

# Greek Biotope/Wetland Centre

organizes a training course within the framework of the project

## **"Hellenic – Bulgarian cooperation for the protection and management of Natural Resources – Application in Struma River Basin"**

regarding a) Hydraulic – hydrologic simulation systems and  
b) Geographical Information Systems and satellite image analysis

**Duration:** 30/10/2006 – 3/11/2006

### **Instructors**

Charalampos Doulgeris, Agr. Engineering, PhD in Water Resources

Antonis Apostolakis, Agr. Engineering, MSc in GIS and Remote Sensing

Lena Hatziiordanou, Geologist, MSc in Environmental Geotechnology

## **PROGRAM OF THE TRAINING COURSE**

### **Monday – 30/10/2006**

<b>Introduction to hydrology models and Geo-databases – Applications</b> (Ch. Doulgeris - A. Apostolakis)	
<b>Topics</b>	<b>Time</b>
1. Introduction to hydrology models – Applications	14.00 - 15.00
2. Introduction to Geo-databases – Applications	15.00 - 16.00

### **Tuesday – 31/10/2006**

<b>Geographical Information Systems (L. Hatziiordanou)</b>	
<b>Topics</b>	<b>Time</b>
1. Principles of GIS	09.00 - 09.30
2. Introduction to ArcGIS	09.30 - 11.00
<i>Coffee break</i>	11.00 - 11.15
3. Creation of geographic data - Databases	11.15 - 12.30
4. GIS analysis	12.30 - 13.30
<i>Lunch break</i>	13.30 - 14.00
5. Thematic Mapping - Map composition	14.00 - 16.00



### Wednesday – 1/11/2006

#### Hydrology – Rainfall-Runoff modelling in Strymon/Struma Basin

(Ch. Doulgeris)

Topics	Time
1. Introduction to hydrology – Numerical simulation (modelling)	09.00 - 11.00
<i>Coffee break</i>	11.00 - 11.15
2. Use of MIKE 11 GUI – Preparation of meteorological data	11.15 - 13.30
<i>Lunch break</i>	13.30 - 14.00
3. Set up of a Rainfall – Runoff model in Strymon/Struma Basin	14.00 - 16.00

### Thursday – 2/11/2006

#### Hydrology – Hydrodynamic modelling in Strymon/Struma River

(Ch. Doulgeris)

Topics	Time
1. Data preparation and Initial set up of a hydrodynamic model	09.00 - 11.00
<i>Coffee break</i>	11.00 - 11.15
2. Final setup of the hydrodynamic model – Connection with a Rainfall – Runoff model	11.15 - 13.30
<i>Lunch break</i>	13.30 - 14.00
3. Calibration of the model – Discussion	14.00 - 16.00

### Friday – 3/11/2006

#### Geographical Information Systems – Remote sensing (A. Apostolakis)

Topics	Time
1. Creating a hydrologically correct DEM from topographic data (Hydro Tools)	09.00 - 11.00
<i>Coffee break</i>	11.00 - 11.15
2. Introduction to remote sensing	11.15 - 13.30
<i>Lunch break</i>	13.30 - 14.00
3. Basic classification techniques	14.00 - 16.00

