

# Monitoring in Shared Waters: Developing a Transboundary Monitoring System for the Prespa Park

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# The Prespa basin

- ◆ Transboundary Basin (shared between 3 countries)
- ◆ Catchment area: appr. 1,400 sq.km
- ◆ Hotspot for biodiversity, endemism:
  - > 1,500 plant spp;
  - > 260 bird spp;
  - 8 endemic fish taxa;
  - Largest Dalmatian Pelican colony worldwide
- ◆ Protected Areas: 4 National Parks, 2 Ramsar Sites
  - Pelister NP (FYRoM)
  - Galichica NP (FYRoM)
  - Prespa NP (AL)
  - Prespa Nat. Forest (GR)
- ◆ February 2000: Establishment of the transboundary Prespa Park



# Project for the development of a Transboundary Monitoring System

- ◆ TB Environmental monitoring a prerequisite for management and protection of TB basin
- ◆ Prespa Park Strategy
  - need for transboundary monitoring explicitly mentioned in the Strategic Action Plan (2002)
  - a priority for the Prespa Park stakeholders
- ◆ Monitoring one of the priority activities of the GEF/UNDP Project for the Prespa Park (started 2007)
- ◆ In 2007, funding secured by the Society for the Protection of Prespa
  - In full coordination with GEF/UNDP Project; some activities co-funded by GEF/UNDP project
- ◆ Technical consultant: Tour du Valat Biological Station, France
  - National Consultants from the three littoral countries

# Project Outline

Title	Development of a Transboundary Monitoring System in the Prespa Park
Project area	Transboundary Prespa Park
Project duration	July 2007-September 2011
Co-funding	SPP/WWF-Greece; some activities co-funded by GEF/UNDP Project
Technical Consultant	Tour du Valat Biological Station, France; National Consultants from the 3 littoral countries
Steering Body	Monitoring and Conservation Working Group (national stakeholders; MedWet; GEF-UNDP project)

# Steering Body: MCWG

- ◆ Monitoring and Conservation Working Group (MCWG)
  - to ensure scientific and political guidance
  - ownership
  - tap national expert resources
- ◆ Established Oct. 2007, supported by GEF/UNDP Project
- ◆ Representation from:
  - Ministries of Environment
  - Universities/ Research Institutions
  - National Park authorities
  - Local environmental NGOS
- ◆ Chaired by International Transboundary Adviser (GEF/UNDP Prespa Park project)



# Preparatory Stage (Oct 07- June 08)

## Main issues investigated:

- ◆ Aim of the TMS
- ◆ Geographical Scale
- ◆ Significant Values and Elements
- ◆ Current situation (as regards stakeholders, estimated available sources of funding, connection to EU Legislation and Policy)
- ◆ Guidelines on
  - indicators
  - institutions for implementing the TMS
  - administration
  - equipment
  - training

# Preparatory Stage (Oct 07- June 08)

## Challenges

- ◆ Institutional differences, difficulties of TB cooperation; hence, need for a wide participatory approach
- ◆ A notable dispersal of operations and responsibilities
- ◆ Indicatively: Fact-finding missions (Dec. 07 - Jan. 08) resulted in meetings with over 30 public authorities, scientific and research institutions implem. monitoring in Prespa, donors, NGOs, in 11 towns/ cities in the 3 countries



# Meta-database of monitoring programmes

- ◆ Consisting of existing environmental monitoring programmes in the Prespa basin
- ◆ Analytical description sheets
  - for each programme or for each family of monitoring parameters
- ◆ Initial identification of:
  - more than 27 institutions
  - in excess of 400 parameters
  - (physico-chemical, meteorological, hydrological, biodiversity, land-uses, demographics/statistics)
- ◆ One-off monitoring projects and surveys, not included
- ◆ But: need for continuous amendment/enrichment of the meta-database – on-going process

# Meta-database: snapshot

Microsoft Excel - Metadatabase\_GR\_v4.xls

MONITORING PROGRAMMES IN PRESPA LAKE AND ITS WATERSHED  
SIMPLIFIED META-DATASR

COUNTRY: OFFICE:

THEME	Ref. N°	Precise parameter(s) regularly measured	Period of monitoring	Periodicity	N° of parameters monitored	Geographic scale* (File provides exact location of station or delineation of area covered on Map (paper or PDF))	Availability of data	Remarks	Organisation in charge of monitoring
	1a	Rainfall	1964-today	monthly (daily)	1	4 stations: Agkaios Orestanos, Koula, Vrotaio, Mikrolina. Koula station has been moved to Agkaios Archilios island	Public (available upon request at nominal price)	Very often used in studies by consultants	Public Power Corporation (PPC), Department of Hydraulics
	1b	Air Temperature (monthly min-average max), Wind Speed (monthly average), Pan evaporation	1954-today	monthly (daily)	5	1 station: Koula, has been moved to Agkaios Archilios island	Public (available upon request at nominal price)	Very often used in studies by consultants	Public Power Corporation (PPC), Department of Hydraulics
	2	Lake Surface Water - Quality Parameters	A few years	5-6 times/year	up to 33-41	Megal Prespa and Idria Prespa (Fouades bay, BOT beach, N of Agkaios Archilios id. at 2m deep 0630,40° 21'01, 33E)			Fluoride Chemistry Service (FCS) in Florina and Central Water Service (CWS) from the Ministry of Environment
	3	Lake Water - Quality parameters	1970s-present (data on the Internet cover years 1984-1997)	Almost Monthly (previously 5 times/year, increased 4 times/year)	up to 19 (usually 18 to 24)	Megal Prespa, Idria Prespa	Public (upon request from the Ministry of Agriculture)		Dept. for the Protection of Longicoin Waters, Ministry of Rural Development and Food (Formerly Ministry of Agriculture)
	4a	Meteorological data (Solar Radiation, Air T., Humidity, Rainfall, Wind Direction, Wind Gust, Wind	1961-present	Samples collected 3 times/week	7	Koula	(available upon request from the		

## A plethora of data types/ availability:

- ◆ Publication:
  - internet;
  - reporting;
  - published articles
- ◆ Data form:
  - synthesized or processed data;
  - raw data?
- ◆ Access??
  - publicly available upon request;
  - free/ nominal fees/ high fees;
  - not available until published;
  - restricted availability

# Preparatory Stage: review by MCWG

- ◆ Outputs reviewed and approved by MCWG in its 3 meetings; trilateral consensus
- ◆ MCWG selected and endorsed the option of a **routine surveillance TMS** for Prespa
  - to establish baseline information
  - to establish range of variation for key parameters
- ◆ May evolve into an “adaptive management” monitoring system, once management plans are in place

# Next stage: expert study for the TMS

- ◆ Expert study (Oct 08 – Sep 09)
- ◆ Trilateral thematic working groups will contribute to selection of indicators
- ◆ Main themes:
  - Waters/ Hydrology
  - Fish & Fisheries
  - Aquatic Vegetation
  - Forests and Forestry
  - Birds and other Biodiversity
  - Socio-economics
  - Land Use

# Overview of the TMS

- ◆ Preparatory Stage (finalized June 08)
- ◆ Expert study (Oct08-Sep 09)
- ◆ Installation of equipment
- ◆ Training
- ◆ Pilot application
- ◆ Final adjustment and evaluation
- ◆ Endorsement
- ◆ Finalised: expected by 2011

# Conclusions

- ◆ Dispersal of operations and responsibilities – high complexity
- ◆ Plethora of existing monitoring programmes and parameters
- ◆ On-going process, long term effort
- ◆ Trilateral contribution and consensus-building prerequisites for monitoring in a transboundary context
- ◆ State commitment and support essential for monitoring

# Thank you for your Attention!

- ◆ *For more info, you can contact the Society for the Protection of Prespa: [spp@line.gr](mailto:spp@line.gr)*

