# INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS

# IMPLEMENTATION OF THE WFD IN CYPRUS

International Conference on the Implementation of the WFD

MEGEVE (FRANCE)

21 & 22 SEPTEMBER 2006

Spyros Stephanou Panayiota Hadjigeorgiou





# Structure of Presentation

- Basic Hydrological Data
- Implementation of the Directive
- **Problems**
- Conclusions









#### **Basic Data**

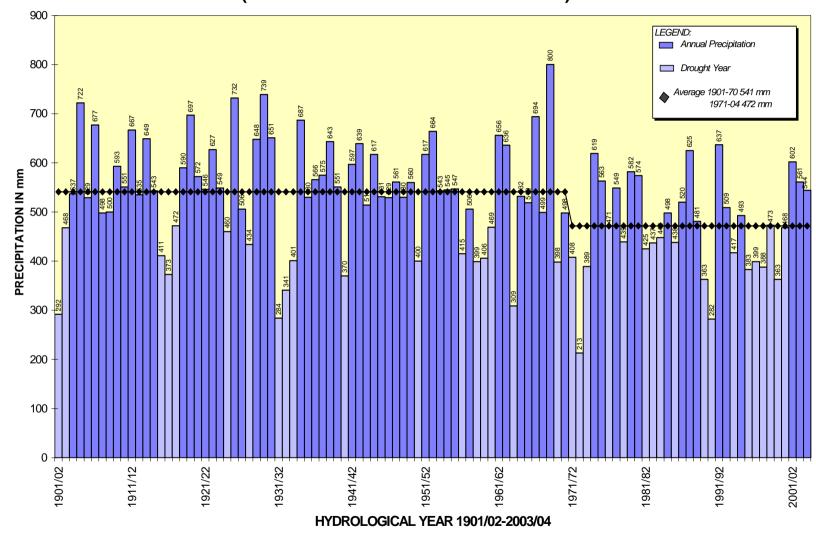
- > Area: 9500 km<sup>2</sup>
- > 1 River Basin
- > Rainfall from 280 to 1000mm
- No perennial rivers
- > No natural fresh water lakes
- Rainfall 1970-2005 470mm1900-1969 540mm
- Drop of 40% in river runoff
- Construction of 20 major dams of total capacity about 300 mcm
- Creation of freshwater lakes







### CYPRUS ANNUAL PRECIPITATION AND AVERAGE 1901/1970-1971/2004 (AREA UNDER GOVERNMENT CONTROL)











# Transportation of Directive

Law N13(I) 2004 on Protection and Management of Waters

Minister of Agriculture, Natural Resources and Environment is responsible Head

The Water Development Department and the Environment Service are the main departments involved





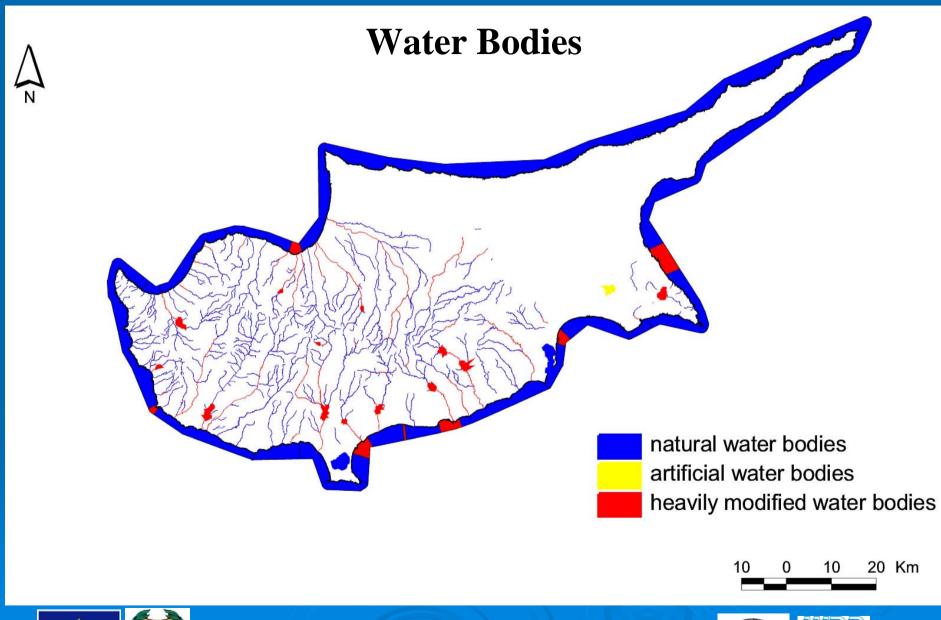
#### The work for Articles 5 & 6

#### Main issues:

- Overabstruction of Aquifers
- Salinization of Aquifers
- Point source pollution from solid waste landfills, pig farms
- Diffuse pollution from Agriculture
- Problems of Adequate Quantity of water supply, affects ecosystems and water quality
- 49 of the 216 streams are heavily modified and 20% are at risk
- 1 of the 20 lakes and 16% of the coastal waters also at risk





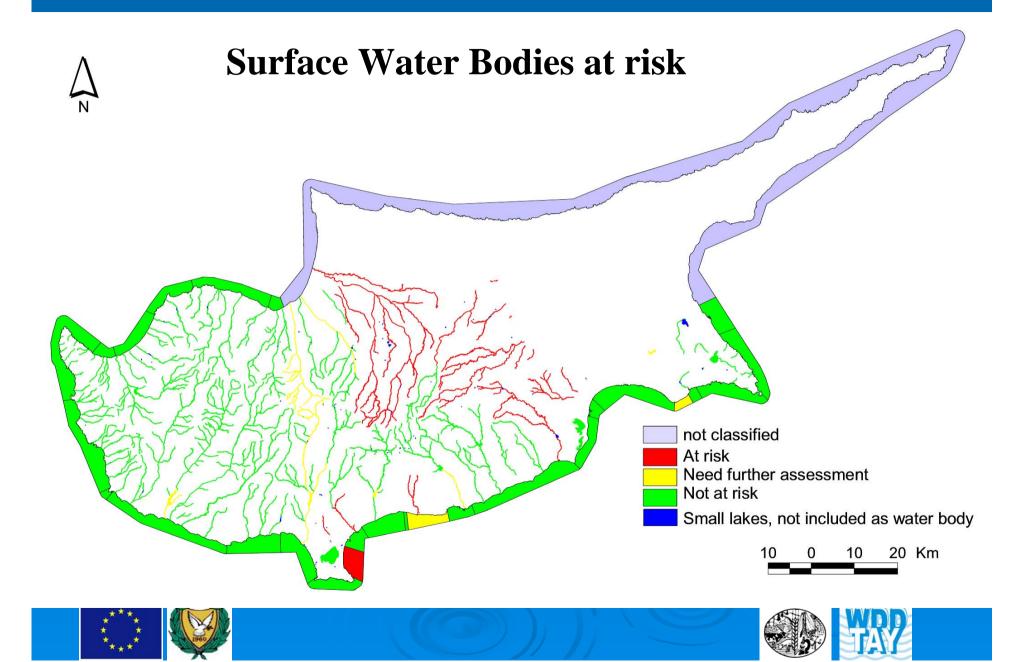












# Intercalibration

Cyprus is actively involved

1st Phase completed







# Public Participation

- A Contract is about to be signed for the fulfilment of article 14(1)(a) and (b) within the specified time limits
- The only Public participation practiced so far has been in connection to Environmental Impact Assessments





# Policies for Water Pricing

Consultancy Services
currently in progress
for designing a Protocol of
Information and a data bank
by the end of 2007





#### Planned Activities

Consultants will be called in the next months to design the Program of Measures and the Management Plan according to the planned time schedule





### Problems faced

 Lack of sufficient quantitative and qualitative data and of a network of data collection and storing

 Difficulties in cooperation between the various agencies dealing with water and the lack of an overall agency





### **Problems**

Shortage of expertise and manpower

Lack of technical means

 The attitude of the users towards water and towards the environment

The high cost of implementation





# Special Problems

- Long drought periods and exhaustion of main aquifers
- Need Augmentation with desalination and sewage reuse – even in a desalinated form
- > Problems of CO2 emissions
- ➤ Even though Cyprus is characterised as one river basin, the government of Cyprus can not exercise control over 40% of the area





### Conclusions

The difficult part of the implementation is ahead of us

It will help in the sustainable management of the Water Resources of the Island

It presupposes political will, long term planning and change of attitude towards water







# THANK YOU



