

48th ECCE METTING



Implementation of the Water Framework Directive in Cyprus

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Outline of Presentation

- Introduction to the WFD
- Progress in implementation of the Directive
- Challenges and Problems
- Outcomes from consultation campaign
- Conclusions

«**Water is** not a commercial product
like any other
but, rather, **a heritage**
which must be protected...»

1st sentence of the EU Water Framework Directive

Introduction to the WFD 2000/60/EK

- Overall framework for integrated management
- **Ambitious Objectives**
 - Expand the water protection to all waters (surface, ground waters, coastal waters)
 - Avoid deterioration, maintain and achieve «good status for all waters»
 - Surface waters (Ecological and Chemical status)
 - Ground waters (Quantitative and Chemical status)

Achieved by a set deadline: 2015!

How?

Through:

River Basin Management Plan

Programme of Measures

Completed Activities in Cyprus

Legal Transposition (Article 3)

- Water and Management Law N13(I)/2004

Identification of Competent Authorities (Article 3)

- The Minister of Agriculture, Natural Resources and Environment
- Two main “agencies” (Water Development Department & Environment Service)

Identification of River Basin Districts (Article 5)

- The whole island is considered as one River Basin

Characterization of River Basin (Articles 5) in terms of :

- Pressures and impacts on water bodies (i.e. pollution, overuse)
- Economics of water uses to identify the most cost effective measures

Register of Protected Areas (Article 6)

- Natura 2000, bathing waters, drinking water sources

Establishment of a Monitoring Network (Article 8)

- In terms of both quality and quantity of waters

Involvement of Stakeholders (Article 14)

- Timetable and Work Programme (1st Campaign April 2007- Sep 2007)
- Significant water management issues (2nd Campaign Dec 2007- Jul 2008)

Currently in Progress Activities

- **Protocol of Information and Data Bank (Article 9)**
 - setting up of water pricing policies with incentives for efficient water use in accordance to the «polluter pays» principle (polluters and users should pay for the natural resources they use and the damage they create)
 - recovering of all costs (prices should cover the operational & maintenance costs, the costs invested in infrastructure, environmental and resource costs)
- **Intercalibration Exercise**
 - which will formally define where “good ecological status of water bodies” lies
- **Monitoring of water bodies (Article 8)**
 - fill data gaps and improve our knowledge of water status and the pressures
 - demonstrate the effectiveness of the measures
 - provide long term trend analysis
- **Public Participation (Article 14)**
 - encourage the active involvement of the stakeholders in the decision making process for the production of the RBMP

Activities to follow

NEXT STEPS (Articles 11 & 13)

: by the end of 2009

- Program of Measures
- River Basin Management Plan (RBMP)
- Drought Management Plan
- Review of the Water Management Policy
- Strategic Environmental Assessment
- The 3rd Consultancy campaign



Operational RBMP by 2012
Good status by 2015

What are the key issues we have to deal with?

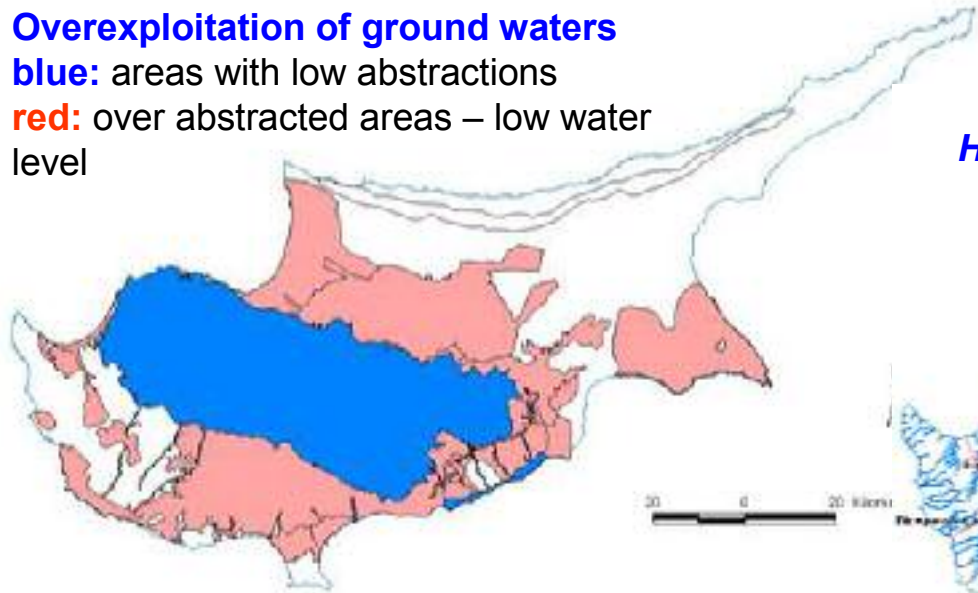


- ❑ **Overexploitation of ground waters (15 out of 19 water systems AT RISK)**
- ❑ **Hydromorphological pressures (downstream of dams) and quantity-flow of surface water (49 streams out of 216 are heavily modified and 20% AT RISK)**
- ❑ **Pollution**
 - **Agricultural (Pesticides and Fertilizers - Nitrates & Phosphorous)**
 - **Urban**
 - **Other sources (industry, mining, rainwater run-off)**
- ❑ **Conservation of protected areas and significant hydrophilous ecosystems (bathing waters, drinking water sources, Natura areas)**
- ❑ **Water scarcity and Drought (both for potable and irrigation water)**
- ❑ **Other issues**
 - **Administrative issues**
 - **Water pricing**
 - **Pressure on coastal water bodies**

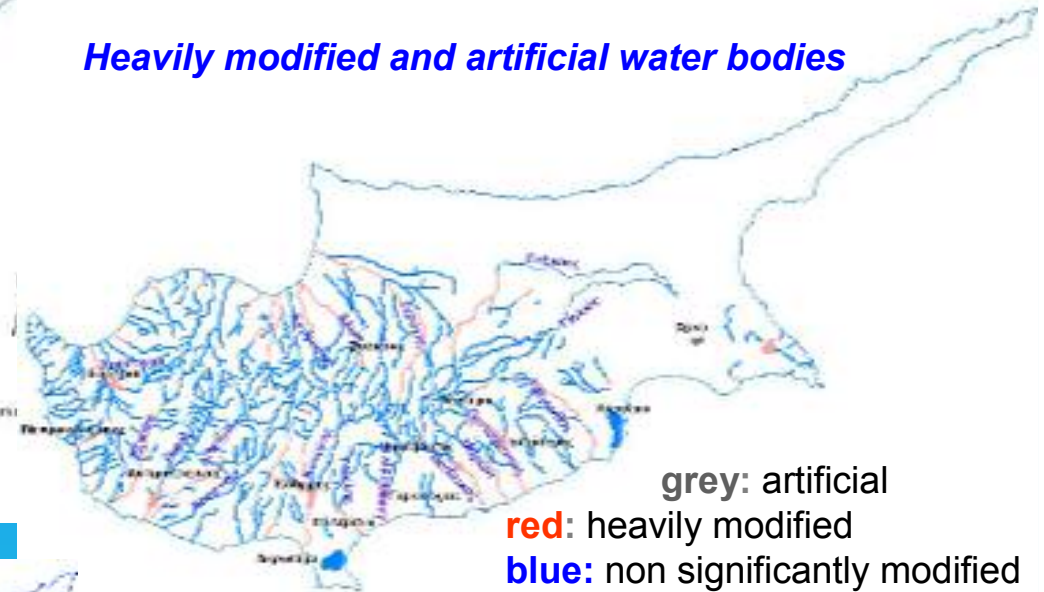
Overexploitation of ground waters

blue: areas with low abstractions

red: over abstracted areas – low water level



Heavily modified and artificial water bodies

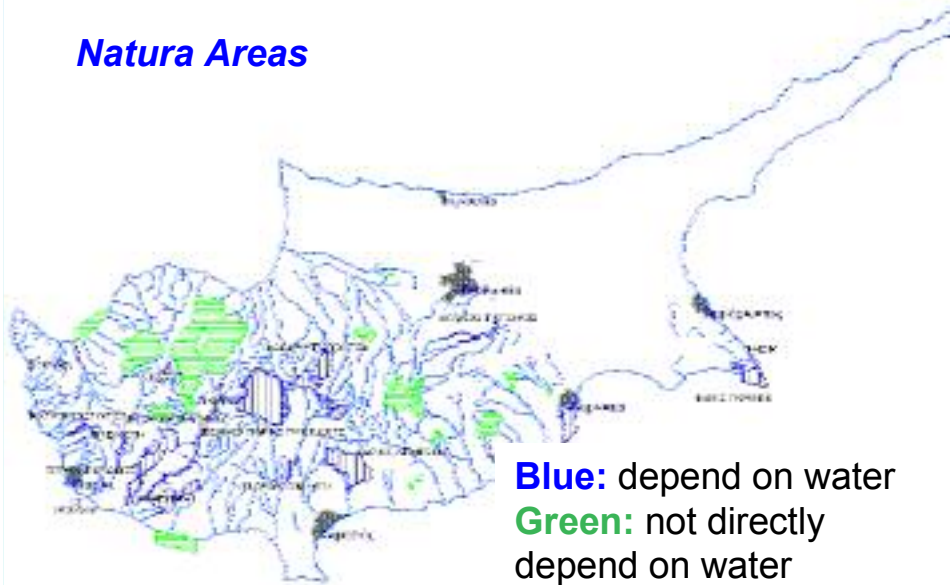


grey: artificial

red: heavily modified

blue: non significantly modified

Natura Areas



Blue: depend on water

Green: not directly depend on water

Maps derived, among others, from the characterization of all water bodies in accordance with Article 5 of the Directive

Specific Challenges

Cyprus has a semi arid climate, numerous small but of great importance catchments, none of which provides perennial flow

Climate change is expected to aggravated these problems

Long, repetitive drought periods

Serious water shortages

Quality and Quantity problems



- **Need augmentation with desalination and sewage reuse even in a desalinated form**
 - **Problems of CO2 emissions**



- **Optimize desalination with water demand management and wider island development plan**



- **Identify adaptation measures and best practices**

Managing stakeholders expectations

Transparency and active involvement through:

- Announcements, TV, Radio, Leaflets
- Web page
- Publications
- Seminars / Workshops
- Questionnaire
- Working groups



www.wfd.wdd.moa.gov.cy

Main issues of concern:

- water sufficiency
- assurance of good water quality for every use
- water pricing
- proper public management



Outcomes of public participation campaign

Examples of measures proposed by working groups:

- Create an Independent Water Entity
- Register and audit all private boreholes to control abstractions
- Implement preventive measures to safeguard potable water sources (i.e. protection zones)
- Develop fiscal incentives to promote water efficient devices
- Reassess all water intensive development plans (i.e. golf courses)
- Rehabilitate obsolete mine areas
- Develop incentives for changing the cropping pattern
- Cease permits for new swimming pools
- Apply same water price all over the island
- Apply quota for overuse
- Use effluent water for irrigation and recharge
- Harvest rain water run off
- Replace domestic water supply networks to decrease water losses
- Intensify awareness campaign and public communication

Main Shortcomings

- Lack of sufficient quantitative and qualitative data
- Lack of a national network of data collection and storing. Even though Cyprus is characterised as one river basin, the government of Cyprus can not exercise control over 40% of the area
- Difficulties in cooperation between the various agencies dealing with water
- Lack of an overall water agency
- Shortage of expertise and manpower
- Small experience in consultation processes
- The attitude of the users towards water / environment
- The high cost of implementation
- The extremely tight and demanding timetable

Conclusions

The Water Framework Directive

- Will help in the sustainable management of the water resources of the Island
- It presupposes
 - political will
 - long term planning
 - change of attitude towards water and
 - active involvement of the society



The difficult part of the implementation is ahead of us

BUT

Together we can make a step forward!

Thank you for listening

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