



**GLOBAL ENVIRONMENTAL FACILITY
World Bank**

**ALBANIAN NATIONAL
ENVIRONMENTAL AGENCY**

**MACEDONIAN MINISTRY
OF ENVIRONMENT AND
TERRITORY PLANNING**

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**LAKE OHRID CONSERVATION PROJECT
(Case Study on Monitoring & Evaluation)**

Some Data on Lake Ohrid

- **Location** *South West of Balkan Peninsula*
- **Area** *358 km² (1/3 belongs to Albanian side and 2/3 to Macedonian side)*
- **Maximum depth** *289 m*

- **Shoreline** **88 km**
- **Maximum length** **30 km**
- **Maximum width** **14.5 km**
- **Altitude from the sea level** **695 m**
- **Watershed area ; originally- 1.042 km², actually- 1.487 km² (starting from 1962, after diversion of River Sateska).**
- **Effective size of watershed is substantially larger including Lake Macro and Micro Prespa watershed because 46% of total inflows in the Lake Ohrid are coming from these lakes. (200 m higher than Ohrid)**
- **40 rivers and torrents draining in the lake**
- **Only one surface outflow from Lake Ohrid is River Drini i Zi (Black Drin) with a mean discharge of 22.2 m³ (72%). 28% by evaporation.**

Environmental significance

- One of the oldest lakes in the world; 2-4 million years old,
- One of the largest biological reserves in the Europe possessing unique flora and fauna extinct elsewhere, thanks its oligotrophic state,
- 17 fish species from which 10 are endemic,
- 5 particular endemic species, restricted to small areas of lake offering special micro ecological systems,

Because of its reach history and unique flora and fauna, Lake Ohrid was declared in 1980 a UNESCO World Cultural and Natural Heritage Site

Economic Activities

- Agriculture production (viticulture, fruit trees plantation, livestock)
- Industrial plants (mining, ore processing, textile, metals, plastics, food)
- Tourism

Major Transboundary Threats to the Lake Ohrid

- lake's water exchange only every 60 years
- increasing amount of phosphorus discharged in the lake by human activities (150 t/y and should be reduced to 100 t/y to conserve oligotrophic state of the lake,
- only 25 % of urban waste waters are treated before discharging into the lake,
- non point sources of pollution (chemicals used in agriculture, erosion),
- untreated industrial waste waters,
- overfishing,
- overcutting of trees around lake
- overgrazing by goats and sheep.

The Project

Total amount	4.392.000 \$US, from which;
GEF grant	4.100.000 \$US (1.840.000 \$US for Albanian Government and
2.260.000\$US for Macedonian Government)	
Albanian contribution	142.000 \$US
Macedonian contribution	150.000 \$US

Project implementation period: 3 years, starting from March 1999.

Responsible agencies: Albanian National Environmental Agency and Macedonian Ministry of Environment and Territory Planning.

Project Objective

The primary objective of the Project is to develop the basis for the joint management and protection of Lake Ohrid by the Albanian and Macedonian Governments and people of two countries.

By establishing a basis for joint management of lake, the Project will promote cost-effective solutions to transboundary natural resources management and pollution problems, and provide basis for the sustainable economic development of the watershed.

Project Structure

Project Components and achievements during one year and half of its implementation

The project consist of 4 components:

1. Institutional Strengthening (351.000 \$US).

***The objective:* strengthening the capacity of public officials at all levels in the Lake Ohrid watershed for effective enforcement country's environmental laws, regulations, standards and policies.**

The achievements:

- **establishment of joint (Alb.-Mac.) Institutional Strengthening Task Force (ISTF) and organization of meetings**
- **Sectorial Working Groups for reviewing the policy, legislation and enforcement and production of respective reports.**
- **Agreement of responsible local structures for the enforcement of Law on Fishery and its regulation (labeling and licenses and fishery control).**
- **Agreement of the joint ISTF for unification of some articles of regulation on fishery of both countries and submission to respective government for final approval.**
- **Preparation of the Report on the Present Environmental Policy Framework and the Related Administrative and Enforcement System (to be completed by October 2000)**

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- **2. Monitoring Program (1.900.000 \$US from which 946.000 \$US for Albania).**
(Fig. of sampling station in Lake Ohrid)

The objective: Establishing a comprehensive bi-national Monitoring Program to inform the public and local officials, and to provide the environmental information necessary for effective and rational planning and decision making.

The achievements:

- **Establishing the joint Monitoring Task Force (MTF).**
- **Preparation of the Joint Protocol on the methodology of sampling and analyzing.**
- **Implementation of Monitoring Program and reporting the results to the public.**
- **Construction of measuring profiles to the tributaries of Lake Ohrid.**
- **Preparation of Executive Designee for Monitoring Laboratory to be constructed in Pogradec.**
- **Preparation of technical specification for equipment to be installed in the Monitoring Lab.**
- **Recruitment of technical staff for the Lab. And training program for them.**
- **Base line study on the Lake Ohrid (to be completed by October 2000).**

3. The Participatory Watershed Management Approach (1.900.000 \$US).

The objective: mobilization the groups within the watershed to transform the strategic program developed in the feasibility study into an action plan. The approach involves developing a participatory watershed management committee and using pilot projects to demonstrate cost-effectiveness of measures, and know-how to implement them.

The achievement:

- **Preparation and distribution to communities and stakeholders two brochures; on LOCP and Feasibility Study on LOCP Strategic Action Plan (SAP).**
- **Meeting with target groups on watershed management for introduction LOCP mainly focused on Participatory Approach and identification of candidates for Water Management Committee (WMC).**
- **Training of selected people from local authorities, and communities on institutional and legal aspects of environmental protection, environmental issues in the Lake Ohrid Watershed area.**
- **International technical assistance on development of watershed management approach.**
- **Establishment of WMC with participation of representatives of main social and economic activities in the watershed including media and local NGOs.**

4. Public Awareness and Participation (250.000 USD)

The Objective:

(I) Increase public awareness on environmental issues related to Lake Ohrid, and (II) Increase community participation in activities to conserve and protect Lake Ohrid and its watershed.

The achievements:

- **30 projects granted and implemented by 16 local NGOs.**
- **A NGO Need Assessment survey was carried out by the staff of this component and respective report published in Albanian and English.**
- **Four training courses for local NGOs encompasses the topics as NGO management, writing a project-proposal, monitoring evaluation, reporting, communication, facilitation, public participation, etc.**
- **The three lingual bulletin of the Project (Albanian, English, Macedonian).**
- **Monthly newsletter.**
- **Main Products: a considered numbers of activities involving the community, students, citizens, posters, ecoguid of Pogradec region, booklets on the species of the lake, leaflets on environmental issues, TV and broadcast debates, TV spots, cultural activities.**

5. Lake Ohrid Management Board.

- **Was established on November 20, 1996 on the base of MOU between Albanian and Macedonian Governments.**
- **It is consisted of twelve members, six of each party, convened two times per year.**
- **Some of decisions and recommendations: Establishment of joint ISTF and MTF, yearly work plans and respective budgets.**
- **Joint statement on the construction of sewage water treatment plant in Pogradec.**
- **Fulfillment of planned activities under the Project during the one year and half of its life.**
- **Proposal to respective Governments for opening new border pass in the Ohrid Lake region for facilitating the free circulation of people in two sides of the Lake.**
- **Adoption of June 21, as “Lake Ohrid Day”.**

6. Monitoring and Evaluation

- **Monitoring and Evaluation is not an ex-post assessment exercise, but an integral part of project design.**
- **Monitoring is a critical input to the project components (watershed management, public awareness and institutional strengthening).**
- **Monitoring is the key tool to measure the achievement of project development objectives.**
- **Monitor the critical ecological and water quality parameters.**
- **Inform public about the health of the lake and threats to it.**
- **Provide official with reliable environmental data for planning and decision making.**
- **Measure progress made by the project as a whole in achieving its development objectives.**

7. Monitoring and Evaluation Indicators

- *PDO: Conserve and protect Lake Ohrid natural resources and biodiversity.*

Indicators

- **Maintain phosphorous below levels for oligotrophic state.**
- **Reduced nutrients (N&P) and microbiological loads (E. Coli) in the tributaries.**
- **Maintain key ecological indicators of ecosystem health within safe limits.**

PDO: Develop effective bi-national cooperation

Indicator:

- **Lake Ohrid Management Board is fully functional and empowered to make and/or affect decision concerning watershed.**

October 16, 2000