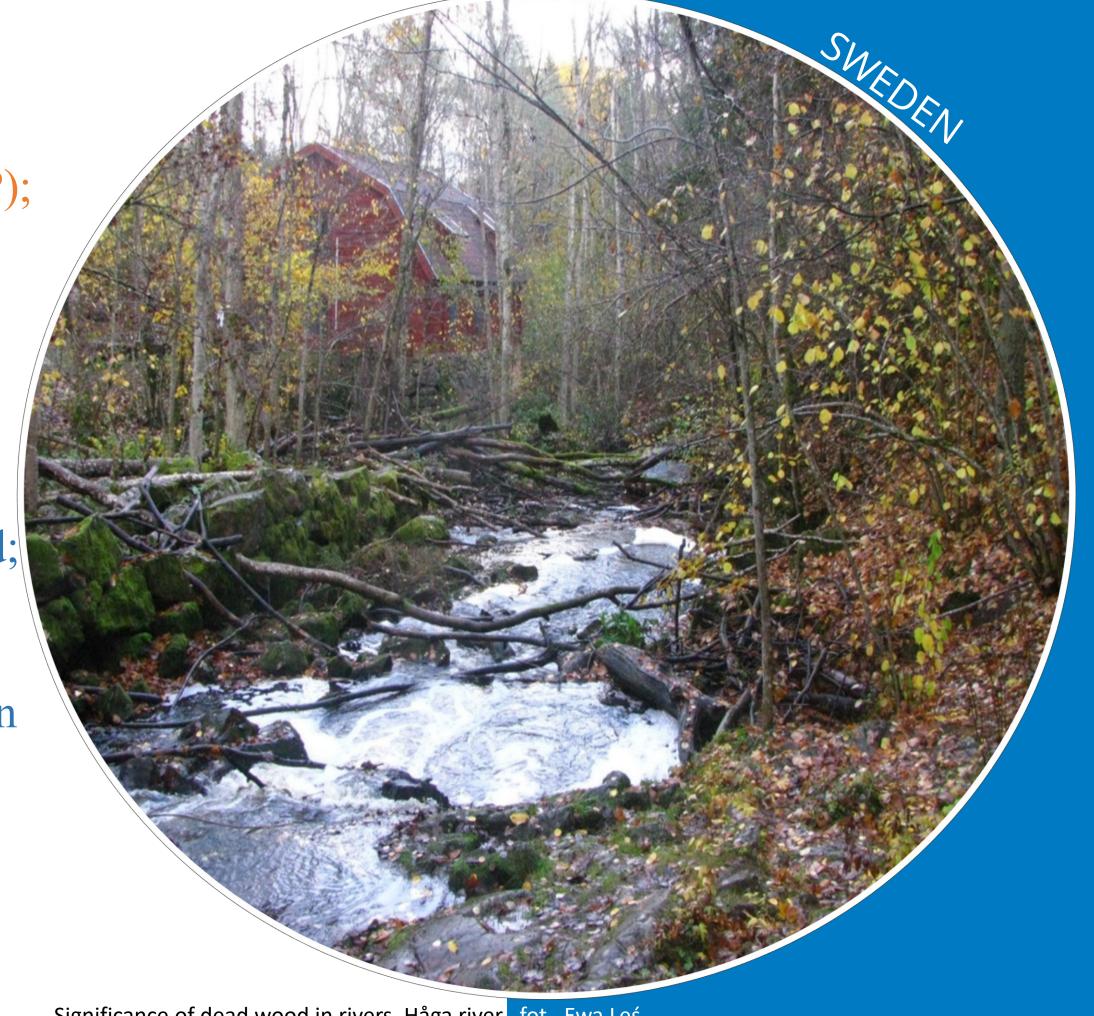
~ 4 northern national rivers are protected;

~ practicing 'water councils';

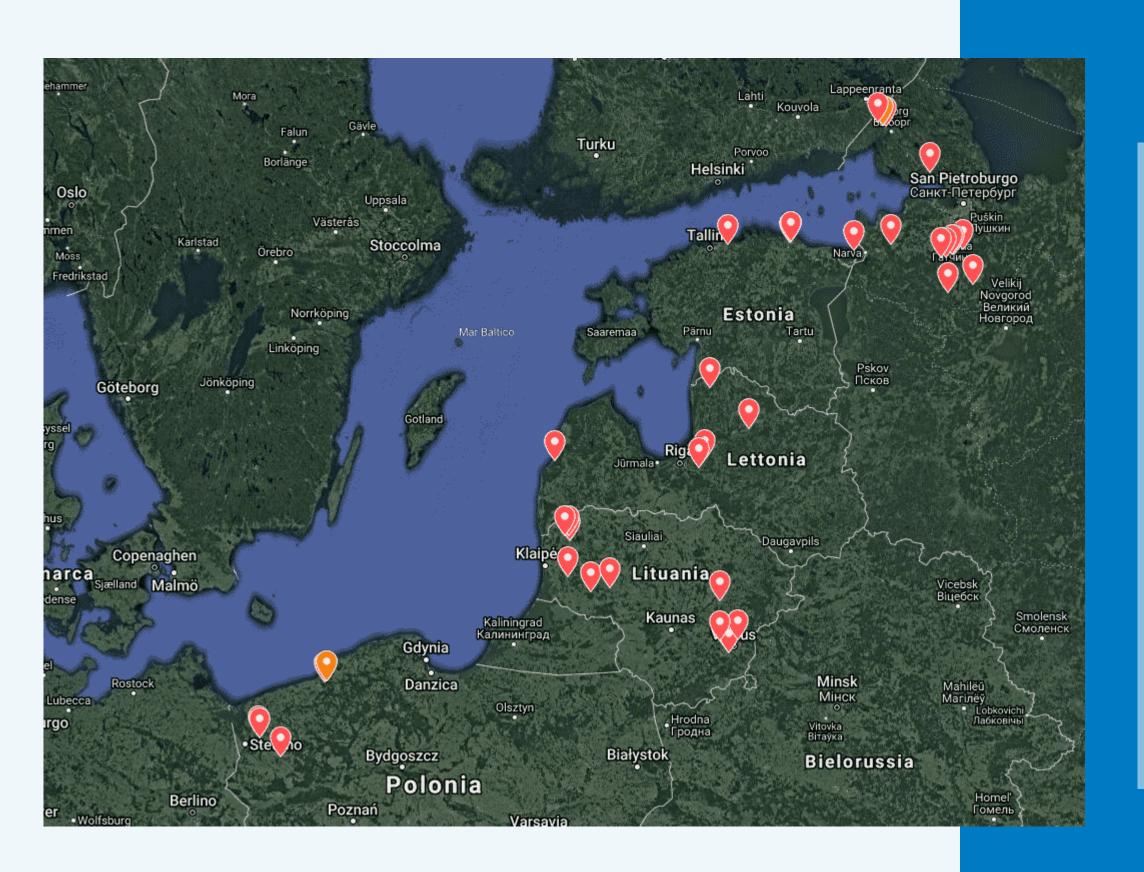
~ planned reclamation and reconstruction of wetlands;

~ ongoing river restoration;

~ HP permits revision



Significance of dead wood in rivers, Håga river fot. Ewa Leś





REPORT

River Barriers to remove or mitigate in the Baltic Sea region

actions to strengthen salmonid.

populations and other migrating species

April 2021







Article

Feeding the Future with the Past: Incorporating Local Ecological Knowledge in River Restoration

Ewelina Szałkiewicz 10, Joanna Sucholas 2 and Mateusz Grygoruk 3,*00

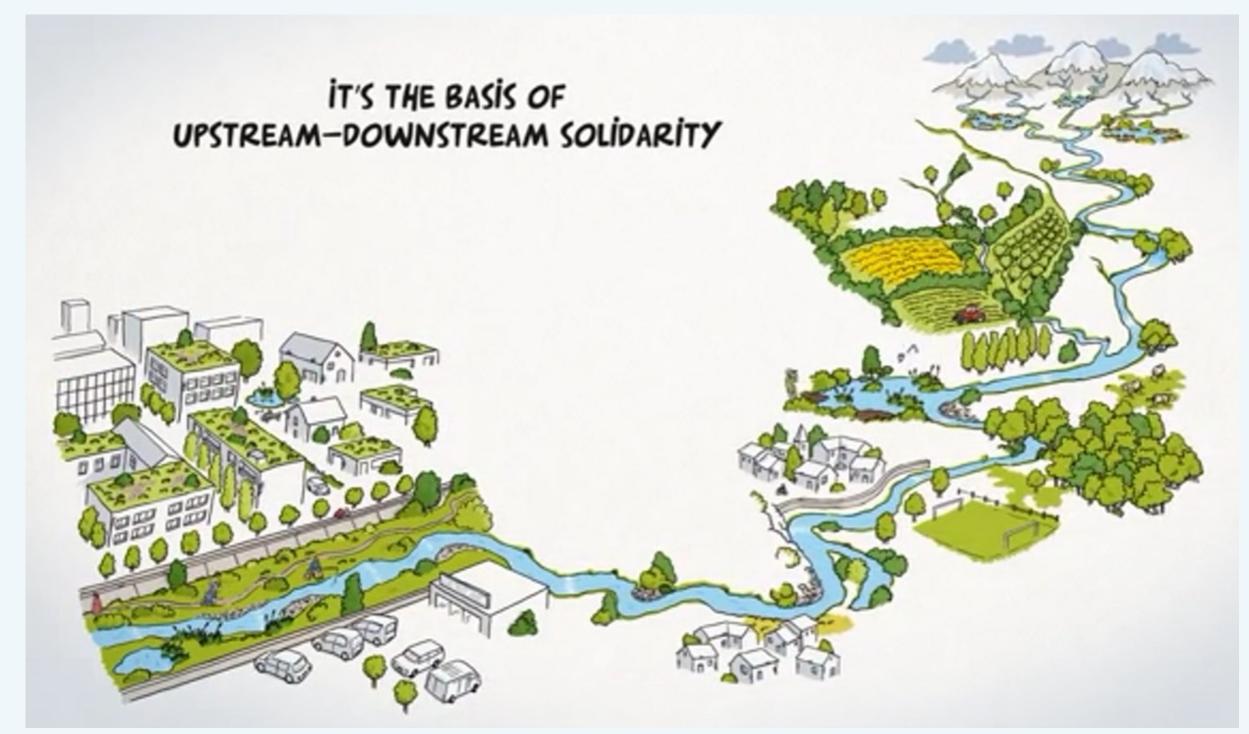
- Department of Hydraulic and Sanitary Engineering, Faculty of Environmental Engineering and Spatial Management, Poznań University of Life Sciences, ul. Wojska Polskiego 28, 60-637 Poznań, Poland; sonnenbergewelina@gmail.com
- Institute of Plant Sciences, Faculty of Biology and Preclinical Medicine, University of Regensburg, Universitätsstr. 31, 93053 Regensburg, Germany; j.sucholas@gmail.com
- Institute of Environmental Engineering, Department of Hydrology, Meteorology and Water Management, Warsaw University of Life Sciences-SGGW, ul. Nowoursynowska 166, 02-787 Warsaw, Poland
- Correspondence: M.Grygoruk@levis.sggw.pl; Tel.: +48-225935309

Received: 22 March 2020; Accepted: 20 April 2020; Published: 22 April 2020



Abstract: Despite many years of experience in the river restoration field, which has become one of the most promising areas of water resources management, significant challenges and problems remain. These include the scope and scale of restoration measures, developing the reference model, assessment of restoration success, and the engagement of local stakeholders. Progress in addressing these challenges to river restoration could be achieved by changes in current approaches through the appreciation and integration of local communities and their local ecological knowledge (LEK).





https://www.youtube.com/watch?v=21YAP8RF_sw



Bogactwo przyrodnicze doliny Samy - Marcin Pakuła

Stan obecny rzeki Samy - Bogumił Nowak, PGW Wody Polskie

część II w terenie nad miejską Samą godz. 14:00 - 15:30

warsztat Mapowanie - rozpoznanie problemów i szans związanych z użytkowaniem rzeki

Biodróż z Michałem Książkiem - grupa do 25 osób (zgłoszenie pod szkola@zdrowarzeka.pl)

SZOK

THANK YOU

Ewa Leś ewa.les@ccb.se

MORE INFORMATION:

- 1) ground for restoration and dam removal activities in BSR
- 2) <u>expert workshop 'Natural river processes as a base for river-related protected</u> <u>areas and river restoration'</u>





