



European Union Water Initiative Plus for Eastern Partnership Countries

TECHNICAL WORKSHOP ON THE EUWI+ PROGRESS ACHIEVED IN BELARUS AND ITS OUTLOOK

OECD / UNECE / EU MS Consortium, Minsk and online, 4 March 2021





European Union Water Initiative Plus for Eastern Partnership Countries
Technical workshop on the EUWI+ progress achieved in Belarus and its outlook

OPENING AND WELCOMING STATEMENTS

(moderated by Alexandr Stankevich, CRICUWR)

Ms Tatsiana Minguriva, Ministry of Natural Resources and Environmental Protection of the Republic of Belarus

Mr Tomas Stravinskas, EU Delegation to Belarus

Mr Alexander Zinke, on behalf of OECD / UNECE / EU MS Consortium





Session 1: Recent progress in modernising water policy in Belarus and emerging national priorities

(moderated by Matthew Griffiths, OECD and Alexandr Stankevich, CRICUWR)

- Recent progress in modernising water policy in Belarus and EUWI+ contribution: Launch of the publication “Towards Water Security in Belarus: A synthesis report”, *Matthew Griffiths, OECD and Minprirody*
- Towards a national Strategy for water resources management for the period until 2030 in the context of climate change: SEA process and alignment with EU water policies. Activities towards adoption and implementation, *Alexander Belokurov UNECE and Palina Zakharko, CRICUWR (separate presentation)*
- Update on transboundary water cooperation with the neighboring countries and reporting under SDG 6.5.2, *Tatsiana Mingurova, Minprirody and Sniazhana Dubianok (CRICUWR)*
- Q&A followed by discussion





Session 1.1: Launch of the publication “Towards Water Security in Belarus: A synthesis report”

- Published in English and Russian languages in December 2020
- Inspired by the strong vision for the water sector and the draft new Water strategy with ensuring water security in Belarus as the overarching objective
- A number of studies pull towards this policy objective, with studies completed at the national, subnational and transnational level under the EUWI+ project
- Contributions from all implementing partners and review by national experts





Action funded by the
EUROPEAN UNION



EUWI+
EU WATER INITIATIVE
FOR EASTERN PARTNERSHIP



OECD Studies on Water

Towards Water Security in Belarus

A SYNTHESIS REPORT



 OECD



К водной безопасности Беларуси

СВОДНЫЙ ОТЧЕТ



 ОЭСР



Session 1.1: Launch of the publication “Towards Water Security in Belarus: A synthesis report” - 2

- Chapter 1 considers the context of Belarus’s overarching policy objective to ensure water security and briefly outlines the main results of EUWI+ work in this domain.
- Chapter 2 provides an overview of the composition and distribution of the country’s water resources, including the particular challenges facing different regions (oblasts) of Belarus.
- Chapter 3 discusses policy responses to the problems identified in Chapter 2 within the context of Belarus’s new Strategy of Water Resource Management for the Period until 2030, in the Context of Climate Change (Water strategy).
- Chapter 4 concludes with an assessment of potential ways to boost water security in Belarus by supporting the country’s ongoing reform agenda (*today we will discuss this topic in more detail in Session 4*).





Session 1.1: Launch of the publication “Towards Water Security in Belarus: A synthesis report” - 3

- The report looks at the Water strategy’s primary focus of achieving Sustainable Development Goal (SDG) 6 through six areas of reform. :
 - Introduction of best available techniques and further improvement of water use efficiency.
 - Better accounting for the impacts of climate change on water resources and adaptation of the water sector to climate change.
 - Improvement of surface and ground water monitoring systems.
 - Introduction of an integrated system of permits for nature/water users and reform of the pricing system for water resources.
 - Adoption and implementation of river basin management plans,
 - Continue co-operation with neighbours on transboundary rivers.
- **Note** – the use of SDG 6 indicators to monitor strategy implementation provides an inspiring lesson to the region and wider water community





Session 1.1: Launch of the publication “Towards Water Security in Belarus: A synthesis report” - 4

- Highlights include:
 - An overview of the current state of water resources in Belarus in terms of quantity, distribution, quality, use and the challenges for current and future exploitation
 - Case studies on different regions of Belarus and their respective problems, including (i) the comparatively water-rich Vitebsk oblast; (ii) the city of Minsk, which faces water stress due to demographic pressures; and (iii) Gomel oblast, where water stress is of a seasonal nature; and rural areas like Kopyl rayon.
 - Tools and techniques designed to respond to Belarus’s regional needs and improve water security at both the local and national levels.





Session 1.1: Launch of the publication “Towards Water Security in Belarus: A synthesis report” - 5

- Key activities progressed with support from EUWI+ and included in the report :
 - Support to policy dialogue on water, recognising the importance of water to country’s development
 - Support to drafting the new Water strategy to 2030 and its SEA
 - Support to developing methodologies to form SDG 6.3-6.5 tasks indicators (definition, calculation) and integrating them into the State Water Cadastre
 - Development of RBMPs for the Dnieper and Pripyat river basins
 - Improvement of local capacity to carry out hydrochemical, hydrobiological and hydromorphological monitoring to WFD standards and of data management: laboratory equipment and staff training
 - Work on a national programme of measures to implement targets set under the Protocol on Water and Health
 - Local pilot actions aimed to improve potable water supply in rural settlements and water efficiency in water intensive industries in Kopyl rayon of Minsk oblast





Session 1.1: Launch of the publication “Towards Water Security in Belarus: A synthesis report” - 6

- Key activities (*continued*):
 - Support to the work of intergovernmental bodies on the upper Dnieper and Pripjat rivers, negotiations on transboundary rivers and expert work with neighbouring Latvia and Lithuania, and input from Belarus to working groups under the UNECE Water Convention
 - Local capacity development regarding use of economic instruments for managing water resources, bodies and systems; and reporting on SDG indicator 6.5.2 on transboundary water co-operation
 - Studies on improving taxation of wastewater discharges, and options for better sludge treatment (*work in progress*)
 - Study on options for resuming irrigation in pilot rayons of Gomel oblast (in Pripjat river basin)





Session 1: Policy questions for discussion

- What is the timeline and priority next steps towards adoption of the national Water strategy to 2030?
- Are any legislative or institutional changes required to facilitate the implementation of the strategy?
- How will the new Water strategy impact transboundary cooperation?
- What lessons have been learned from the SEA process on the Water strategy?
 - Will these lessons impact development of new strategic documents in the water domain?





Session 2: Progress in River Basin Management Planning and enhancing monitoring capacities under EUWI+

(moderated by Philippe Seguin, OiEau and Vladimir Korneev, CRICUWR)

- Upgrading the water monitoring capacities for surface and ground water bodies, *Alexander Zinke, Environment Agency Austria*
- Updates on the Pripjat and Dnieper RMBPs, and additional results, *Philippe Seguin, OiEau, Kanstantsin Tsitou and Palina Zakharko, CRICUWR (separate ppt)*
- Future priorities on river basin management planning in Belarus, *Minprirody and A. Stankevich, CRICUWR*
- Q&A
- Demonstration of a short video on the springs of Belarus, developed by EUWI+





MAIN TASKS OF EAA

Output 2.1: Adequate infrastructure and analytical tools for sound monitoring of water

- Assess capacities and needs
- Purchase equipment to upgrade existing laboratories
- Support laboratories for accreditation

Output 2.2: Strengthened capacity on chemical, hydro-morphological, ecological and biological monitoring of surface and groundwaters

- Provide trainings
- Prepare Monitoring Development Plans

Output 2.3: Pilot river basins management plans implemented

- Delineate surface water/groundwater bodies
- Carry out biological, ecological, chemicals surveys
- Support completion of RBMP monitoring chapters



Procurement of laboratory equipment

- Republican Center of Analytical Control in the field of environmental protection (RCAC), Minsk
 - **Liquid chromatograph with tandem mass spectrometer (LC-MS/MS):** for pesticides, pharmaceuticals, industrial chemicals (e.g. perfluorinated tensides)
 - **Solid phase extraction system:** for sample preparation
 - **Renovation works:** in the corridor on the first floor of the laboratory building





August 2020



October 2020





Procurement of laboratory equipment

- Republican Center of Analytical Control in the field of environmental protection (RCAC), Gomel
 - **Microwave digestion system:** for sample preparation
 - **Atomic Fluorescence Spectrometer (AFS):** for determination of ultra trace amounts of mercury
- The Central Laboratory of the Republican Unitary Enterprise "the Scientific and production center for Geology", Minsk
 - **Microwave digestion system:** for sample preparation





Status of new laboratory infrastructure and analytical tools

EQUIPMENT	CONTRACT AWARDED	STATUS
LC-MS/MS	16.09.2019 Waters	Pending (delivered and installed, registration ongoing)
Solid phase extraction (SPE)	01.04.2020 DSP Systems B.V.	completed
Microwave digestion (RCAC)	27.11.2020 Milestone	Pending (expected delivery: March 2021)
Microwave digestion (RPG)	30.11.2020 Milestone	Pending (expected delivery March 2021)
Atomic fluorescence spectrometer (AFS)	06.11.2019 S-Prep	completed
Renovation works	07.08.2020 Imperialstroy OOO	completed



Support for accreditation

5 regional QM trainings and a pre-audit for accrediting ISO 17025 (2017) lab standard



SURFACE WATER MONITORING DEVELOPMENT

PROGRESS DURING EUWI+

Pripyat RB:

- SW body typology and delineation
- SW Survey (MZB+PHB)
- Hydro-morphology Survey
- Procurement of biological equipment and taxonomic keys
- ESCS training
- River Basin Management Plan review

Dniepr RB:

- *Investigative Monitoring* (webinar and practical process)

OUTLOOK UNTIL END OF EUWI+

- Guidance Delineation of SWB
- Guidance ESCS
- Report on SW monitoring in Pripyat RBD
- SW Monitoring Development Plan

SURFACE WATER: TRAINING VIDEOS

- **2 training videos on PHB** (diatoms) presenting **“Lab work & field work”**
- Alternative to physical training
- Important next step in biological monitoring (additional BQEs)
- Subtitles in 6 languages
- Interactive feedback form
- Questions submitted and answered

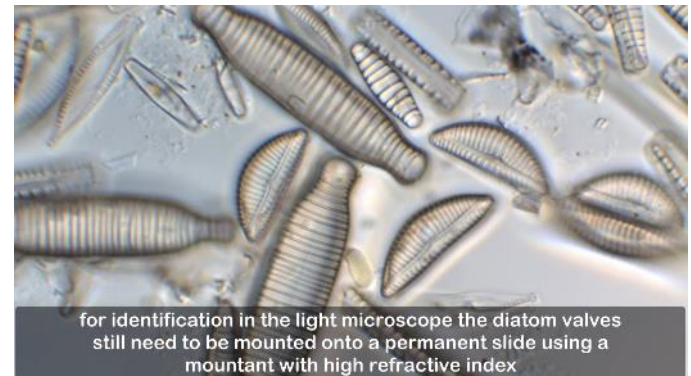
BQE= Biological quality element

PHB= Phytobenthos



hot plate, piston-operated pipet and laboratory glassware shown in this picture

© EUWI+, DWS & Umweltbundesamt, 2020



for identification in the light microscope the diatom valves still need to be mounted onto a permanent slide using a mountant with high refractive index

SW MONITORING – FUTURE NEEDS

More information: **SW Monitoring Development Plan BY**

MZB = macrozoobenthos = invertebrates, PHB = phytobenthos (diatoms), PHP = phytoplankton (chlorophyll-a as starting point), MAC = macrophytes, FIS = fish

- Increase biological monitoring capacities
- Continue trainings
- Biological monitoring in lakes and reservoirs (HMWB/artific.)
- Expand HYMO surveys
- Introduction of other BQEs
- Development of ESCS and intercalibration exercise

	Steps	MZB	PHB	PHP	MAC	FIS
1	Delineate SWB	Completed during EUWI+				
2	Define typology	Completed during EUWI+				
3	Risk assessment for SWB	Completed during EUWI+				
4	Establish a sampling method	Completed during EUWI+	Still needed			
5	Establish a lab method	Completed during EUWI+	Still needed			
6	Gather data on biology in a consolidated database	Completed during EUWI+	Still needed			



Photo © Zornig

For WFD compliant methods (all BQEs), the next steps are to:

1. Establish a pressure-response-relationship
2. Define criteria for type-specific reference (benchmark) conditions
3. Set class boundaries (EQR)
4. Compile all methods to a binding guidance document (as a basis for the monitoring)

GROUNDWATER MONITORING DEVELOPMENT

PROGRESS during EUWI+ (2017-19)

- **3 trainings:** GWB delineation (8p), monitoring (8p), sampling (7p).
- **6 contracts / 5 surveys** with total 91 sampling sites:
 - 11 GWBs in Pripjat RB delineated and characterised;
 - Monitoring network reviewed, improvements proposed;
 - 2 pollution areas investigated (pesticides, radionuclides)
 - 1st transboundary coordination round of GWBs with Ukraine

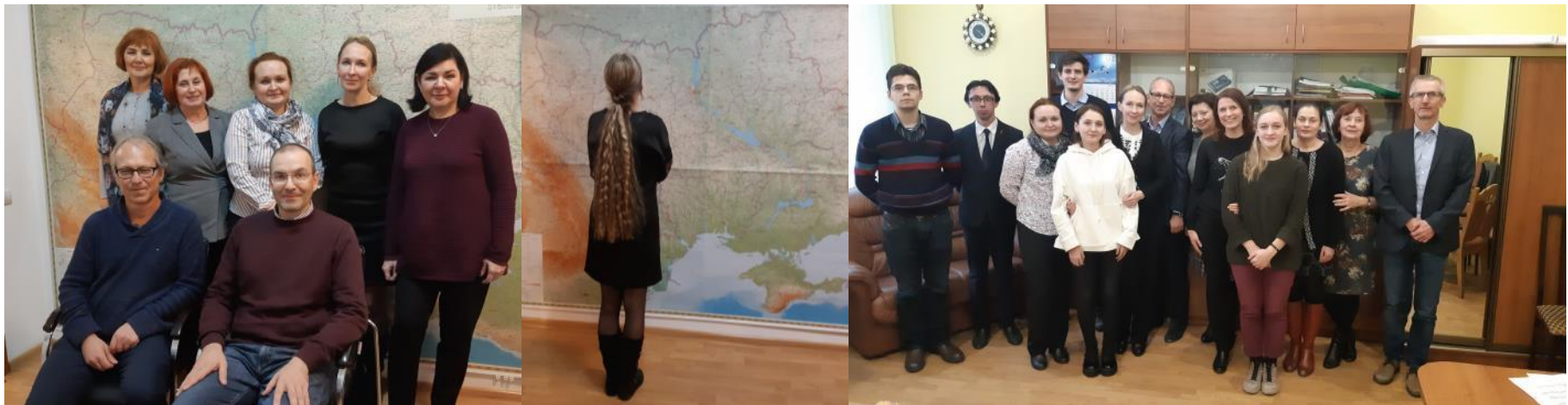
PROGRESS during EUWI+ (2020)

- **2 trainings:** risk and status assessment (17p) and transboundary coordination with Ukraine (2p)
- **1 contract:**
 - WFD compatible method for GW risk and status assessment elaborated;
 - 2nd transboundary coordination round of GWBs with Ukraine
- **Poster** presented at international EGU2020 conference.
- **Sampling equipment and laptops** procured.

GROUNDWATER MONITORING DEVELOPMENT

Outlook until end of EUWI+

- GW Monitoring Development Plan.
- Guidance Delineation of GWB
- **Poster** for international EGU2021 conference (with UA)
- **Presentation** at ISARM2021 conference.



GW MONITORING – FUTURE NEEDS

- Improve GW monitoring **network**;
- More **parameters** for chemical monitoring;
- More guaranteed **budget** for chemical monitoring;
- Establish GW **threshold values**;
- Establish natural background levels;
- Discuss **status assessment method** nationally;
- Continue **transboundary** cooperation with Ukraine;
- Purchase missing **equipment**
- Implement principles in the remaining territory of Belarus

	Steps		Pripyat RBD	Dnieper RBD	Remaining RBDs
1	Delineate GWBs ^(A)		Completed during EUWI+	Completed before EUWI+	Still needed
2	Characterise GWBs ^(A)		Completed during EUWI+	Completed before EUWI+	Still needed
3	Pressure/impact (Risk) assessment for GWB ^(B)		Completed during EUWI+	Completed before EUWI+	Still needed
4	Quantity monitoring	Legal basis	In line with WFD		
		Operative budget	Seems guaranteed		
		Network density	Proposal for improvements were made during EUWI+	A review per GWB is needed	
		Practical implementation	In line with legal requirements		
5	Chemical monitoring	Legal basis	Needs small amendments (parameters)		
		Operative budget	Not fully guaranteed		
		Network density ^(D)	Proposal for improvements were made during EUWI+	A review per GWB is needed	
		Practical implementation	Not fully in line with legal requirements		
6	Sampling	Training ^(C)	Completed during EUWI+		
		Equipment	Partly provided by EUWI+ but still needed.		
7	Data management		Started during EUWI+		
8	Set GW threshold values		Still needed		
9	Natural GW background levels		Still needed		
10	Status and trend assessment	Establish methods	Started during EUWI+		
		Perform assessment	Still needed		

More information:
GW Monitoring Development Plan



MAIN TASKS OF INTERNATIONAL OFFICE FOR WATER

Output 2.3: Pilot river basins management plans implemented

- Completion of RBMPs
- Production of guidance documents
- Development of sub-basin management plans
- Development and strengthening of national database on water related issues and ensure compliance with SEIS principles
- Dashboard to monitor the implementation of the RBMPs

Output 3.1: Coordination, awareness and visibility of the project

- Development and implementation of a communication strategy for the project
- Organisation of exchanges to support public and stakeholder participation in the preparation of RBMPs
- Information sharing and communication with practitioners involved in the 6 EaP countries
- Organisation of international events



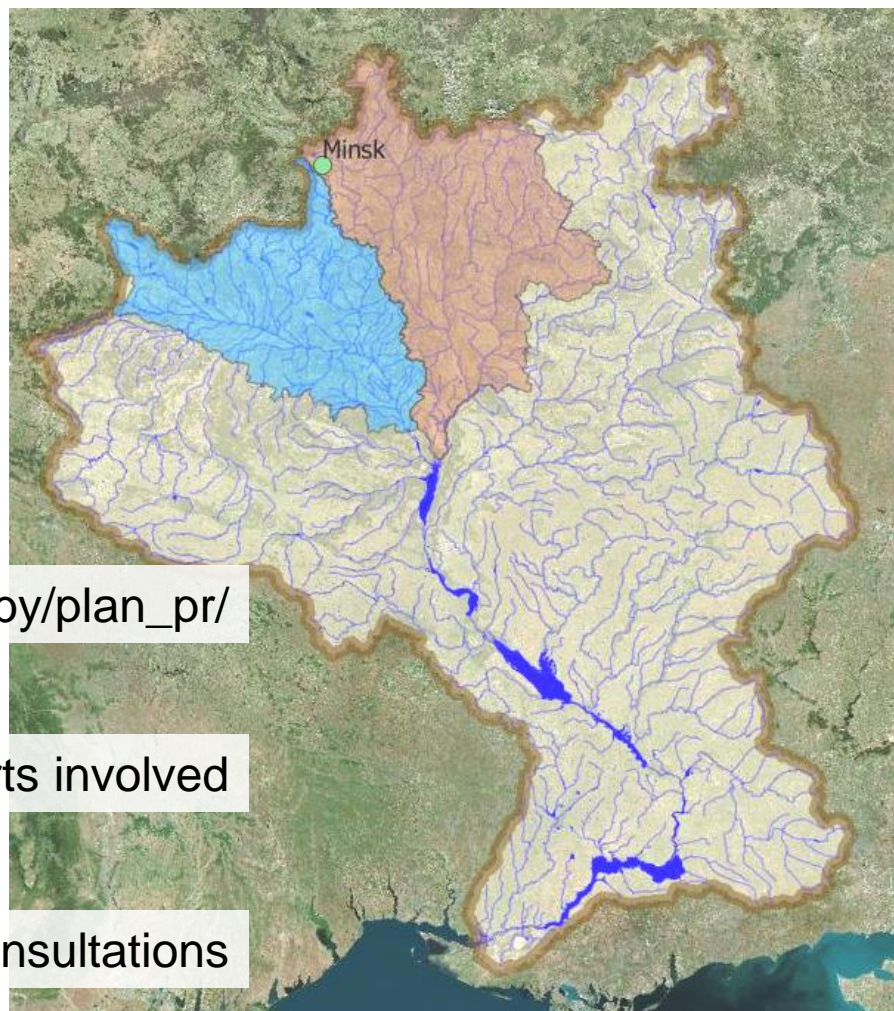
UPDATES ON THE PRIPYAT AND DNEIPEP RIVER BASIN MANAGEMENT PLANS

Pripyat RBMP:
adopted by the Basin
Council on 16 October
2020. Approval
process on-going

http://www.cricuwr.by/plan_pr/

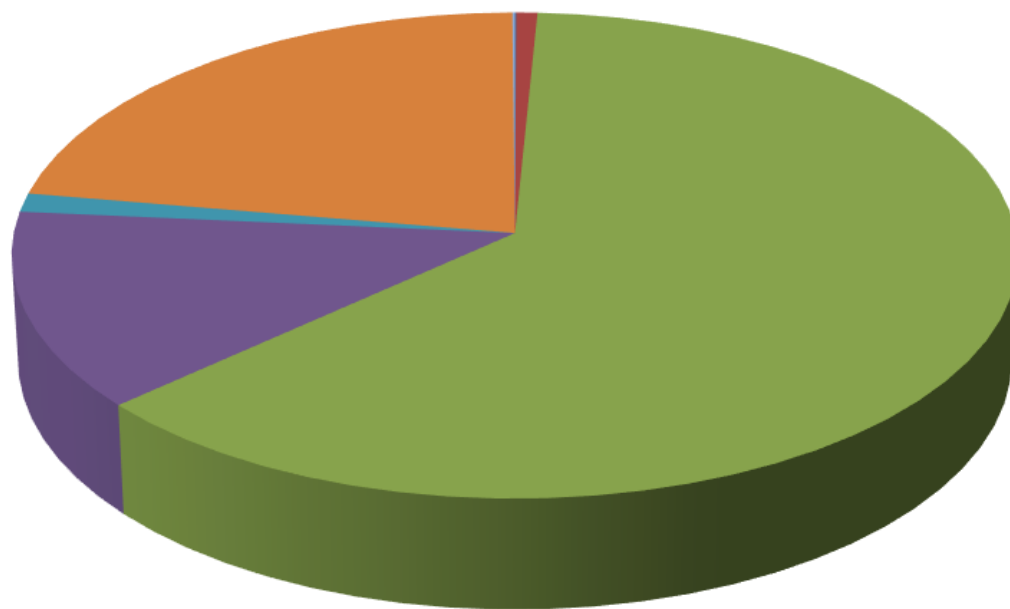
20 Belarusian experts involved

2 public consultations



Dnieper RBMP:
officially approved
on 31 December
2019

PRIPYAT RBMP 2021-2030: PROGRAMME OF MEASURES



- Institutional measures
- Monitoring programme
- Water supply and sanitation of municipalities
- Reduction of impact from economic activities (industry, agriculture)
- Land use regulation in water protection zones
- Reduction of climate change impacts (floods, droughts)
- Additional measures

455 million €; 43 €/inhabitant/year



ADDITIONAL RESULTS

Dnieper RBMP implementation

- Sub-basin management plan of Uza river (Gomel Oblast)
- Sub-basin management plan of urban rivers of Mogilev

Guidance documents from RBMP experiences

- National technical guidelines for river basin planning framework: closer to the WFD requirements with outline, list of maps, water bodies delineation, economic analysis, programme of measures incorporated in local and/or sectoral plans, consultation, availability on-line
- Manual to estimate diffuse sources pollution: adopted in Dec. 2020



ADDITIONAL RESULTS

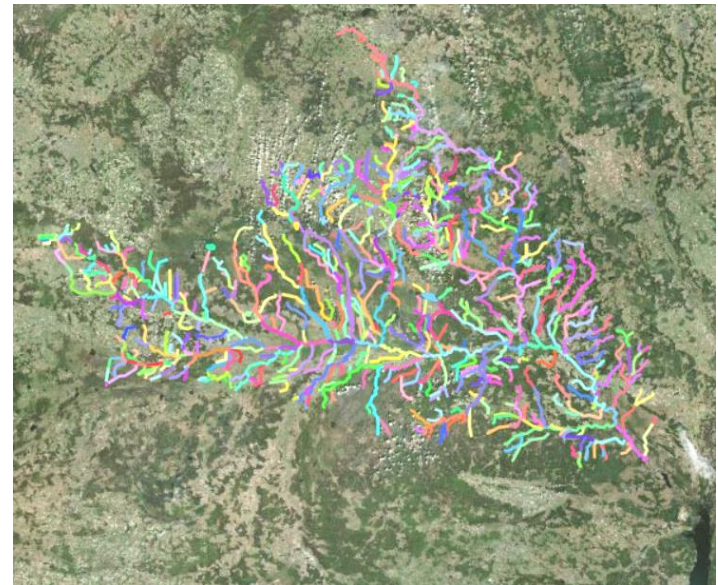
Data management

Installation of a server at CRICUWR in order to develop data sharing between data producers and a data management platform

Visibility

Website www.euwipluseast.eu

Social network, videos





SESSION 2: QUESTIONS FOR DISCUSSION

- How to organise the implementation of the programme of measures: information, responsibilities, funding, monitoring, etc?
- Is a Government budget secured for a future extended surface and groundwater monitoring, covering more sites and parameters, notably on biology?
- What could be the process to ensure the consistency of RBMPs on both side of the borders?
- What legislative and/or institutional frameworks must be developed to organize data sharing among stakeholders?





Session 3: Adopting new plans and regulations and addressing the implementation challenge

(moderated by Alisher Mamadzhanov, UNECE and Sniazhana Dubianok, CRICUWR)

- Key findings of the OECD-led studies on options for improving taxation of wastewater discharges and sludge treatment , *S. Dubianok, CRICUWR, BSTU and A. Martoussevitch, OECD*
- Assessing options for resuming irrigation in selected areas of Belarus: the case of Gomel oblast, *Kanstantsin Tsitou, CRICUWR, Gloria Depaoli, ACTeon and A. Martoussevitch, OECD (separate ppt)*
- Focus on springs inventory in Belarus – *Alena Hramadskaya, CRICUWR (separate ppt)*
- Revision of the national targets under the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes – *A. Drazdova, Ministry of Health, A. Mamadzhanov, UNECE (separate ppt)*
- Q&A





Session 3.1: Interim results of the OECD-led studies on options for improving taxation of wastewater discharges and sludge treatment

- **Both studies aim to support the development (planned for 2021) and implementation of the future national WSS Strategy, as well as implementation of SDG 6.3**
- **Study on improving taxation of wastewater discharges**, status: interim notes submitted by CRICUWR and HSE
- The note by local consultant, assesses the practice of applying environmental tax to wastewater discharges, with the volume of discharge as the tax base (irrespective of pollution load) and proposes steps forward towards improving the taxation
- The note by international consultant (HSE) briefly presents selected international experience and, following the German model, recommends shifting to taxation of the pollution load, estimated in the so called “hazard units”

(Ms Dubianok will present interim recommendations in more detail)





Session 3.1: Interim results of the OECD-led studies - 2

- **Предложения международных экспертов** (Высшая школа экономики, г. Москва) по совершенствованию системы обложения сбросов сточных вод в Беларуси:

1 Расширение сферы применения экологического налога за сброс сточных вод за счёт следующих объектов налогообложения:

- сбросы от городских и сельских населенных пунктов, имеющих и не имеющих дождевую канализацию;
- поступление загрязнений с сельскохозяйственных угодий;
- поступление загрязнений от железных и автомобильных дорог.

2. Обложение сброса ограниченного перечня загрязняющих веществ (легкоокисляющиеся растворенные органические вещества по БПК₅, нефтепродукты, общий фосфор, общий азот, железо и тяжелые металлы (цинк, медь, хром, свинец и др.) в расчёте на «единицу вредности», оцениваемую по массе поступления вышеперечисленных веществ.

3. Создание целевого Национального водного фонда (с функцией поддержки проектов по охране и экономному использованию водных ресурсов) – это тема отдельного исследования.





Session 3.1: Interim results of the OECD-led studies - 3

- **Промежуточные результаты национального исследования** определили 4 основных направления для совершенствования системы экологического налогообложения в части сбросов сточных вод в Беларуси:
 1. повышение ставок налога за добычу (изъятие) водных ресурсов с упразднением льгот для отдельных групп налогоплательщиков
 2. изменение методики исчисления экологического налога с установлением норматива платы за массу сброса облагаемых загрязняющих веществ
 3. расширение сферы применения экологического налога за сброс сточных вод
 4. установление целевого статуса экологического налога за сброс сточных вод с целью целевого финансирования мероприятий по снижению воздействия на водные ресурсы
- The note by international consultant (HSE)





Session 3.1: Interim results of the OECD-led studies - 4

- **Следующие шаги для завершения данного исследования:**
 - Обсудить промежуточные записки ЦНИИКИВР и ВШЗ с заинтересованными организациями и лицами, на техническом совещании
 - Если заинтересованные стороны в целом поддерживают предложения, проработать их более подробно и разработать «дорожную карту» по переходу в период 2021-2025 гг. на новую систему экологического налогообложения за массу сброса загрязняющих веществ в составе сточных вод
 - При этом Беларусь может быть заинтересована получить помощь в разработке проектов соответствующих нормативных правовых актов для представления в Правительство для рассмотрения и окончательного утверждения.





Session 3.1: Interim results of the OECD-led studies - 5

- **Study on sludge treatment options – beneficiaries: all interested EaP countries incl. Belarus; focus – on small and medium size settlements, both urban and rural**
- **Status:** draft interim notes received from BSTU and international consultant; in Moldova, appropriate sludge treatment is integrated into a concept note on future new design and construction norms for small-scale sanitation systems, centralized/piped and on site
- The note by local consultant, presents the situation with sludge generation and treatment in Belarus; the note received from international consultant present various sludge treatment options known from international practice and potentially applicable in EaP countries
- **Next steps:** (i) to identify pre-requisites for applying each individual options: scale, sludge volume and content, unit costs (capital and O&M), technical staff capacity to operate , etc. (ii) Discuss options and pre-requisites for applying them at a **regional expert meeting** where countries could indicate options most attractive in their specific circumstances for settlements of different size; and (iii) Deliver Final report with recommendations for all EaP and individual interested countries





SESSION 3: QUESTIONS FOR DISCUSSION

- How to maximize the impact of ongoing work on the implementation of the draft Water Strategy until 2030 and SDGs?
- What are the gaps and future needs in legislative and regulatory fields to support the implementation of the Water Strategy and ensure the attainment of SDGs?
- How the revised water and health targets contribute to the above?





Session 4: Next steps towards completion of EUWI+, outlook beyond 2021 and closing remarks

(moderated by A. Martoussevitch, OECD and T. Minguriva, Minprirody)

- Exchange on future activities to address priority issues, *Minprirody and EUWI+ Implementing partners*
- Concluding statements
- Closure of the meeting





Session 4.1: Outlook beyond 2021

- **Exchange of views on future needs and priorities of Belarus in the water domain after 2021:** those of local stakeholders, the EUWI+ Implementing partners and DPs
- **The views of Implementing Partners** on possible future priority actions are summarised in Chapter 4 of the “*Towards Water Security in Belarus: A synthesis report*”, as follows:
 - Support implementation of Water Strategy to 2030
 - Move forward on river basin management plans (adoption and implementation)
 - Further improve SW & GW monitoring and water data management;
 - Identify and implement ways to ensure equitable access to water supply and sanitation (focusing on service quality & affordability, and on rural WSS);
 - Work towards meeting water related international obligations;
 - Continue respective capacity development as a cross-cutting issue.
- *Minprirody* and other local stakeholders and international partners are invited to provide their comments on the list and present own views on most topical needs and priorities of Belarus, and issues critically important for successful implementation of national water policy targets, incl. those set in the draft Water Strategy to 2030.





THANK YOU!

Any Questions?

please contact the responsible project leaders

UNECE Alisher Mamadzhanov, Alexander Belokurov

OECD Matthew Griffiths, Alexandre Martoussevitch

EU Member State Consortium

Lead UBA (AT): Alexander Zinke

IOW (FR): Pierre Henry de Villeneuve, Philippe Seguin



<https://euwipluseast.eu/en/>



@EUWI+