



## Capacity Building Workshop on 'Non-Conventional Water Resources Management: Local Solutions'

13-14 November 2019

Malta College of Arts, Science and Technology (MCAST), Paola, Malta

### Announcement

The regional organisation Global Water Partnership - Mediterranean (GWP-Med) and the Energy and Water Agency (EWA) of Malta are organizing the Capacity Building Workshop 'Non-Conventional Water Resources Management: Local Solutions', that will take place on 13 and 14 November 2019 and will be hosted by the Malta College of Arts, Science and Technology (MCAST).

The activity is taking place in the framework of the "Non Conventional Water Resources Program Malta (Alter Aqua)", Phase III, designed and implemented by Global Water Partnership - Mediterranean (GWP-Med), in partnership with the Energy and Water Agency (EWA) and the Coca-Cola in Malta (General Soft Drinks S.A. and the Coca-Cola Company), supported primarily by The Coca-Cola Foundation and co-funded by EWA.

### Workshop context

Non-Conventional Water Resources (NCWR) are increasingly utilised by many countries in the Mediterranean, offering opportunities to secure additional water sources. Particularly in the islands and areas with limited freshwater resources, NCWR are critical to bridging the water budget deficit.

In recent years, NCWR technologies have improved through innovative techniques and methods and are serving as cost-effective solutions for enhancing water availability and addressing water challenges at local level. NCWR technologies and practices, such as the reuse of treated greywater, i.e. water from showers and sinks, of harvested rainwater and of collected stormwater, constitute not only solutions for water availability and climate change adaptation at the local level, but also opportunities for green/blue jobs and entrepreneurship.

*Why is it important to revive traditional water management practices such as rainwater harvesting? What other options do technological advancements offer? How can Integrated Urban Water Management (IUWM) and NCWR contribute to improving lives in cities?*

The workshop will offer responses to these questions, while challenging participants to address real-life dilemmas in interactive sessions.

### Target audience

The workshop is addressed to **tertiary education students and young professionals of technical backgrounds, such as engineering, architecture, natural resources management, water technologies** and others, that are interested in NCWR and IUWM.



## Workshop aims

Through the workshop **participants will:**

- Increase their knowledge and improve their skills on NCWR and IUWM solutions and technologies
- Deepen their understanding on technically sound and socially acceptable small and medium scale NCWR applications that can contribute to water security in insular and coastal communities
- Gain valuable insights through international case studies and the experience of the technical portfolio of the NCWR Programme in Malta.

## Workshop content

The workshop **includes:**

- Presentations by accomplished professionals in the water sector about the implementation of NCWR interventions, with case studies and insights from Malta and abroad, including opportunities and challenges
- Participatory interactive sessions, supplying insights on IUWM and on the use of NCWR in insular and coastal communities. See below for further details.
- Guidance and mentoring on project ideas and on practical tips on designing and executing NCWR applications, for those participants that have submitted their proposals through the Call for Proposals ([bit.ly/NCWRProjects](http://bit.ly/NCWRProjects))
- Visit to NCWR projects implemented by or inspired by the NCWR Programme in Malta and to the Ghajn National Water Conservation Awareness Centre.

During their registration participants may select one of the two interactive activities described below; each activity can host a limited number of participants, however the best effort will be made to accommodate all participants to their preferred activity.

### **A. Serious Game: facilitated session of GWP-Med's Serious Game on Integrated Urban Water Management at a coastal city**

The 'Integrated Urban Water Management Serious Game' (IUWM Serious Game) aims to build capacity on urban water management and strategic planning for a water resilient city, responding to climate change and urbanisation trends. Participants in this table game represent four stakeholders of the city that are called to take climate change adaptation measures using NCWR and urban green-blue infrastructure to ensure sufficient water resource availability while preventing city flooding and responding to the demands of the civil society. The game is facilitated by a trained game master and advances in seasonal rounds of increasing difficulty.

The IUWM Serious Game was developed by GWP-Med in collaboration with FloodCom, a Dutch company which specialises in Serious Game development, in the frame of the 'Water for the City' project ([www.waterforthecity.net](http://www.waterforthecity.net)), implemented in the coastal city of Alexandroupolis, NE Greece (2016-2019), in collaboration with the Municipality of Alexandroupolis and the Water and Sewerage Enterprise of Alexandroupolis, with the financial support of The Coca-Cola Foundation.



## **B. Insular area activity: facilitated session on implementing Non Conventional Water Resources interventions in insular & coastal areas**

The interactive session 'Non Conventional Water Resources – Implementing integrated solutions in Insular & Coastal Areas' aims to offer insights on opportunities and challenges while planning and implementing NCWR applications at various scales at insular and coastal areas. Participants are presented with an aerial photo (schematic) of an arid coastal area and, taking on the role of decision makers and stakeholders, are called to implement various water management solutions and climate change adaptation measures through the use of NCWR in a spectrum of locations in the urban and periurban setting, as well as through the consideration of non-technical measures and water demand management solutions.

### **Agenda**

The first day of the workshop (Wednesday 13/11) includes site visits and the second day (Thursday 14/11) presentations and interactive sessions. Below you may find the draft agenda.



### Wednesday 13 November 2019 – Field visits

<b>08:00 – 08:30</b>	<b>Gathering &amp; registration (MCAST)</b>
08:30 – 08:50	The Non Conventional Water Resources (NCWR) Programme in Malta: advancing NCWR & engaging people in Malta since 2011 – <i>Konstantina Toli, Global Water Partnership- Mediterranean (GWP-Med)</i>
08:50 – 09:00	Overview of the site visit & practical information
09:00 – 16:00	Visits to Greywater Recycling system(s), Green roof, Rainwater Harvesting System(s), Ghajn National Water Conservation Awareness Centre, Storm water management application. The schedule includes lunch break & travel back to venue.

### Thursday 14 November – Presentations & Interactive sessions

<b>08:00 – 08:30</b>	<b>Gathering &amp; registration (MCAST)</b>
08:30 – 08:50	Greetings by the Organizers: Global Water Partnership- Mediterranean (GWP-Med), Energy & Water Agency (EWA), Malta College of Arts, Science and Technology (MCAST)
08:50 – 09:10	The NCWR Programme in the Mediterranean & planned activities – <i>Konstantina Toli, Global Water Partnership- Mediterranean (GWP-Med)</i>
09:10 – 09:40	Integrated Urban Water Management (IUWM) – <i>Nassia Kassela, Global Water Partnership- Mediterranean (GWP-Med)</i>
09:40 – 10:05	Rainwater Harvesting & Green-Blue infrastructure: worldwide applications and case studies in Malta & the Mediterranean Region – <i>Sakis Pierropoulos, Atlantis Co.</i>
10:05 – 10:30	Stormwater management & reuse potential in Malta – <i>Alison J. Zammit, Malta College of Arts, Science and Technology (MCAST) &amp; Cranfield University</i>
10:30 – 11:00	Greywater recycling technologies & case studies in Malta & the Mediterranean Region – <i>Julian Mamo, Energy &amp; Water Agency (EWA)</i>
<b>11:00 – 11:30</b>	<b>Coffee break / Networking with professionals</b>
11:30 – 11:55	Information & communications technology (ICT) in agricultural water management – <i>Konstantina Toli, Global Water Partnership- Mediterranean (GWP-Med)</i>
11:55 – 12:20	Bill of quantities (BoQs), tendering & procurement – <i>Mark Perez, Energy &amp; Water Agency (EWA)</i>
12:20 – 12:45	Stakeholder engagement & private sector participation in climate change adaptation solutions – <i>Konstantina Toli, Global Water Partnership- Mediterranean (GWP-Med)</i>
<b>12:45 – 13:45</b>	<b>Lunch break</b>
13:45 – 15:45	Interactive group sessions <ul style="list-style-type: none"> <li><b>A.</b> Serious Game: facilitated session of GWP-Med’s Serious Game on Integrated Urban Water Management at a coastal city</li> <li><b>B.</b> Insular area activity: facilitated session on implementing Non Conventional Water Resources interventions in insular &amp; coastal areas</li> </ul>
15:45 – 16:15	Group session reporting, discussion and conclusions



## Registration

The workshop can only host a **limited number of participants**, therefore early registration is highly advised. You may register using the following link: [bit.ly/2nwkZjU](https://bit.ly/2nwkZjU).

Note: Participation is free of charge and information gathered will only be used for the purposes described above.

## Other information

The capacity building workshop '**Non-Conventional Water Resources Management: Local Solutions**' will be held back-to-back with the workshop '**Communicating Water Trends & Innovation to Engage Locals and Tourists**' ([bit.ly/2ljjyd](https://bit.ly/2ljjyd)) that is addressed to tertiary education students and young professionals of creative backgrounds, such as art & design, media & communication, social sciences and history (12-13/11).

## Background

The "Non Conventional Water Resources Program Malta [aka Alter Aqua]" (NCWR | [www.gwpmed.org/NCWR](http://www.gwpmed.org/NCWR))" is implemented in the Maltese Islands since 2011 and is currently in its 3<sup>rd</sup> phase (2019-2020). The Programme is designed by the regional organisation Global Water Partnership - Mediterranean (GWP-Med | [www.gwpmed.org](http://www.gwpmed.org)), one of the thirteen regions of the inter-governmental organisation Global Water Partnership (GWP | [www.gwp.org](http://www.gwp.org)), in partnership with the Energy and Water Agency (EWA | [www.energywateragency.gov.mt](http://www.energywateragency.gov.mt)) and the Coca-Cola in Malta (General Soft Drinks S.A. and the Coca-Cola Company), supported primarily by The Coca-Cola Foundation and co-funded by EWA.

Alter Aqua commenced in the Maltese Islands in 2011, first focusing on the island of Gozo, in partnership with the Ministry for Gozo and the Eco Gozo project, and since 2014, focusing in Malta, in partnership with the Ministry for Energy and Water Management and the Energy and Water Agency (EWA), aiming to promote the use of non conventional water resources (NCWR) as a sustainable practice for local water security and climate change adaptation. Since 2011, the Programme has applied 17 NCWR systems, yielding about 18 million liters of water annually, including the installation or reinstatement of rainwater harvesting systems and greywater recycling systems, alongside educational and awareness raising activities and capacity building workshops for professionals. The Programme has reached out to about 17,650 students, 1,380 teachers, 56 technicians, benefiting a total of 71,800 people. It has contributed to water availability at local and national level in a sustainable and cost-effective way and has promoted a new water culture for sustainable water use.

As water security is among the top priorities in the Maltese Islands, applying integrated and innovative approaches in water management, mobilising non conventional water resources and engaging stakeholders are pivotal in improving water efficiency and management and contributing to climate change adaptation and sustainable development. Leveraging the legacy of the previous phases, Alter Aqua - Phase III seeks to mainstream NCWR applications and water saving in Malta, including through youth engagement and capacity building. In this regard the Programme collaborates with tertiary education institutes to place youth at the forefront and promote their employability in green/blue jobs.

For more information please visit the [event page](#) through [www.gwpmed.org](http://www.gwpmed.org) or contact Ms Nassia Kassela, GWP-Med, at [nassia@gwpmed.org](mailto:nassia@gwpmed.org).

