

PROJECT IDEA APPLICATION FORMAT

in the frame of the UNDP/GEF project

Integrating multiple benefits of wetlands and floodplains into improved trans-boundary management for the Tisza River Basin

I General information

Project title	Selected Measures Towards Integrated Land and Water Management in Upper Tisza, Ukraine
Project summary	<p>The project is devoted to demonstrate advantages of integrated approach towards joint water and land management for floodplain in Velyky Bychkiv village, Upper Tisza river basin. It comprises the following activities:</p> <ul style="list-style-type: none"> • development and implementation of floodplain management plan for stream Mlynivka (tributary of Tisza), including flood mitigation measures, reduction of nutrient and hazard pollution; • support in development and construction of waste water facilities for district of Velyky Bychkiv; • restoration of riverbed, floodplain and habitat on one of small streams; • floodplain cleaning from solid waste and improvement of cost-effective garbage utilization system in Velyky Bychkiv village • support in re-opening of the water gauging station in Dilove village, Tisza river.
Project area	The project area includes Upper Tisza river basin with special focus on Velyky Bychkiv village, Rakhiv rayon, Zakarpattya Oblast, Ukraine.
Requested grant	87,000 USD
Available co-financing	Total: 135,000 USD
Source:	• Velyky Bychkiv village council - 123,000 USD (600,000 UAH) (for construction of wastewater facilities)
Amount:	• Zakarpattya Center on Hydrometeorology - 4,000 USD (19,500 UAH) (operation costs for renewed water level gauging station)
Source:	• Institute of Hydrobiology of National Academy of sciences of Ukraine (8,000 USD) (39,000 UAH) (sampling and transport).
Amount:	
Project duration	15 February 2009 – 15 August 2010
Relevance with other application in the transboundary region	YES
Project title:	INTERREG Ukrainian-Romanian Project “Improvement of Flood Protection and Environmental Rehabilitation at border Ukrainian-Romanian part of Tisza”
Name of applicant:	Zakarpattya Water Management Board

II Applicant information

Bratislava Regional Centre • Grösslingova 35, 811 09 Bratislava, Slovak Republic
 Telephone: (421-2) 59337-111 • Fax: (421-2) 59337-450 • E-mail: registry.sk@undp.org •
<http://www.undp.org/europeandcis>

Name of applicant	Zakarpattya Oblast organization of All-Ukrainian Ecological League
Type of organization	Non-governmental organization
Brief description of organization mission	It is one of the most famous NGOs in Ukraine, established in 1997 with branches, covering all territory of Ukraine. Its main mission is to improve environmental situation in the country and to increase the level of ecological education and culture of Ukrainian citizens.
Recent activities relevant to the project	<p>2003-2006 National partner of Project of European Union “<i>Flood Risk Assessment in Zakarpatska Oblast, Ukraine</i>”. Main goal of the project: to improve the security of people and property against floods in the Tisza river basin by putting in place better assessment, warning and response systems,</p> <p>2004-2006 National partner of the Project of European Union “<i>Management of the Bug, Latorica and Uzh basins</i>” Main goal of the project: to enable a common management approach to be adopted across all parts of each international river basin</p> <p>2007-2008 Project partner of INTERREG project “<i>Improvement of Flood Management System</i>”. Main goal of the project: to decrease damage done by the floods, to improve efficiency of flood management</p> <p>2006-2008 Organizer of <i>All-Ukrainian Environmental Actions</i> “Do not Cut New year trees”, “Protect Early Spring flowers”, “Plant Your Tree”, “New Life of Water Springs”(cleaning water sources) in Zakarpattya Oblast</p> <p>2006-2008 Co-organizer of All-Ukrainian Ecological Field survey “<i>Public Control over Protected Areas</i>” Main goal: to conduct independent monitoring of environmental legislation fulfillment in protected areas</p> <p>2006-2008 Member of <i>Interdepartmental Commission on Technogenic-Environmental Safety of Zakarpattya Oblast State Administration</i> - issues of environmental monitoring</p> <p>2006-2008 Member of <i>Public Council</i> (Independent NGOs advisory Board) of <i>State Department of Environmental Protection in Zakarpatska oblast</i></p> <p>2007, 2008 Organizer of the <i>Danube day celebration</i> in Zakarpattya oblast Ukraine with support of ICPDR</p>
Contact person Name: Address: Phone: Fax: e-mail: web-site:	Vasyl Manivchuk Slovyanska naberezhna, 5 Uzhgorod, Zakarpattya Oblast 88018, Ukraine +380 50 432 70 60 +380 312 61 71 23 blu-rivers@utel.net.ua http://ecoleague.net/
Project partners Name: Type of organization: Brief description of activities: Role in the project:	Velyky Bychkiv village council http://www.bychkiv.com.ua/ Self-government Management of social, economic environmental issues of the village Main beneficiary and partner of the project. It has intension to build the wastewater facilities according to the

	construction scheme developed by the project. The council will provide all necessary data and support for project implementation.
Name: Type of organization: Brief description of activities: Role in the project:	Rakhiv Rayon State Administration http://www.rakhiv.adm.org.ua/ Local governmental body Management of the whole Rakhiv rayon, where the project area is located, implementation of Ukrainian national policy locally. Including the project recommendation in local development policy within Rakhiv rayon, support in project replication for other areas of the rayon.
Name: Type of organization: Brief description of activities: Role in the project:	Tyachiv rayon water management unit of Zakarpattya Water Management Board: http://vodhosp.uzhgorod.ua/ Local body of Zakarpattya Water Management Board Responsible for water resources management, irrigation and flood protection in Rakhiv and Tyachiv rayons It will provide all necessary data as well as will be a partner in the project activities on flood mitigation (stuff, machines)
Name: Type of organization: Brief description of activities: Role in the project:	Zakarpattya Center for Hydrometeorology http://gmc.ushgorod.ua State organization, representative of State Hydrometeorological Service in Zakarpattya oblast Operation of water gauging and meteorological stations, weather forecast The partner and beneficiary of the activity of water gauging re-opening. It will cover operation costs related to newly restored station and will provide received data at national and international levels.
Name: Type of organization: Brief description of activities: Role in the project:	Institute of Hydrobiology National Academy of Science of Ukraine Research institute Leading institute in surface waters bodies investigation and assessment The partner of the activity on restoration of riverbed, floodplain and habitat on one of small streams and Tisza floodplain. It will provide expertise, transport and sampling.

III Project information

- a) Describe the problem(s) this project intends to address. What would happen without UNDP/GEF support?

Velykyy Bychkiv village is a second largest settlement in Upper Tisza, located on right side bank of Tisza in 95 km from source of Black Tisza. It was selected to be a demonstration area for the project due to several problems, most of which are common for whole Upper Tisza within Ukraine (activities 1-4) as well as local one (activity 5). It is located in mountaineer part of the Tisza river, where the flood is being formed (3 extreme floods during last 10 years: 1998, 2001, 2008)) and in the same time here Tisza faces different types of pollution by nutrients, organic and hazard substances. The village is located on border with Romania, therefore improper land and water management in Velykyy Bychkiv has negative transboundary impact.

Regardless several on-going activities and programs in this area, UNDP/GEF demonstration project can assist in solving concrete problems, and achieved results can be easily transferred to other areas within Upper Tisza.

- b) Outline the project objective, activities and outputs.

The main objective of the project – to demonstrate innovative and cost-effective solutions to the typical environmental problems faced in Upper Tisza floodplains with guide for their further replication.

Activity 1. Development and implementation of floodplain management plan for stream Mlynivka (tributary of Tisza), including flood mitigation measures, reduction of nutrient and hazard pollution and risk assessment of accidental pollution

Background: There are a number of small streams, tributaries of Tisza, flowing through settlements in Upper Tisza river basin. In most cases, they are shallow or even dry most of time of the year. Households are often located right on their banks, and their floodplain is used for agricultural purposes up to water level. The riverbed and floodplain are not managed properly, littered and overgrown with trees and bushes. As a result, river flow capacity is being reduced, which lead to flooding by domestic flow, organic and nutrient pollution.

Stream Mlynivka, right side tributary of Tisza is located in village Velykyy Bychkiv. During historical flood in July 2008 Mlynivka in particular (not Tisza) caused most of damages of households and local infrastructure. In the same time, large wood processing factory (one of the hot spots within Ukrainian part of Tisza basin) is located in the catchment of Mlynivka.

Objective: to reduce flooding, nutrient and hazard pollution of Mlynivka stream by means of development and implementation water and land management plan

Outputs:

- water and land management plan for stream Mlynivka is developed and implemented;
- riverbed and floodplain cleaned and rehabilitated, water discharge capacity is increased up to natural one;
- water protective zone along the stream (according to Water Code of Ukraine) are created with concrete action plan for each household in the protective zone to reduce nutrient pollution. It became an integral part of the General Development Plan of Velykyy Bychkiv.
- risk assessment of accidental pollution from wood processing factory, including water sampling is conducted.

Partners and in-kind contribution:

Velykyy Bychkiv village council: responsible for management of identified water protective zones, agreeing of program of measures with households.

Tyachiv rayon water management unit of Zakarpattya Water Management Board: assistance in riverbed and floodplain cleaning and maintenance by providing machines and local stuff.

Rakhiv Rayon State Administration: law enforcement related to protective zones management.

Activity 2. Support in development and construction of waste water facilities for district of Velyky Bychkiv

Background: Velyky Bychkiv with population of 9,000, as many other settlements in Upper Tisza has no municipal sewage system at all. The results of water quality analysis show the water quality downstream such villages worsened. Taking into account economic situation in Ukraine, construction of single village sewage network and treatment facilities are not feasible. The approach is to construct the number of separate treatment facilities.

The district selected includes multyflat blocks, school, kindergarden. At present, the sewage water from these buildings flows underground to river Shopurka (tributary of Tisza) and causes nutrient pollution. Moreover, wood processing plant is located between houses and the river. It is oldest factory since 1868 and soil is highly contaminated by wood processing residue, which led to pollution of water in wells and in Shopurka and Tisza as well.

Objective: to support in construction of water sewage treatment facilities for district in Velykyy Bychkiv village

Outputs:

- design of sewage network and plant is prepared. The construction will be financed by the village council from the national sources;
- pollution by organic and nutrients is reduced;
- pollution by hazard substances (wood processing residue) is reduced.

Partners and in-kind contribution:

Velykyy Bychkiv village council:

- provision of all necessary data for the design, identification and allocation of the land for waste water treatment facilities, their further construction according to the design.
- financial contribution: 600,000 UAH (123,000 USD) (construction of waste water treatment facilities).

Rakhiv Rayon State Administration: support in financing of planned waste water treatment facilities.

Activity 3. **Restoration of riverbed, floodplain and habitat on one of small streams**

Background: Timber cutting and saw mill operation are one of the main economic activities in Upper Tisza river basin. Unfortunately, many of small streams and rivers are significantly disturbed physically due to tracks and by pollution (wood remains). As result, habitats are deteriorated, and biodiversity is decreased.

Objective: to restore riverbed, floodplain and habitat of a stream upstream Belyky Bychkiv using environmentally friendly measures.

Outputs:

- the riverbed and floodplain physically are cleaned from wood residue
- cascade of waterfalls and side inlets are constructed to restore the river habitat
- invertebrates are introduced into the river.

Partners and in-kind contribution: *Institute of Hydrobiology National Academy of Science of Ukraine:*

- providing expertise, transport, sampling;
- financial contribution: 8,000 USD (sampling and transport).

Activity 4. **Floodplain cleaning from solid waste and improvement of cost-effective garbage utilization system in Velykyy Bychkiv village.**

Background: Pollution of floodplain by domestic waste, namely plastic items is significant environmental problem in Ukrainian part of Tisza river basin. Besides loose of aesthetic value of floodplain, plastic items (bottles, bags etc) disturb life in riverbed and floodplain ecosystem and as result lead to biodiversity degradation. Garbage is of local origin as well as coming from upstream villages both from Ukraine and Romania. Velykyy Bychkiv has very basic garbage utilization system, which should be improved.

Another recent problem in the floodplain along Velykyy Bychkiv is possible pollution by heavy metals accidentally spilled from Romania (Viseu river basin), happened during July 2008 flood. In case of pollution, relevant action plan should be elaborated.

Objective: to improve solid waste management system in Velykyy Bychkiv for floodplain ecological potential preservation.

Outputs:

- village solid waste collecting system is developed;
- waste containers are purchased;
- public awareness campaign is conducted;
- guide is published covering the issues of proper garbage management, actions in case of flood, and proper floodplain management;
- floodplain of Tisza and other rivers and streams within the village are cleaned and maintained with involvement of local population;
- floodplain soil analysis for heavy metals and other hazard substances is conducted

Partners and in-kind contribution:

Rakhiv Rayon State Administration: assisting in public awareness campaign.

Velykyy Bychkiv village council: assisting in floodplain cleaning and maintenance of improved solid management system (providing local staff)

Institute of Hydrobiology: sampling and analysis of floodplain soil (in-kind contribution).

Activity 5. **Support in re-opening of the water gauging station in Dilove village, Tisza river**

Background: Water gauging station on Tisza river in Dilove was opened in 1913 (one of the eldest stations in Upper Tisza). During financial crisis in the mid of 90s of last century, the station was closed. The upstream gauging station on Tisza located in Rakhiv and downstream one located in Velyky Bychkiv - distance

between them about 45 km. On this rapid reach of Tisza 3 large tributaries enter Tisza: Kisva, Shopurka and the biggest one - Viseu. For purpose of flood forecast and readiness and flood mitigation program, the data from Dilove station (exit from Ukraine and few km upstream Viseu confluence) is of big value. This data will be useful for Flood Protection Program and flood forecast system in Zakarpattya, which foresee construction of dikes at this part of Tisza, leading to disconnection of floodplains.

Objective: to re-open the water gauging station for improvement of flood forecast and flood management.

Outputs:

- equipment for the water gauging station is purchased and construction works are finalized
- the water gauging station is operational and data is available to all interested stakeholders (including Hydrometeorological Services of Ukraine and relevant services in Tisza countries).

Partners and in-kind contribution: *Zakarpattya Center of Hydrometeorology:*

- conduction of regular hydrological observations
- financial contribution – 4,000 USD (salary for observer, communication and maintenance).

c) Describe how the sustainability of project results will be ensured.

All planned activities have support of local authorities, including their financial contribution. It shows their high interest in planned results and assures sustainability of project results.

d) Describe the potential for replication elsewhere.

As far as the project will deal with typical for Upper Tisza problems, the best practices developed will be spread for other settlements (brochure, media reports etc.) Rakhiv rayon State Administration will assist in such replication and project results dissemination.

e) Summarize activities, programs and projects being undertaken by other organizations that could influence your project, and how your project could collaborate with them.

Since 2001 Ukraine adopted *Flood Management Program for Zakarpattya Oblast*. Some of the measures focus flood protection in Velykyy Bychkiv. The proposed demo project will allow to specify some of actions, in particular the actions related to disconnection and reconnection of floodplain.

The proposed demo project will complement recently launched INTERREG Ukrainian-Romanian Project “Improvement of Flood Protection and Environmental Rehabilitation at border Ukrainian-Romanian part of Tisza” in the fields of local flood mitigation actions, floodplain rehabilitation and pollution reduction.

f) List the project partners that have been already approached and agreed on the cooperation.
Describe their role in the project.

See b), described by activities.

g) List potential donors and in-kind contributors to project activities.

See b), described by activities.

h) Estimate timeline and budget summary.

Project duration: 8 months/ 15 February 2009 -15 August 2010

#	Activity	Sum, in USD
1.	Development and implementation of floodplain management plan for stream Mlynivka	36,100
2.	Support in development & construction of wastewater facilities for district of Velyky Bychkiv	14,000
3.	Restoration of riverbed, floodplain and habitat on one of small streams	8,000
4.	Floodplain cleaning from solid waste and improvement of cost-effective garbage utilization system in Velykyy Bychkiv village.	12,400
5.	Support in re-opening of the water gauging station in Dilove village, Tisza river	2,000
6.	Management costs	8,500
7.	Travel costs	3,000
8.	Workshops	3,000
	TOTAL:	87,000