

# The development of EMWIS and NWIS in Cyprus

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# Presentation Outline

- Overview of Cyprus EMWIS Activities
- NWIS in Cyprus
- The Road Ahead

# CYPRUS NFP

- The Water Development Department of the Ministry of Agriculture, Natural Resources and Environment is the NFP for EMWIS

# Overview of EMWIS NFP Activities

Developing the Euro-Mediterranean Information System on the Know-how in the Water Sector WDD aimed to :

- Enable exchange of information, experiences and good practices with other Mediterranean countries
- Facilitate synergies between national institutions
- Improve access to stakeholders
  - « who does what »
- Exploit new information and communication technologies
- Serve as a water portal
- A node of the Euro-Med system



# Accomplishments

- EMWIS National Focal Point website
  - Designed, implemented by the WDD
  - Second, upgraded version in preparation
    - The public part of the NWIS
  - Linked with the WDD website
    - Daily updates on water information
    - Wealth of information on water issues in Cyprus
- Feasibility study completion and evaluation
- Preparatory meetings with main stakeholders
- Successful seminar on May 10<sup>th</sup> 2007
  - Participants from all water related authorities expressed an interest to cooperate in supporting EMWIS and NWIS

# EMWIS-Cy WebSite

http://www.emwis-cy.org/ - Windows Internet Explorer

http://www.emwis-cy.org/

SEMIDE  
EMWIS

CYPRUS Focal  
Point

Water Context

News

Institutions

D. Management

Documentation

Training

R & Development

Legislation

PAFOS

LEM EOS (LIMASSOL)

LARNAKA

LEFKOSIA (NICOSIA)

KERYNEIA (KYRENIA)

AMMOCHOSTOS (FAMAGUSTA)

[Euro-Mediterranean Information System on the know-h](#)

Done Internet 100%

# WDD WebSite

Τμήμα Αναπτύξεως Υδάτων - Αρχική Σελίδα - Windows Internet Explorer

http://www.moa.gov.cy/moa/wdd/Wdd.nsf/index\_gr/index\_gr?OpenDocument

Τμήμα Αναπτύξεως Υδάτων - Αρχική Σελίδα

ΚΥΠΡΙΑΚΗ ΔΗΜΟΚΡΑΤΙΑ

ΤΜΗΜΑ ΑΝΑΠΤΥΞΕΩΣ ΥΔΑΤΩΝ

English | Turke

Συνήθειες Ερωτήσεις | Χάρτης Πλοήγησης | Σύνδεσμοι | Επικοινωνία

Αναζήτηση:

Ειδική Αναζήτηση

**▲ ΚΑΛΩΣΗΛΘΑΤΕ ΣΤΟ ΔΙΚΤΥΑΚΟ ΜΑΣ ΤΟΠΟ**

Μέσω της ιστοσελίδας μας μπορείτε να ενημερωθείτε για το ιστορικό της ανάπτυξης των υδάτινων πόρων της Κύπρου. Γίνεται ενημέρωση για την πληρότητα των φραγμάτων και δίδονται στατιστικά στοιχεία για τη συλλογή και τη χρήση του νερού στην Κύπρο. Στις σελίδες μας, θα βρείτε επίσης, έντυπα για την υποβολή διαφόρων αιτήσεων, εκδόσεις, φωτογραφικό υλικό, καθώς και συνδέσεις με την Ευρωπαϊκή Ένωση και άλλες σχετικές σελίδες με θέμα το νερό

**ΔΗΜΟΣΙΑ ΔΙΑΒΟΥΛΕΥΣΗ**  
για το Σχέδιο Διαχείρισης των Υδάτων της Κύπρου

ΑΝΑΚΥΚΛΩΣΗ ΗΜΙΑΚΑΘΑΡΤΟΥ ΝΕΡΟΥ  
€ 1000

ΣΥΝΔΕΣΗ ΓΕΩΤΡΗΣΗΣ ΜΕ ΑΠΟΧΡΗΤΗΡΙΟ

ΜΕΓΑΛΑ ΥΔΑΤΙΚΑ ΕΡΓΑ

ΦΡΑΓΜΑΤΑ ΤΗΣ ΚΥΠΡΟΥ

Ο ΠΥ

INTRANET

ΦΩΤΟΓΡΑΦΙΕΣ

ΦΡΑΓΜΑΤΑ

2000/60/ΕΚ

Πατήστε το play

ΕΚΣΤΡΑΤΕΙΑ ΕΞΟΙΚΟΝΟΜΗΣΗΣ ΠΟΣΙΜΟΥ ΝΕΡΟΥ

Νερό... πάρ' το στα χέρια σου

ΤΜΗΜΑ ΑΝΑΠΤΥΞΕΩΣ ΥΔΑΤΩΝ

Νερό... πάρ' το στα χέρια σου

(2 items remaining) Waiting for http://www.moa.gov.cy/moa/wdd/Wdd.nsf/index\_gr/index\_gr?OpenDocument



# NFP Functions

- Managing the national water information server as an EMWIS node
- Collects Information and implements the thematic directory
- Agreements with information source managers for access through EMWIS
- Development of common access to these information sources
- Defining a set of technical, financial and organizational recommendations and a roadmap for the improvement or implementation and operation of a NWIS



# EMWIS Implementation Problems

- Difference in level between the participating countries
- Lack of coordination between organizations and institutions
- Difficulties in access to water data
- Differences in Information and Communication Technology between organizations and institutions

# From EMWIS to NWIS

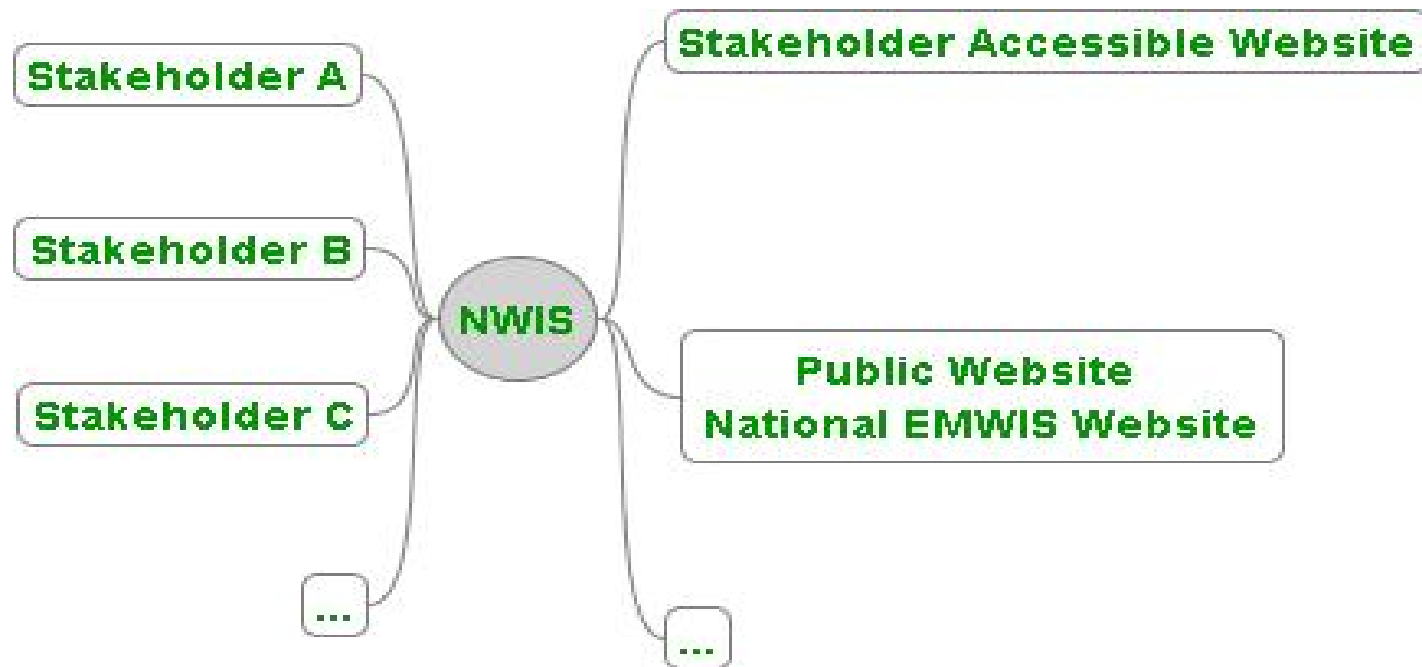
- Enhancement of National Water Information Systems will improve the overall EMWIS system.
  - Remove all obstacles at the national level that impede the advancement of EMWIS
  - Facilitate and harmonise data and information exchange

# NWIS: A Gateway to National Water Information

- A National Water Information System (**NWIS**) is an online system that:
  - integrates data and know-how from all national stakeholders
  - makes available all stored information to all parties interested
  - Serves as a decision support tool to water management
- NWIS can also be used for a variety of tasks
  - More than a simple “computerized system”



# NWIS Vision



# NWIS in Cyprus

- Feasibility study
  - EasyInfo Consulting Company
  - Completed July 2005
- Deliverables
  - Stakeholders identified
  - Problems detected
  - Suggestions

# Stakeholders Identified

- Water Development Department-NFP
- State General Laboratory
- Water Boards
- Meteorological Department
- Geological Survey Department
- Medical Services and Public Health Services
- Department of Agriculture
- Environmental Service
- Department of Fisheries and Marine Research
- Municipalities
- Sewage Boards
- Research Institutions
- Farmers
- Tourism Sector

# Problems Identified

- Lack of policy on data sharing
- Lack of standard operating procedures
- No standard data exchange format and structures
- Lack of staff
- Some stakeholders have no database system
- Availability, suitability of data

# Suggestions

- Establish a NWIS committee
  - Each stakeholder nominate a representative
- Utilize the currently available systems
- Develop the system
  - Web-base application
  - GIS interface
  - Distributed database
- Include information other than quantitative data
- Give access to other stakeholders and users of water information



# Pre-existing Work

- Environment Information System – ENVIS
  - Funded by USAID and implemented by USGS
  - Three major stakeholders involved:
    - WDD, GSD and Meteorological Department
  - Four subsystems covering
    - Surface water
    - Ground water
    - Water Quality
    - Meteorological data
  - Of limited use
    - Restricted number of users
    - Cannot accommodate all required type of data
- Phased out to be replaced by CYMOS



# Ongoing Work

- CYMOS –CYprus MOnitoring System
  - Data base of quantity and quality information on surface water and groundwater
- Part of The Transition Facility Project
  - Development of Integrated Water Monitoring Programs and Tools for cost effective monitoring and Assessment to Support Sustainability of Water Resources and the implementation of WFD 2000/60/EC in Cyprus
- EU funded project
  - Departments to be involved in CYMOS:
    - WDD, SGL, DFMR, GSD
- A first step towards a Cyprus NWIS



# CYMOS Specifics

- Create groundwater and surface water monitoring networks
- Set environmental quality criteria for target chemicals
- Standardize data collection/recording
- Improve data accessibility
- Enable development of ArGIS applications
- Facilitate coordination and interaction of stakeholders

# Vision for Cyprus NWIS

- Overcome Deficiencies of current systems
  - Not XML-based
  - Not web-based
  - Limited stakeholder participation
- Envisioned NWIS will address the above problems and:
  - Provide an integrated framework for water management
  - Serve as a knowledge repository for the involved stakeholders
  - Operate as a water information portal

# The Road Ahead

## ➤ Actions

- Stakeholders awareness campaign
- Forming a NWIS committee
- Data gathering and organization
- Upgrading of the EMWIS National Focal Point portal to include information from all significant stakeholders in Cyprus
- Design and implement a plan for information sharing and knowledge dissemination

➤ Visit us at:

- <http://www.emwis-cy.org>
- <http://www.moa.gov.cy/wdd>

➤ Contact:

- [aachilleos@wdd.moa.gov.cy](mailto:aachilleos@wdd.moa.gov.cy)



Thanks For Your Attention!

