



INTERNATIONAL WATERS RESULTS NOTES

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Water Quality Protection Project

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1. The completed Trnovo and Odzak Wastewater Treatment Plants already substantially contribute to the project's major objective of reducing pollution from municipal sources into the Neretva and Bosna Rivers, whereas the currently being under construction Wastewater Systems of Zivinice and Mostar will result in Bosna and Neretva river water quality improvement shortly.
2. The feasibility study on low cost natural treatment resulted in a comprehensive overview of all currently available wastewater treatment technologies as well as recommendations to each municipality in the BiH on which treatment technique offers optimal results. The study will be soon extensively discussed during a workshop with representatives from other Balkan countries.
3. The extended Water Information System offers the government vast possibilities on efficient assessment of pollution levels, identification of polluters and determination of flow regimes.

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PROJECT OBJECTIVE

The project addresses the environmental degradation of the Neretva and Bosna Rivers, coordinates regional priorities and develops a Wastewater Improvement Plan (WIP) for BiH. The WIP clarifies the institutional framework for Wastewater Management and further improves the cooperation with institutions in neighboring countries and prepares the groundwork for innovative low-cost wastewater treatment methods.

The project also supports further development of the Water Information System (WIS) through installation of additional modules on the existing WIS database.

Furthermore it covers capital investments in wastewater treatment in Trnovo, Odzak, Zivinice and Mostar.

Finally the project aims at disseminating information in BiH and the region for replication activities at other priority sites in the Balkans.

RESULTS: PROCESS

The GEF project is consistent with other projects that are being implemented in the water supply and sanitation sector in BiH. Similar to other operations involving utilities, the project assists the utilities under the project to establish commercially oriented business type practices, and become financially self-sustaining through the preparation of yearly Business Plans showing overall targets for each year in terms of e.g. increase of the number of people to be served, improvements in the quality of water, improvements in the collection-to-billing ratio, reduction of energy per m³ sold water and of the staff per 100 connections.

Moreover, the project supports the establishment of links and partnerships between cities of the region on comprehensive wastewater management and provides a model and an adaptable curriculum in enabling implementation of new processes.

The project further strengthens the Joint BiH/Croatian Working group, with coordination from Serbia and Montenegro to implement the Wastewater Improvement Plan (WIP). Technical specialists working with the project will share their experience and the lessons learned under the project through joint meetings, training session and conferences organized in support of the UNDP/UNEP regional projects as part of the Black Sea/Danube Program and MED SAP.

INDICATOR#1 Improved/Clarified institutional framework for wastewater management, financing and monitoring (Component A) [Completion of Wastewater Improvement Plan.]

A Water Information System (WIS) has been developed for the entire territory of BiH (even though the Project is defined as solely for Federation of BH) and will have significant benefits in terms of a unified, country-wide approach, facilitating, therefore, water quality protection, reporting requirements of BiH as a country and the harmonization of BiH legislation with the EU.

INDICATOR#2 Percentage of the effluent discharged according to the national standard [After completion of this Project, 11% of municipal wastewater (from population which are connected to public sewage) will be treated and discharged according to new BiH water-environment standards.]

6% of municipal waste water is now treated and discharged according to existing standards.

RESULTS: STRESS REDUCTION

The project's capital investments in the wastewater treatment in the four cities directly contribute to the pollution reduction in the two watersheds, those of Bosna and Neretva rivers. Prior to the project the four wastewater treatment plants were non-operational (two will be newly constructed) and the municipal wastewater was released untreated into the river, which apart from being used recreationally or for fishing, is the main water source in the country, both potable and for other uses such as irrigation. These investments will also indirectly, allow for future additional connections to the now established wastewater collection and treatment systems, which would then decrease the non-point sources of pollution from clusters of households that are currently not connected to the wastewater collection and treatment systems.

INDICATOR#1 [Reduction of nutrient discharges (P & N kg/yr) and associated op.costs (\$/kg/nutrients)]

Effluent with an emphasis on nutrient discharges will be regularly monitored in all four wastewater treatment plants, and data will soon be available for comparison and cost extrapolation.

INDICATOR#2 [BOD discharges (tons/yr) and associated op.costs]

Effluent, specifically BOD discharges will be regularly monitored in all four wastewater treatment plants, and data will soon be available for comparison and cost extrapolation.

RESULTS: WATER RESOURCE AND ENVIRONMENTAL STATUS

The project's results are directly related to the protection of water resources, and improvement of the water quality in the two largest watersheds in the country. The project aims at development of the Water Information System that presents a unified, country-wide means to monitor water quality that is harmonized with the EU requirements. In addition, the feasibility study on non-conventional wastewater treatment will establish a framework on future actions and developments in wastewater management. The capital investments in Trnovo, Odzak, Zivinice and Mostar will substantially decrease the stress on surface waters – to be most clearly shown in the town of Mostar, which is the largest settlement on karst banks of the Neretva river.

The indicators on water quality and reduction of pollution loads please see above result on Stress Reduction.

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