

Project Idea

“Development of the wastewater treatment plants in Transcarpathian region Ukraine”



Main Priority Area

PA 4.04 To continue boosting major investments in building and upgrading urban wastewater treatment facilities across the Danube Basin, including measures to build capacity at the regional and local level for the design of such infrastructure



Project relevance

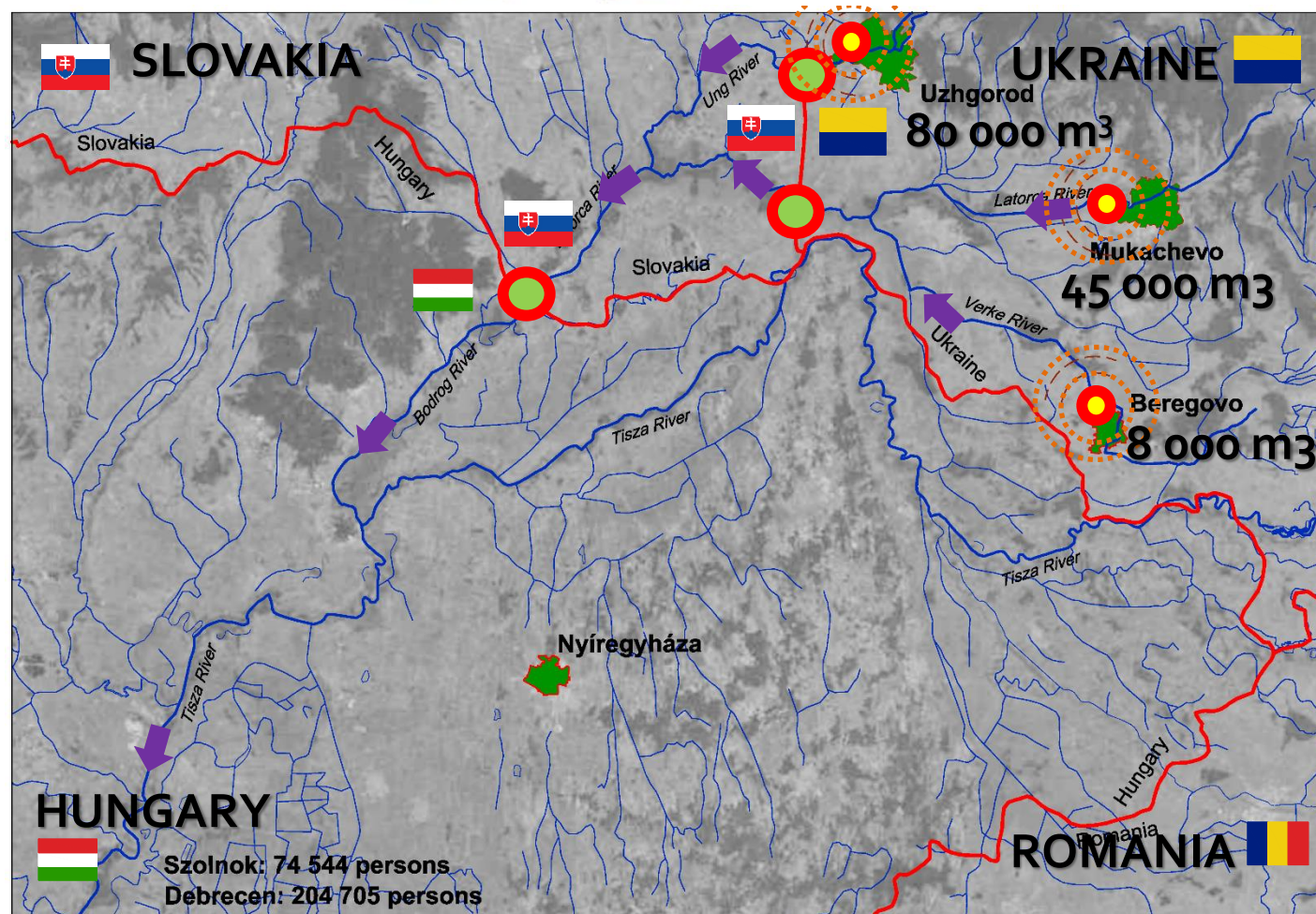
The quality and capacity of wastewater treatment facilities in three target cities of Uzhgorod, Mukachevo and Beregovo lay significantly behind other Danube cities.

In extreme case, a total of nearly 150,000 m³ of insufficiently purified wastewater pollutes rivers Danube basin every day!



Direct risks in the region:

- River pollution,
- Groundwater pollution.



Target groups



Target groups

- Population of Uzhgorod: 117,600 persons.
- Population of Mukachevo: 81,600 persons.
- Population of Beregovo: 24,505 persons.
- Inhabitants of Transcarpathia (Ukraine), Kosice region (Slovak Republic), Eastern part of Hungary (Borsod-Abaúj-Zemplén, Hajdú-Bihar, Jász-Nagykun-Szolnok, Szabolcs-Szatmár-Bereg, Bács-Kiskun, Békés, Csongrád) and North of Serbia (Vojvodina), - more than 6.8 million people.
- 1500 settlements in the water catchment area of the Tisza River and of the Danube river.



Project general and specific objectives

Overall objective:

- to improve the wastewater treatment facilities in Uzhgorod, Mukachevo and Beregovo and thus reduce pollution in rivers of Danube region.

Specific objectives:

- reconstruction of waste water plants and implementatio of modern purification technologies;
- development of treatment facilities for waste and sludge (biogas plant and composting stations).



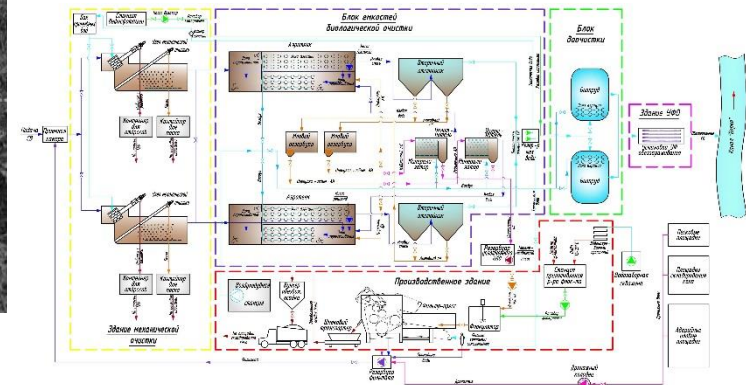
Current condition

- Hydraulically surcharged,
- Critical technical conditions,
- Limit exceeding,
- Possibility of groundwater pollution,
- No waste and sludge usage.

Uzhgorod



Beregovo



Proposed project activities and their locations

Activity 1: Estimation of building costs and design for 3 cities (Uzhgorod, Mukachevo and Beregovo);

Activity 2: Construction of mechanical and biological treatment facilities in 3 cities;

Activity 3: Construction of nutrient removal facilities in 3 cities;

Activity 4: Sewage sludge treatment, construction of composting facilities and rainwater reservoir.

Activity 5: Reconstruction of the most critical elements of canal network.



Expected results and outcomes

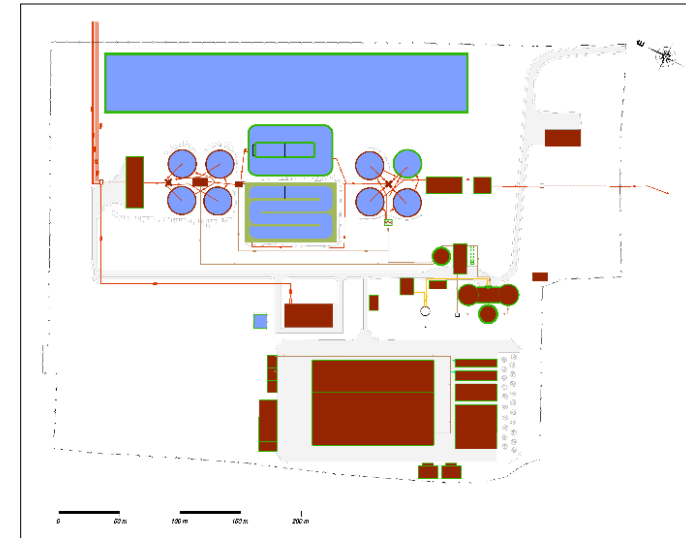
- 1) Project documentation for 3 wastewater treatment plants and 3 sludge digesters prepared;
- 2) Existing mechanical and biological treatment units demolished and new facilities constructed;
- 3) Nutrient removal facilities constructed;
- 4) Composting units, sludge digesters constructed;
- 5) Rainwater reservoir, roads and yard lines constructed;
- 6) A trial run for each treatment plant;
- 7) Reduction of infiltration on canal network.



Uzhgorod

Planned conditions

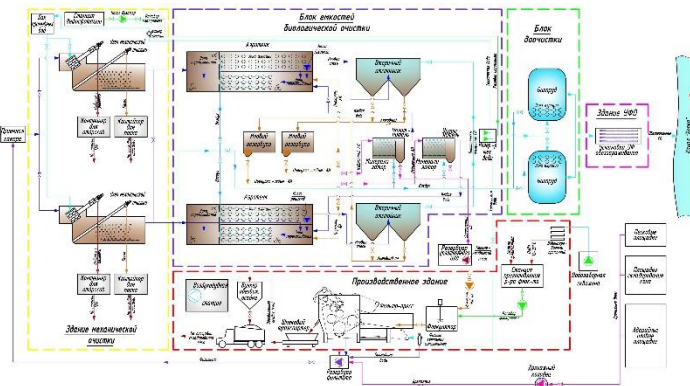
- Termination of hydraulic surcharge, rainwater reservoir,
- Termination of groundwater pollution,
- Usage of sludge, sludge emplacement.



Mukachevo



Beregovo



Project timeframe

06.2016 - 06.2019

Approximate total project budget (in million EUR)

Preparation and measuring total = 3,5 EUR:

Uzhgorod 1,5 EUR, Munachevo 1,0 EUR, Beregovo 1,0 EUR;

Project of WWT total = 34,5 EUR:

Uzhgorod 15,5 EUR, Mukachevo 11,5 EUR, Beregovo 7,5 EUR;

Project of canal network total = 6,0 EUR:

Uzhgorod 2,0 EUR, Mukachevo 2,0 EUR, Beregovo 2,0 EUR



Project Partners

- NGO Transcarpathian Agency for Investments, Innovations and Development, Ukraine,
- Municipality of Nyíregyháza, Hungary,
- Uzhgorod City Council, Ukraine,
- Mukachevo City Council, Ukraine,
- Berehovo City Council, Ukraine,
- NYÍRSÉGVÍZ Nyíregyháza, Hungary,
- Region Water and Sewer Works Plc., Hungary.



Potential sources of funding

- Danube Transnational Programme 2014-2020,
- ENPI CBC HUSKROUA 2014-2020,
- European Investment Bank,
- European Bank for Reconstruction and Development,
- NEFCO, etc.



Other relevant information

Development Study, preliminary building estimation and designs (for Uzghorod and Munkachevo) are available at the moment, June 2015.

Documents have been prepared in the frame of Project

“The development of environmental protection in the cities of Mukachevo and Uzhgorod through assessing the status of existing, polluting water utility systems (water and waste water), additionally, design of a development programme for these systems” HUSKROUA/1101/068 funded from ENPI CBC Programme Hungary-Slovakia-Romania-Ukraine 2007-2013.





Thank you for attention!

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