

# PS PUBLIC SERVICE REVIEW

Europe 24

an independent review

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# Urban aquatic ecosystems management

*Ecohydrological rehabilitation of municipal reservoirs...*

**E**cohydrological transdisciplinary science integrates knowledge of different disciplines for environmental problem solving. It is based on the dual regulation (hydrology-biota) biotechnologies and system approach based on hydrological, ecological and 'dual regulation' principles.

The city of Łódź, situated on the hilly area between two large river catchments (Vistula and Oder), maintains 20% of its urban area forested or green. However, water resources are limited to 18 small streams that constitute important potential for the city's sustainability. The headwater of the Bzura River, with a cascade of three reservoirs, called Arturówek, is an important space for the recreation for the city's residents.

There are three major forms of impact that affect Arturówek reservoirs' ecosystem services for society: polluted stormwater; pressure from the surrounding residential and recreational area; excessive cyanobacterial toxic blooms.

The EU LIFE+ project *'Ecohydrologic rehabilitation of recreational reservoirs Arturówek (Łódź) as a model approach*

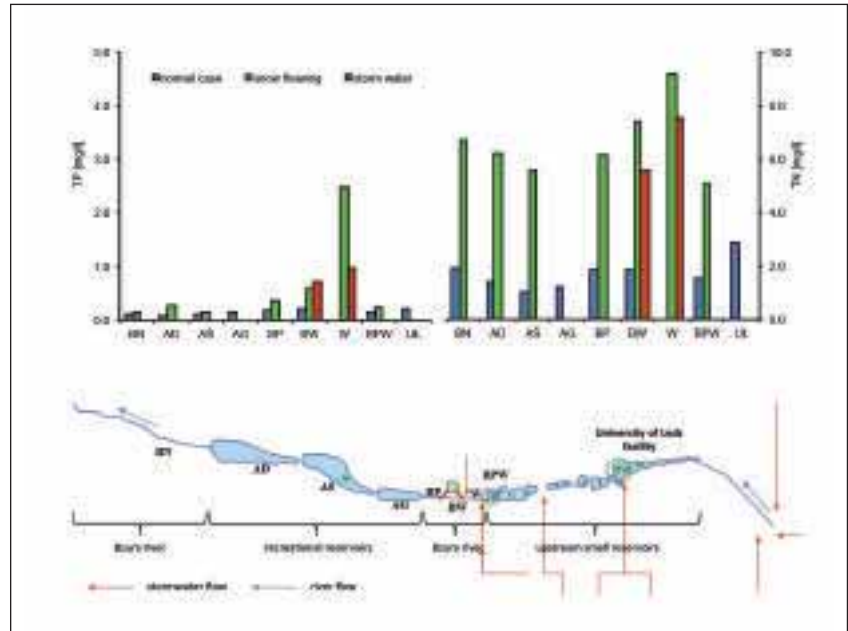


Fig. 1: The project is financed by the European Union, National Fund for Environmental Protection and Water Management and Provincial Fund for Environmental Protection and Water Management in Łódź

to rehabilitation of urban reservoirs' (LIFE08 ENV/PL/000517) takes comprehensive action (Fig. 1) based on ecohydrological biotechnology initiated in the SWITCH project (GOCE 018530, 6FP EU) and Adaptive Assessment and Management and developing in POIG project (POIG.01.01.02-10-106/09). The innovative approach proposes:

- Developing and implementing ecohydrological biotechnologies and their synergies for accomplishment of the goals of the EU Directives (Directive 2006/7/WE on bathing waters; Water Framework Directive 2000/60/WE) on improving water quality and reducing cyanobacterial blooms;
- Planning and decision-making methodologies for integrated and participatory urban aquatic ecosystems management in a multi-stakeholder platform;
- Training, dissemination and upscaling of knowledge and know-how;

- Consolidation of knowledge about functioning of urban water ecosystems.





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