

**DEVELOPING STRATEGIES FOR REGULATING  
AND MANAGING WATER RESOURCES AND  
DEMAND IN WATER DEFICIENT REGIONS**

WaterStrategyMan

**Kick – Off Meeting  
Athens, 6-9 February 2002**

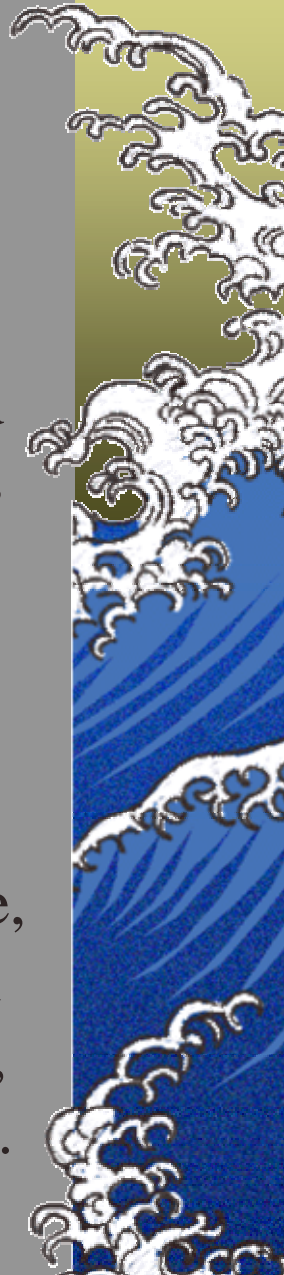


# WaterStrategyMan

## THE PARTNER

Established in 1998, AEOLIKI Ltd. is a Cypriot based consulting and technology brokerage company in the areas Environment, Energy, Information Technology and Telecommunications

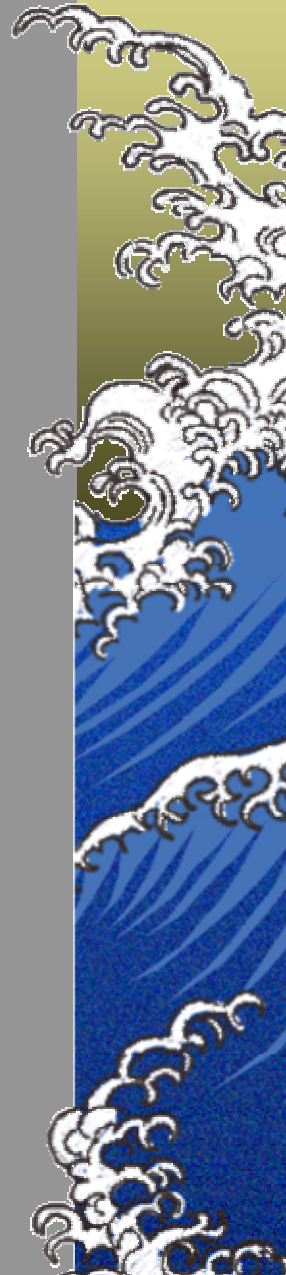
AEOLIKI is fully dedicated in the area of environmental and natural resources management. Its high calibre of experts provide consulting, training, technology brokerage, business development on a wide range of environmental subjects including environmental assessments, planning, policy and legislation, and natural resources management.



# WaterStrategyMan

## EXPERTISE

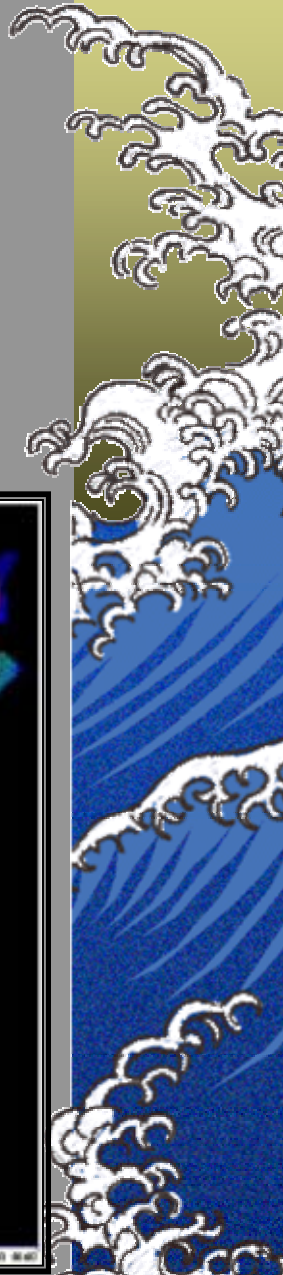
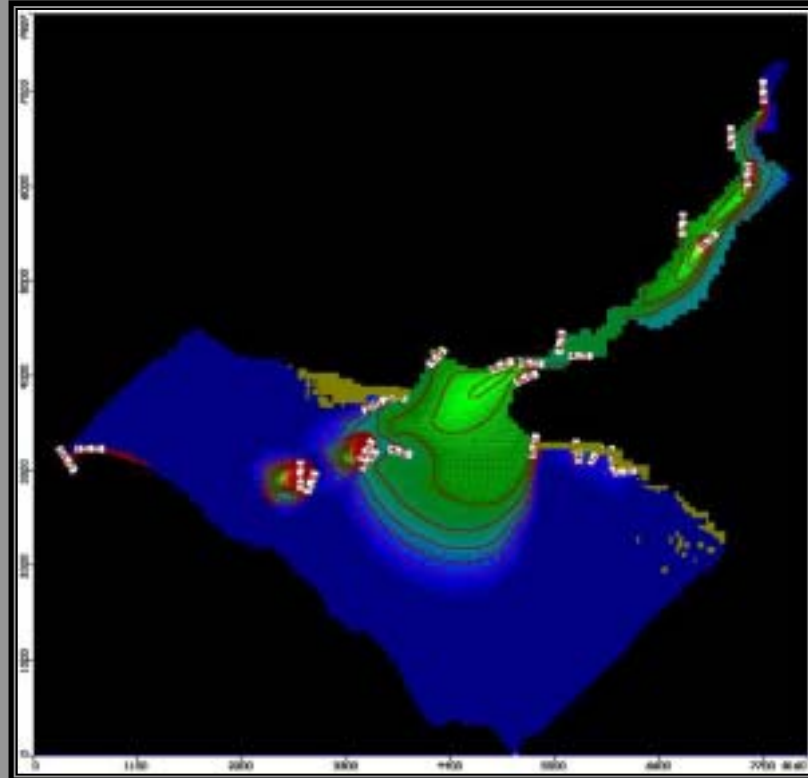
AEOLIKI has gathered great experience in the area of environmental and natural resources management. Its high calibre of experts have accumulated many years of experience in the water management field, through their participation in consulting assignments in Cyprus as well as in European Union Projects.



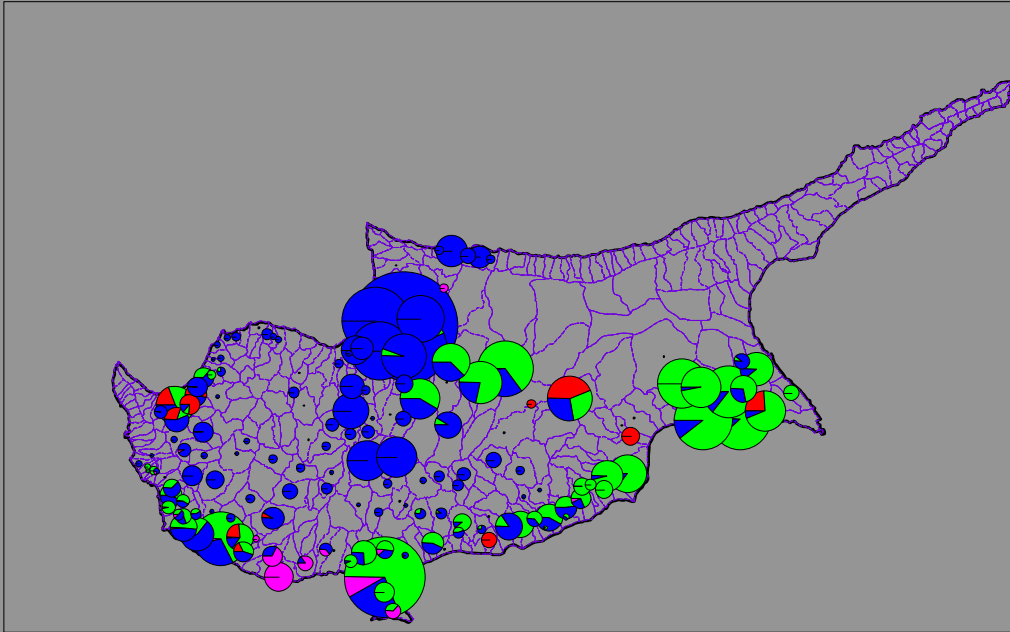
# WaterStrategyMan



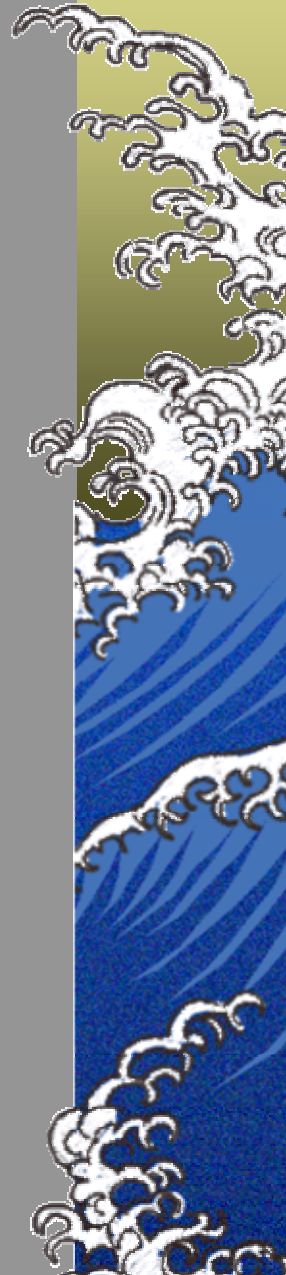
## EZOUSAS AQUIFER



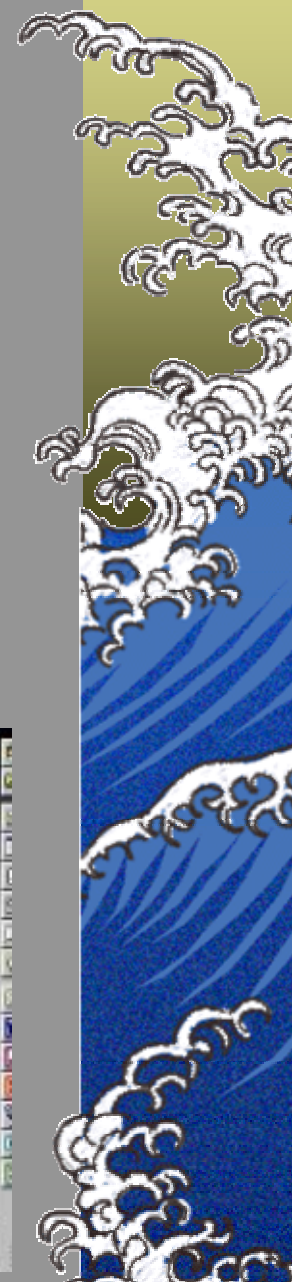
# WaterStrategyMan



**MEDCODESAL**




# WaterStrategyMan



**Water Shortage Analysis for NewRegion7 Demand Region.**

Demand Region:	NewRegion7
Area:	28 sq km
Type:	Secondary Hydrologic
Permanent Population:	1795
Total Water Demand:	1,82889
Supply Region:	NewRegion7
Area:	28 sq km



Water Supply data are presented in  $10^6 \text{ m}^3 / \text{year}$

Surface Water:	0,204
Groundwater:	1,284
Total resources:	1,392
Stable resources:	1,812
Non-physical supply:	-

Supply

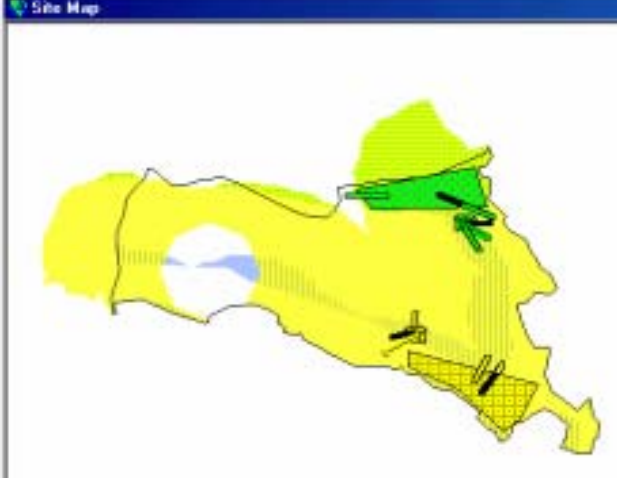
Water Shortage:	1,689000000000001
Consumption Index (%):	131,385
Exploitation Index:	1,009
Population/Resources:	1289

Water Problems

Display Graphs:

MEDCODESAL

**Site Map**



Details

Demand Region:	NewRegion7
Supply Region:	NewRegion7
Wind park area:	1,456 [km <sup>2</sup> ]
Average w. speed:	5 [m/s]
Road:	1,342 [km]
Electric cable:	1,683 [km]
Water duct:	1,547 [km]
Solar park area:	1,648 [km <sup>2</sup> ]
Average s. radiation:	1715 [kwh/yr/m <sup>2</sup> ]
Road:	1,095 [km]
Electric cable:	1,142 [km]
Water duct:	0,606 [km]



# WaterStrategyMan

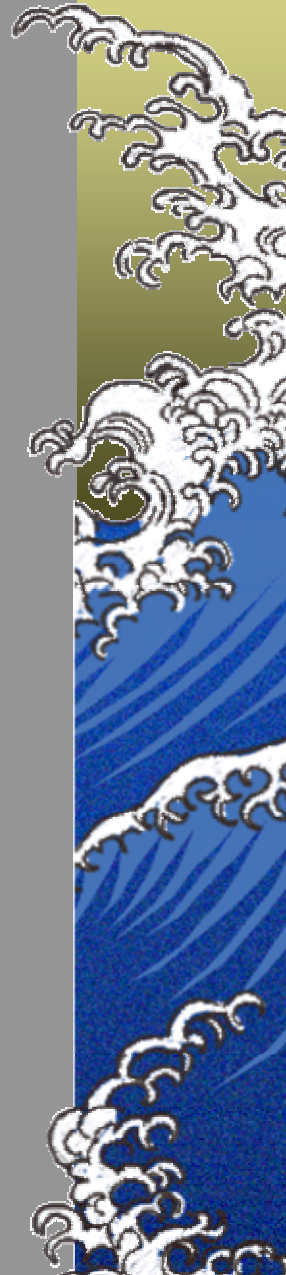
## **PAST OR PRESENT WORK *RELATED TO THE PROJECT***

MEDCODESAL – Mediterranean cooperation for Water desalination policies in the perspective of a Sustainable development

PRODESAL – Pro Desalination, Towards the Large Scale development of decentralised water desalination

Coastal zone management of the Pyrgos District – Cyprus

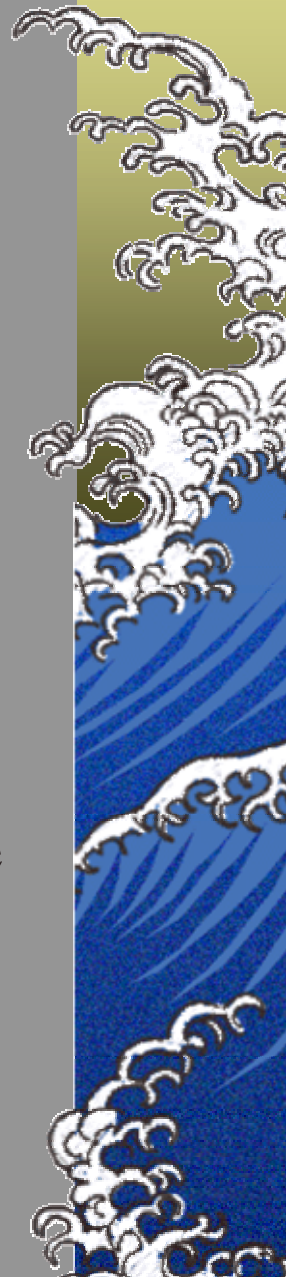
Ezousas Aquifer water management strategy - Cyprus



# WaterStrategyMan

## ROLE IN THE PROJECT

Develop a methodology, which by a holistic analysis will provide the tools for the application of an ***INTEGRATED MANAGEMENT APPROACH***. The usage of the IT, in the form of a DSS, will improve decision - making capabilities through the analysis of quantitative and qualitative impacts, the evaluation o the entire range of potential responses and the suggestion of appropriate Solutions.

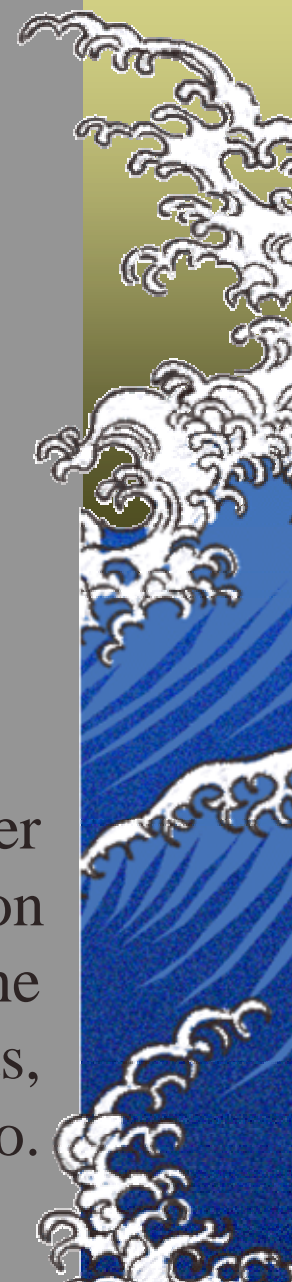




# WaterStrategyMan

## ROLE IN THE PROJECT

	Strong	Average	Low
<b>AEOLIKI</b>	WP6 WP14	WP8.2 WP8.3	Rest of WPs



AEOLIKI will be in close collaboration with the other Cypriot partner WDD for the preparation of the common project deliverables. Both organisations experienced in the last 4 years a fruitful co-operation in many assignments, which ensures the effective collaboration in this project too.

# WaterStrategyMan

## ROLE IN THE PROJECT

WP 0 : Co-ordination and Clustering

AEOLIKI will contribute through the on time preparation and delivery of project deliverables to the coordinator, the participation to project activities, meetings and workshops.



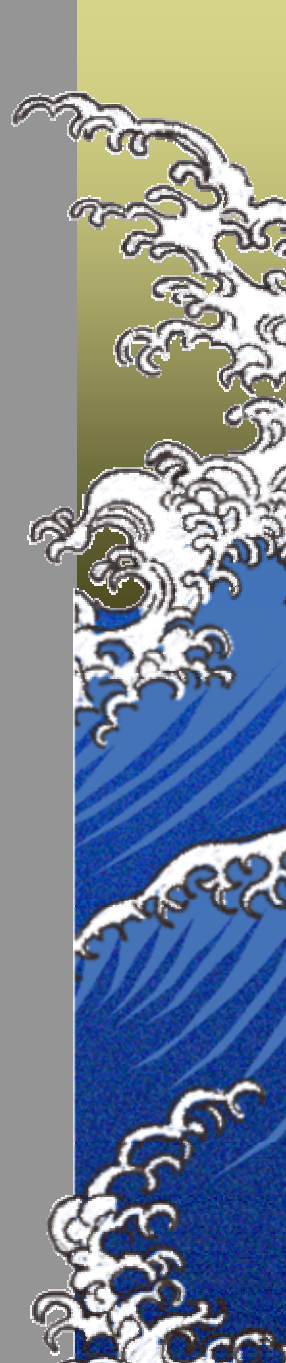
# WaterStrategyMan

## ROLE IN THE PROJECT

WP 1 : Determining the range of existing circumstances

AEOLIKI will identify the existing situation associated with water resources management in Cyprus, and will prepare a classification of water deficient regions of the island to be used as the basis for the formulation of the specific principles and targets of the paradigm in WP3.

*AEOLIKI's participation in the MED-CODESAL project provides the resources (information and experience) needed for the successful elaboration of this WP.*



# WaterStrategyMan

## ROLE IN THE PROJECT

WP 2 : Workshop on existing circumstances

AEOLIKI will participate and present, together with WDD, the results of the analysis of the existing water management situation in Cyprus. A detailed description of the selected representative water deficient watershed will be given, as far as the identified problems, and the available instruments and responses is concerned.



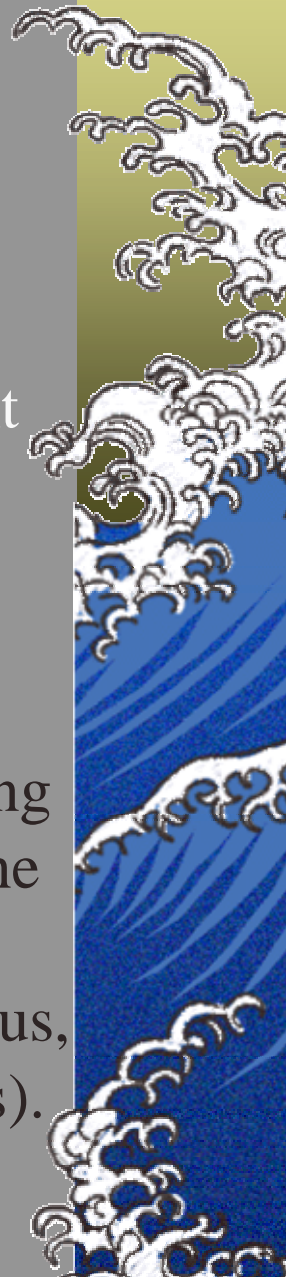
# WaterStrategyMan

## ROLE IN THE PROJECT

WP 3 : Developing a systematic typology of water deficient regions (definition of representative paradigms)

AEOLIKI's contribution will be twofold, that is :

- contribute to formulate the paradigms definition providing comprehensive and critical assessment of the type of the water problems of the selected water deficient region
- contribute to identify a representative case study for Cyprus, within the lines of the most relevant paradigm (for Cyprus).



# WaterStrategyMan

## ROLE IN THE PROJECT

### WP 4 : Development of a methodology

AEOLIKI will contribute providing available data (for Cyprus), required in the course of development of WPs 4.1, 4.2, 4.3, and providing comments related to the adopted methodologies for forecasting water resources and for estimating costs, the adopted multi-criteria approach, and the integration of the above methodologies to formulate an Integrated Multi-Criteria decision making approach.



# WaterStrategyMan

## ROLE IN THE PROJECT

WP 5 : Review, testing and adaptation of tools for water resources management

AEOLIKI will contribute providing available data (for Cyprus), required in the course of development of WPs 5.1, and 5.2, and providing comments related to the functionality of the selected tools when applied in Cyprus. Differentiations / adaptations of the tools will be identified in this WP, as well as the need for preparing the available data in a format required by the tools.



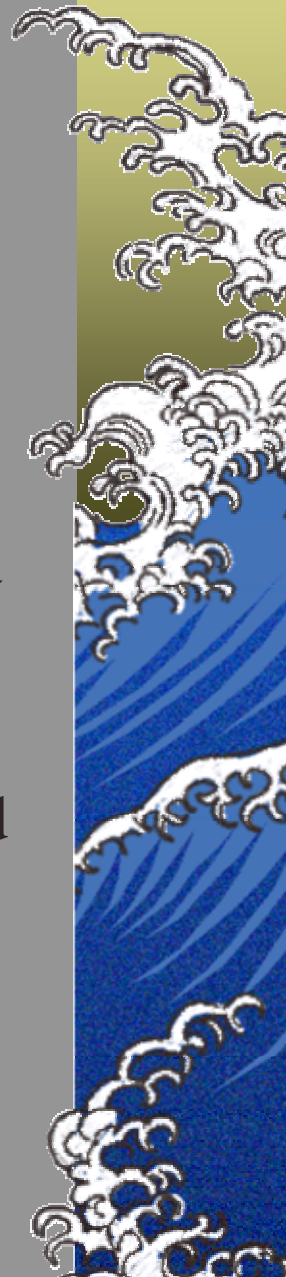
# WaterStrategyMan

## ROLE IN THE PROJECT

### WP 6 : Data and GIS database

AEOLIKI will collect and provide all available data (on water resources and demand in the selected case study for Cyprus), to develop (and update) the data base of the GIS tool. Close collaboration with Partner 1 is foreseen to be required until the data base is correctly incorporated in the tool.

*AEOLIKI's participation in the MED-CODESAL project provides the experience needed for the efficient elaboration of this WP.*





# WaterStrategyMan

## ROLE IN THE PROJECT

WP 7 : Workshop for presenting findings and training on DSS

AEOLIKI will participate and present, together with WDD, the results of the Analysis Phase (WP 4 and WP 5). Its contribution in the preparation phase of the Workshop, will be to market the workshop in Cyprus and provide a list of experts and decision makers to participate in the workshop. After the conclusion of the workshop, AEOLIKI will make known the results to all interested parties in Cyprus, preparing the ground for the successful implementation of WP13 (Seminar in Cyprus).



# WaterStrategyMan

## ROLE IN THE PROJECT

### WP 8 : Generation of coherent water management scenarios

AEOLIKI will perform a detailed analysis of the water management options for the selected paradigm-case study.

The analysis will be performed using the tools developed in the Analysis Phase. The analysis will be performed in two stages :

- Analyse the current situation (the results will be verified with real data from the known existing situation)-base case
- Develop, assess and evaluate alternative water management scenarios based on user defined criteria (supply interventions, demand side actions, etc.), simulations of the existing water system under new conditions, evaluation of costs & benefits comparisons with base case scenario, evaluation of scenarios

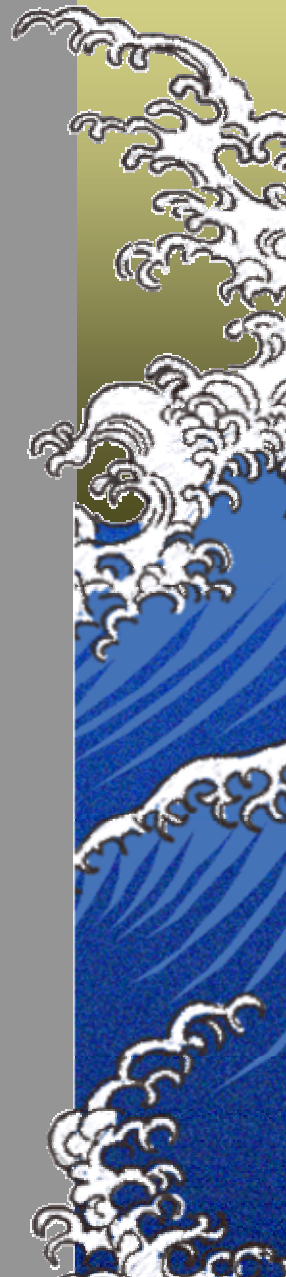


# WaterStrategyMan

## ROLE IN THE PROJECT

WP 9 : Development of water management strategies

AEOLIKI will propose integrated water management strategies for the selected case study, focusing on water cost recovery strategies. Strategies will be evaluated using the adopted DSS tool (WP 5.1).



# WaterStrategyMan

## ROLE IN THE PROJECT

WP 10 : Development of guidelines

AEOLIKI will contribute to the development of generally applicable guidelines for determining improved water management strategies. This will be accomplished by providing comments for the common characteristics and patterns of the alternative strategies, and the synthesis procedure to extend the identified strategies to generally applicable guidelines.

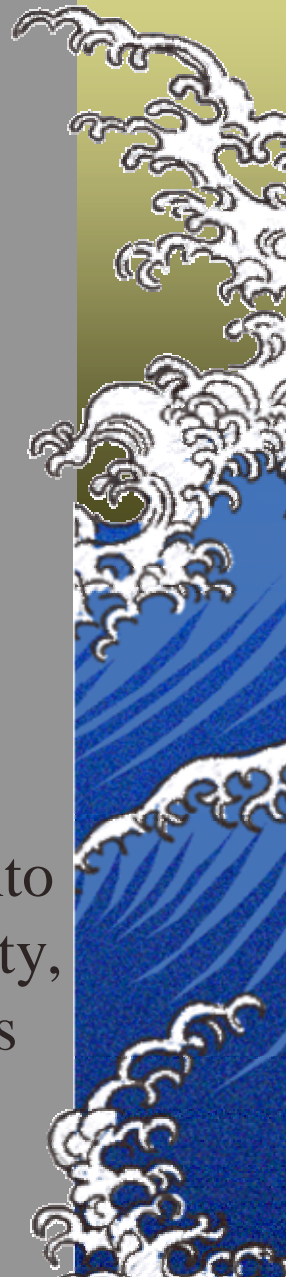


# WaterStrategyMan

## ROLE IN THE PROJECT

WP 11 : Development of protocols for implementing integrated approaches

AEOLIKI will compile the developed strategies (for the case study) and will propose the necessary action plan (a protocol) for the implementation of the decided integrated water management strategies (WP 9), taking into account the existing inefficiencies in water quantity/quality, and institutional framework, and the developed guidelines in WP 10.



# WaterStrategyMan

## ROLE IN THE PROJECT

WP 12 : Elaboration of project results into publishable form

AEOLIKI will contribute to this WP by providing in due time any information, technical report etc. necessary for the preparation of the publishable reports. When the reports will be published, AEOLIKI will circulate them to all interested parties in Cyprus and the neighboring Med countries

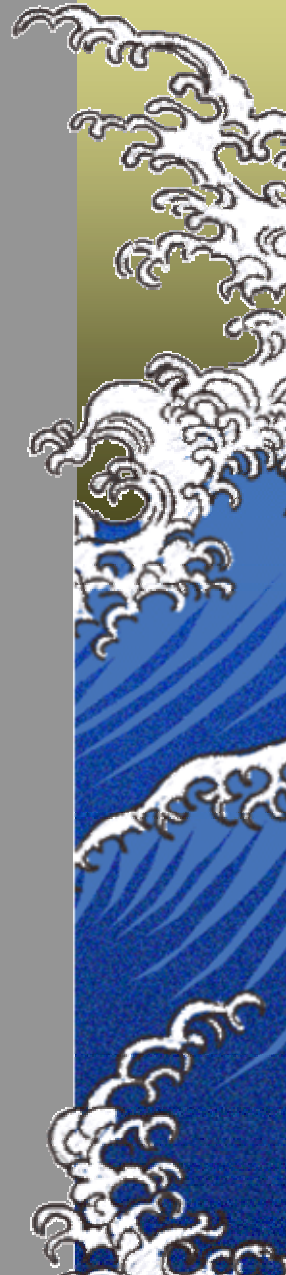


# WaterStrategyMan

## ROLE IN THE PROJECT

WP 13 : Seminar

AEOLIKI will help WDD in organising the event in Cyprus, and will compile the Seminar Proceedings.

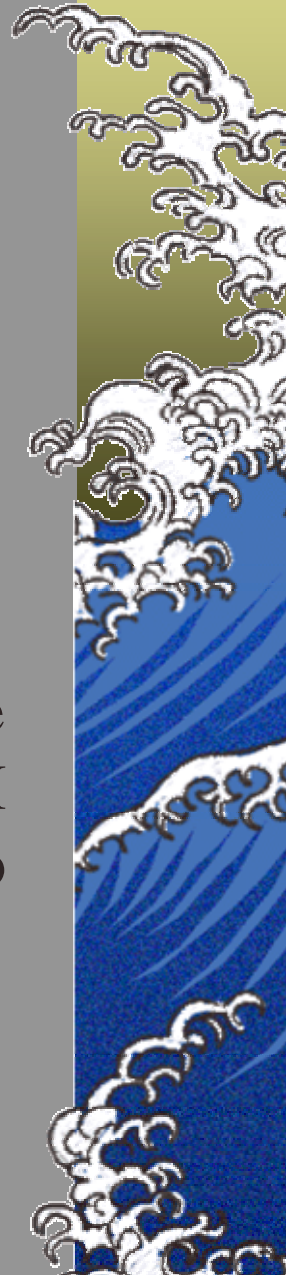


# WaterStrategyMan

## ROLE IN THE PROJECT

### WP 14 : Information campaign, training and exploitation plan

AEOLIKI will develop an interactive multimedia CD with the project's outputs as well as the training programme which will be developed in WP 14 (Task 14.4). AEOLIKI can also help in the development and updating of the Web site which will be created in WP 0.2 (cluster)





# WaterStrategyMan

**КАЛН АРХИ**

