#### Introduction

Water is essential for human, animal and plant life and is also a key driver of economic and social development. Protection of water resources and promotion of a sustainable water use are therefore main cornerstones of environmental policies worldwide. Although important progresses on water management, infrastructure, technologies and legislation have been made over the past decades in many developed and emerging countries, further efforts are still required to properly face major concerns such as floods and droughts, water scarcity, water pollution, as well as access to safe sanitation, which can be further increased by climate change, population growth and urbanization.

The objective of the 6th International Symposium of the European Water Resources Association is to provide an open forum for analyzing the main challenges for an effective water resources management, also able to adapt to climate change impacts. Particular emphasis will be devoted to the developments in the application of EU policies on water resources management (i.e. Water Framework Directive 2000/60, Floods Directive 2007/60 and Water Scarcity and Droughts Strategy), as well as to the latest advances in water engineering all over the world.

The following topics will be discussed:

- Drought characterization, monitoring, forecasting
- Modelling of natural and dam-break floods and extreme events
- Water Framework Directives implementation
- Water quality management
- Assessment of climate change
- Water resources management
- Irrigation
- Innovations in water supply and distribution systems

# **Organizing Committee**

- Antonino Cancelliere and Giuseppe Rossi University of Catania (*Italy*)
- George Tsakiris National Technical University of Athens (*Greece*)
- Brunella Bonaccorso, Leila Castiglione, David Johnny Peres and Antonio Castano University of Catania (*Italy*)

# **Programme**

#### Wednesday June 29th

#### <u>Afternoon</u>

15:00-15:30 Registration and welcome coffee

15:30-16:00 Welcome ceremony

16:00-16:45 **Invited lecture**: Breaking the hydro-illogical cycle: progress or status quo for drought preparedness (*Donald Wilhite*, University of Nebraska-Lincoln, USA)

16:45-18:30 <u>Session 1</u>: Drought characterization, monitoring, forecasting

16:45-18:30 <u>Session 2</u>: Modelling of natural and dambreak floods and extreme events

#### Thursday June 30<sup>th</sup>

#### <u>Morning</u>

08:45-09:30 **Invited lecture**: WFD river basin management planning in the context of climate change adaptation – policy and research trends (*Philippe Quevauviller*, University of Brussels, Belgium)

09:30-11:00 <u>Session 3</u>: Water Framework Directives implementation

09:30-11:00Session 4: Water quality management11:00-11:30Coffee break11:30-13:30Session 5: Assessment of climate change11:30-13:30Session 6: Water resources management13:30-15:00Lunch

#### <u>Afternoon</u>

15:00-15:45 **Invited lecture**: Water quality models for river and stream. State of the art and future perspectives (*Marcello Benedini*, Italian Hydrotechnical Association)

15:45-18:00 Poster session and coffee break

18:00-19:00 EWRA general assembly

20:30 Social dinner

#### Friday July 1<sup>st</sup>

#### <u>Morning</u>

09:00-09:45 **Invited lecture**: Facing challenges on water resources management when searching for a sustainable adaptation to climate change focusing agriculture (*Luis S. Pereira*, Technical University of Lisbon, Portugal)

09:45-11:00 Session 7: Irrigation

09:45-11:00 <u>Session 8</u>:Modelling of natural and dambreak floods and extreme events

11:00-11:30 Coffee break

11:30-13:15 Session 9: Irrigation

11:30-12:30 <u>Session 10</u>: Drought characterization, monitoring, forecasting

12:30-13:30 <u>Session 11</u>: Assessment of climate change

13:30-15:00 Lunch

#### <u>Afternoon</u>

15:00-15:45 **Invited lecture** Integrating hydrological and global circulation models for studying climate change impacts at the river catchment scale *(Jacques Ganoulis,* UNESCO)

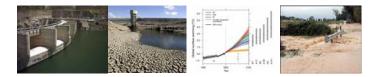
15:45-18:15 <u>Session 12</u>: Water quality management

15:45-18:15 <u>Session 13</u>: Innovations in water supply and distribution systems

18:15-18:45 Closing ceremony

#### Saturday July 2st

#### **Technical visit**



# Language

Official language of the workshop is English

#### Venue

Monastero dei Benedettini

Piazza Dante, Catania

#### How to reach the venue

<u>By AMT Bus</u>: Take at the airport the AMT line 457 (cost 1€) and get off at bus stop in *Via Sangiuliano*. Then walk to the venue in *Piazza Dante* by *Via Sangiuliano* (about 600 m). For further information see website www.amt.ct.it/PercorsieOrari.php

<u>By Taxi</u>: At the airport to the venue or hotels (about 20', estimated cost  $20-35 \oplus$ ). For further information see website <u>http://www.radiotaxicatania.org</u>

<u>By Shuttle service</u>: A shuttle service has been arranged for participants between the Catania-Fontanarossa airport to the selected hotel or to the venue of the symposium and vice versa ( $20 \in$  one-way per person). In order to reserve the shuttle service, please send an e-mail, referring to the symposium, with the following information (Date and time of arrival, Arrival flight no., Date and time of departure, Departure flight no., Number of people) to: info@sicilyexcursions.eu

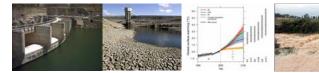
# Accomodation

Information for booking Hotels in the nearby area of the Symposium can be founded at: <u>http://www.ewra2011.dica.unict.it/index\_file/</u>

Further information available at:

# www.ewra2011.dica.unict.it

# www.ewra2011.ewra.net



## **Proceedings and Special issues**

A book of abstracts and a CD with the full papers will be distributed at the Symposium.

Selected papers will be included in a special issue of the journal *Water Resources Management* published by Springer. Selected papers will be also included in the journals *European Water* and *Water Utilities Journal* published by E.W. Publications.

#### **Registration fees**

EWRA members	340 €
Non EWRA members	360 €
Students	150 €

Registration fees include coffee breaks, two lunches, a Book of abstracts and a CD of Proceedings

## **Scientific secretariat**

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# **Registration secretariat**

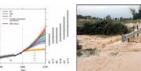
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# **Organisation assistance**

Lab. of Reclamation Works and Water Resources Management/Centre for the Assessment of Natural Hazards and Proactive Planning, Nat. Tech. University of Athens









European Water Univer Resources Departn Association Environm

University of Catania Department of Civil and Environmental Engineering

Italian Hydrotechnical Association

# VI International Symposium

# Water Engineering and Management in a Changing Environment



**Catania, Italy** June 29<sup>th</sup>-July 2<sup>nd</sup>, 2011

In collaboration with:



Centro Studi di Economia applicata all'Ingegneria

