



Joint management of Latvian – Lithuanian transboundary river and lake water bodies (TRANSWAT)

PROJECT REVIEW

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General information

The aim of TRANSWAT project is to ensure joint assessment and management of trans-boundary river and lake water bodies which hydromorphological and/or ecological quality pose a risk for not meeting the EU Water Framework Directive (WFD) requirements.

Project duration: 24 months (01.10.2020 - 30.09.2022)

Project budget: 607 466.51 EUR, including ERDF financing 85 % (516 346.53 EUR)

Project lead partner: Latvian Environment, geology and meteorology centre Project partners: Lithuanian Energy Institute, Latvian University, Institute of Food Safety, Animal Health and Environment BIOR, Nature Researge Centre

Project work packages

MANAGEMENT

Assessment and management of regulated river water bodies

Ecological quality & ecosystem health assessment of trans-boundary lakes

Harmonized Monitoring Program and Program of Measures COMMUNICATION

T1. Assessment and management of regulated river water bodies Case-study area



•Ciecere River – Ciecere HPP •Ciecere River – Dzirnavnieki •HPP •Ciecere River – Pakuli HPP •Losis River – Grantini HPP •Losis River – Lejnieki HPP •Varduva River – Kulšėnai HPP Varduva River – Renavas HPP •Varduva River – Vadagiai HPP •Varduva River – Ukrinai HPP Varduva River – Juodeikiai HPP

T1. Assessment and management of regulated river water bodies Main tasks



T1. Assessment and management of regulated river water bodies Results

1. Defined seasonal E-flow for fish spawning and growing periods downstream each HPP in cascade;

2. Recommendations for amendment of national legislation for water resources use;

3. List of the most effective mitigation measures for river regulated by HPP;

- 4. Recommendations for operational regime on HPP cascades;
- 5. Water level, water discharge & habitat databases for project rivers.



Project materials on the website of the LEGMC: <u>https://videscentrs.lvgmc.lv/iebuvets/projekts-latvijas-lietuvas-parrobezu-upju-un-ezeru-udens-baseinu-vienota-parvaldiba</u>

T2. Ecological quality and ecosystem health assessment of trans-boundary lakes Case-study area



- Ilzu (Garais)/Ilge Lake
- Galinu/Salna Lake
- Kumpinisku/Kumpiniskiai
 Lake
- Laucesas/Laukesas Lake
- Skirnas Lake

T2. Ecological quality and ecosystem health assessment of trans-boundary lakes Main tasks



- Lakes water depth measurements
- Water quantity Ilzu(Garais)/Ilge Lake inflow / outflow measurements measurements
 - Development of "Methodology for lake ecosystem health assessment"

Methodology development

Water quality measurements

Data analysis

- Methodology testing (Ilzu(Garais)/Ilge Lake)
- Surveys of physio -chemical indicators of lakes (nitrogen and phosphorus concentrations, water transparency) and biological quality elements (macrophytes, phytoplankton, macrozoobenthos, and zooplankton)
- Fish surveys
- Lab analysis
- Data analyzing and ecological quality assessment





T2. Ecological quality and ecosystem health assessment of trans-boundary lakes Results

- **1. All five LV-LT transboundary lakes delineated as "water bodies"**
- 2. Developed "Methodology for lake ecosystem health assessment";
- 2. Assessed IIzu (Garais)/IIge Lake ecosystem health;
- 3. Assessed IIzu (Garais)/IIge Lake contamination risk of surface water groundwater interaction;
- 4. Developed lakes bathymetry mapes;
- 5. Assessed ecological status of all LV-LT transboundary lakes



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Harmonized Monitoring Program and Program of Measures Results

- **1. Developed harmonized LV-LT lakes Monitoring Program;**
- 2. Developed harmonized LV-LT lakes Program of Measures;
- 3. List of effective measures for rivers regulated by HPPs.

Project materials on the website of the LEGMC: <u>https://videscentrs.lvgmc.lv/iebuvets/projekts-latvijas-lietuvas-parrobezu-upju-un-ezeru-udens-baseinu-vienota-parvaldiba</u>

Challenges

- COVID-19 restrictions;
- Lack of time;
- Weather conditions;
- Lack of data (water quality parametrs, hydro-geological, hydrological, HPP technical specification);
- Physical obstacles bushes, woody debris, beaver dams.





Thank you for attention!

Write me:









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