

GLOBAL PARTNERSHIP ON NUTRIENT MANAGEMENT

BMP Case Study

Overview

Name: Hungary: Reduction of Nutrient Discharges

Location/Terrain: Hungary at the North Budapest Wastewater Treatment Plant (NBWWTP) and in the Gemenc and Beda-Karapanca areas of the Danube-Drava National Park (DDNP)

Crop(s): Livestock and wetlands restoration

Nutrient(s): Nitrogen and/or phosphorous

Rationale: Reduce eutrophication caused by the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorous; reduce nutrient discharges into the Danube River that originate from untreated communal wastewaters from Budapest.



Issue(s) of Concern/Challenges:

Nutrient discharge is contaminating bodies of water that lead into the Danube River and Black Sea.

Practice Objectives:

Reduce nutrient discharge to water bodies and promote behavior change through strengthened institutional capacity and community-based actions.

Practice Description:

This project has several components, including:

1. Upgrade NBWWTP to tertiary level of treatment for nitrogen and phosphorous removal.
2. Rehabilitate about 10,000 hectares of wetlands.
3. Conduct comprehensive impact evaluation and results analysis studies of the two previously mentioned interventions. These results used as a basis for dissemination, replication and knowledge-sharing activities.

Outcomes:

- Implementation of the EU Nitrates Directive and selected measures under the Water Framework Directive
- Investment support provided for Monitoring, Reporting and Impact Analysis at the local, and river basin levels

Key Successes:

- Progress towards compliance with EU directives
- Increased capacity of existing central, regional and local institutions to protect and manage wetlands, floodplains and aquatic ecosystems

- Improved water quality and decreased risk of pollution at 700 potable water wells producing 1.2 million cubic meters of drinking water daily
- Support to GEF Danube and Black Sea Regional Projects
- Protection of the ecosystems of two internationally important Ramsar sites that are nesting places for a number of migratory birds and other species of global importance

Significance:

Through the development of tertiary treatment at the NBWWTP and wetland restoration, nutrient discharge to bodies of water can be reduced.

Data/Graphs:

Investments:

WB-GEF Strategic Partnership for Nutrient Reduction in the Danube River and Black Sea:
USD 31.97 million



For more information, please contact Chuck Chaitovitz at chuck.chaitovitz@gef.org or visit www.gpa.unep.org/index.php/global-partnership-on-nutrient-management.

For further information, the project contact is:

Janos Tobias, Ministry of Environment and Water, Hungary Fo u. 44-50, 1011 Budapest. Tel.: (36-1)457-3300, E-mail: tobiasj@budapest.hu,
Website: <http://ktm.hu>