

“OUTLOOK ON UNCONTROLLED ANTHROPOGENIC IMPACT FOR DAMAGES TO THE MICRO PRESPA LAKE”,

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Environmental problems of Prespa Lake system are presented in the paper. This system is composed of Minor and Macro Prespa Lakes, and is the largest and important limnological object. Prespa Lakes have great and special ecological values. Its environment is characterized by a picturesque nature, particular climate, very rich biodiversity, extremely complicated karstic hydrography, high transparency of dark blue waters and uncommonly diversified, beautiful coastline. Micro Prespa in particular has high ecological values. Micro Prespa Lake has international status according to the Ramsar Convention, International Park and Special Protection Area-79/409/EEC. Prespa Lakes have a very important influence in the general water balance of the Ohrid Lake. Prespa's hydrographic network is located in the three-state border area, i.e. between Albania, FYROM and Greece, which have the common interest for maintaining and recuperating the special natural hydro-ecological values of European dimensions in this area.



The Project “**Rising Public Awareness for halting anthropogenic damages to the Micro Prespa Lake**”, supported by UNDP-GEF/SGP Program, made Micro Prespa problem clear. The main aim of the project was rising the sensibility and awareness of the local community and state institutions about the great importance of impact assessment of anthropogenic activity in the biodiversity of Prespas area. According to the studies, investigations and analyses, the following was concluded:

1. The Albanian part of the Micro Prespa Lake has been damaged and continues to be damaged by the uncontrolled human activities. About 20% of the Albanian part of Micro Prespa

Lake are destroyed. The other part of the lake is atrophied and the habitat and biodiversity are damaged. Important and unique species of fish, birds and plants of national and international values are risked.

2. In 1974 have been constructed an irrigation system for the region. Very turbulent water of the Devolli River has discharged in Micro Prespa Lake during the winter, and is taken from this lake for the irrigation during the summer. Turbid waters of Devolli River flows in Micro Prespa Lake and decanted in it. A huge amount of 1,2 million cubic meters alluvium has been deposited on the lake bottom and lakeshore, and has destructed the lake. Devolli River waters, rich in alluvium, organic coal material, absorbed and free chemical toxic remains by the drainage of Devolli farm ground and geological section outcrops, have changed the chemical features of the lake water and degrading it. Blockage of underground karstic connection ways has diminished not only the components of the lake water balance, but also the decreasing yield of the underground springs, that supply the lake and the population with drinkable water. This situation is very dangerous for the rural community. At the present, the Albanian part of the Micro Prespa Lake plays the role of a gigantic decanter. This is an unprecedented case, not only in Albanian but also in Balkan and World hydrography.

3. Devolli river alluvium deposited in Micro Prespa Lake caused the otherwise of territory of Republic of Albania in this area. Albania will not have any part in this lake after some years.

4. Devolli River- Micro Prespa Lake irrigation system not scientifically supported by environmental engineering, hydroeconomy and International Rights principles. It doest work according to the project parameters and doesn't supply the agricultural needs. Only 10 % of the water volume, discharges by Devolli River in Micro Prespa lake is taken from this lake for the irrigation, while 90% of this water volume flows to Macro Prespa Lake. Micro Prespa Lake communicates with Macro Prespa Lake. Turbid waters of Devolli River flows in Micro Prespa Lake and decanted in it. The waters free of river alluvium, flows into Macro Prespa Lake. Water transfer from one basin into the other, as it is in Devolli River and Prespa Lake case, must based on Water Law of the Republic of Albania and transborder waters international law.

5. The social and public opinion in Albania , must be conscious for the otherwise of Albanian territory, which in the case of Micro Prespa Lake has a national and international negative effect on destructions of a transborder lake, defendet by European Convents. The responsible state administrate must take measures to halt these damages and to regenerate Micro Prespa lake and its biodiversity.

6. It is quite necessary to realized a joint Albanian, Greek and Macedonian integrated investigation: **“Regeneration and conservation of ecological values and biodiversity of transborder Prespa Lakes and on the evaluation of the compelxe and integral use in hydroeconomy”**.

7. To determined technical works for the regeneration of the lake, in framework of proposed project, integrated geophysical surveys have programed, for solving of two problems:

- a) Mapping of the filled lake sediments,
- b) Slope stability investigation,
- c) Karstic zones investigation.

High resolution shallow seismics, submerged GeoRadar survey, resistivity tomography, micromagnetic surveys, and underwater core sampling will be included in the geophysical complexe, in order to arrive at an integrated technology.