#### Water and Environment Support

in the ENI Southern Neighbourhood region

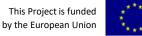


Explore the Potential of Natural Water Retention Measures (NWRM) and Water Harvesting (WH) at the catchment scale Activity No.: N-W-JO-2

**Final Consultation Workshop** 

15 May 2024 Kempinski Hotel, Amman, Jordan





### Water and Environment Support

in the ENI Southern Neighbourhood region



# Explore the Potential of NWRM and WH at the catchment scale Activity No.: N-W-JO-2

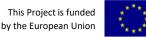
# **Final Consultation Workshop**

15 May 2024

# Overview of the Water and Environment Support (WES) Project

Presented by: Suzan TAHA, WES Key Water Expert



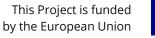






- WES aims at protecting the environment and improving the management of scarce water resources in the Mediterranean.
- It strives to address the country needs for creating the enabling environment and enhancing the capacities of stakeholders in the Partner Countries (PCs) to tackle problems related to pollution prevention and water use efficiency.
- WES capitalises on previous successful EU funded regional projects (Horizon 2020 CB/MEP; SWIM SM; SWIM-Horizon 2020 SM).





# **WES Identity**





**Partner Countries:** 

8 Countries in North Africa and the Middle East



**Duration:** May 2019 – November 2024 (66 months)

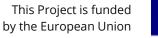


Budget: 9.508.054 Euros



Team Leader: Professor Michael Scoullos, <u>scoullos@wes-med.eu</u> Water Expert: Ms Suzan Taha, <u>taha@wes-med.eu</u> Environment Expert: Mr Anis Ismail, <u>a.ismail@wes-med.eu</u> Communication & Networking Expert: Ms Lisa Papadogeorgaki, <u>lpa@ldk.gr</u> Stakeholders Engagement Expert: Dr. Emad Adly, <u>wes.gc@raednetwork.org</u>









#### **Our Consortium**



LDK Consultants Global EEIG (Leader)



Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE)

Arab Network for Environment and Development (RAED)



RAED - J

Association of Cities and Regions for Sustainable Resource Management (ACR+)



CIHEAM – Mediterranean Agronomic Institute of Bari (CIHEAM Bari)



Gopa Infra GmbH

MedWaves the UNEP/MAP Regional Activity Centre for SCP

MedWaves the UNEP/MAP Regional Activity Centre for SCP

#### RAMBOLL



**Royal HaskoningDHV** 

**Ramboll Denmark A/S** 

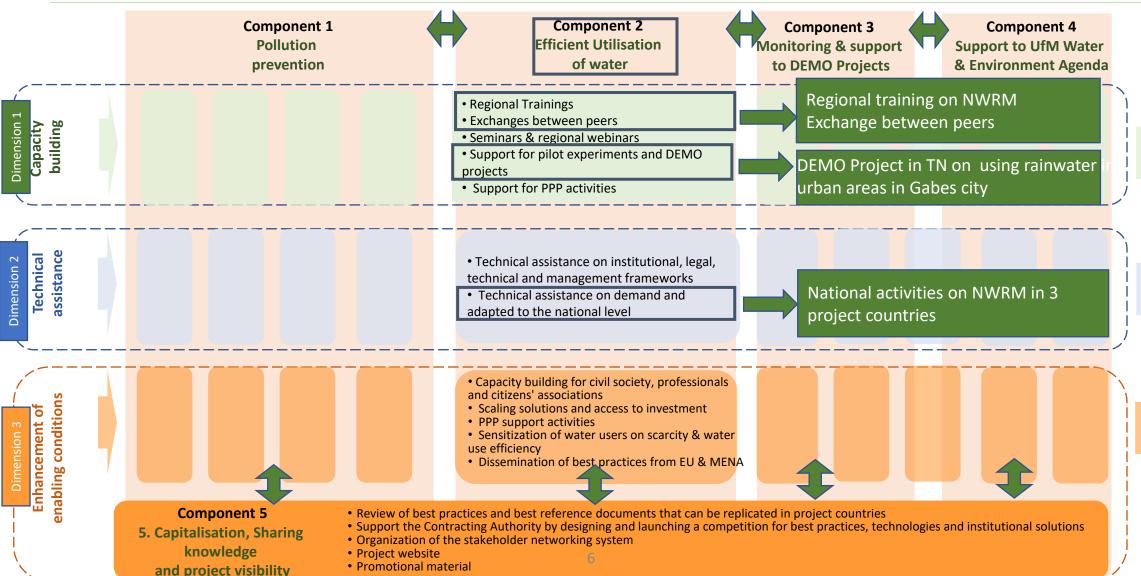






#### **Project Architecture**





# WES progress at a glance





# **Project Activities**



#### Component 2 – Regional Activities

- **RW-1-REG:** water-energy-food-ecosystem nexus
- RW-2-REG: water accounting
- **RW-3-REG /RW-3-P2P:** Water Demand Management (WDM)
- RW-4-REG / RW-4-P2P: water harvesting and NWRM
- RW-5-REG/RW-5-ST : Treatment of wastewater for reuse
- RW-6-REG/RW-6-P2P/RW-6-ST: Non-Revenue Water (NRW)
- <u>RW-7- REG/RW-7-ST</u>: optimal irrigation management and practices
- RW-X-WEB: Two webinars



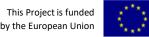


# **Project Activities**

#### Component 2 – Horizontal Regional Activities

- HW-1-REG / HW-1-P2P: Capacity building on PPP, entrepreneurship in the green / blue economy and banking services for the water / wastewater sector
- **HE-3-REG:** Education for sustainable development: focusing on treatment for the reuse of wastewater and unconventional water resources







# **Project Activities**

#### Component 2 – Technical Assistance (Jordan)

• N-W-JO-2: Explore the potential of Natural Water Retention Measures (NWRM) at the catchment scale

Launched on 15 December 2020 with MWI, WAJ and JVA as partners

• N-W-JO-1: Elaboration of a Non-Revenue Water (NRW) Policy for Jordan

Launched 15 Feb 2022 with MWI and WAJ



### Water and Environment Support

in the ENI Southern Neighbourhood region



Explore the Potential of NWRM and WH at the catchment scale Activity No.: N-W-JO-2

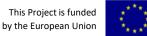
# **Final Consultation Workshop**

15 May 2024

# Introducing the WES activity in Jordan

Presented by: Suzan TAHA, WES Key Water Expert





# Objectives of the activity and overview of the proposed actions



- Enrich knowledge and know-how of NWRM including storm water management in peri-urban areas as well as in rural/natural areas according to water usage.
- Review of best management practices for NWRM.
- Learn from the experience achieved from designing NWRM in two pilot cases in Jordan at the feasibility level.
- Review of economic incentives and regulation to support and amplify storm water management.
- Better understand the relationship between rural/natural and peri-urban storm water in the context of storm water management.

Review of Best Management Practices in NWRM for storm water management, aquifer recharge, debris retention transported by runoff, direct use in agriculture etc., and holding a workshop

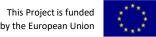
Selection of pilot case studies in Jordan

Basic design of NWRM in the selected pilots including assessing its feasibility

Review of economic incentives and regulation regarding storm water management

Concluding workshop



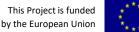


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- Present an overview of the national activity in Jordan.
- Present the findings of the final screening of the Best Management Practices and NWRMs demonstrating the application of selected best practices in natural and peri-urban environments in arid or semiarid areas with restricted area availability.
- Present, discuss, obtain feedback and validate the outcomes of the study with respect to:
  - The designs of the NWRMs for the two pilot areas
  - The applicability of the selected measures in Jordan and alternative techniques.
  - The cost-benefit analysis of the application of the proposed NWRM in the two pilot areas.
  - The proposed economic incentives and regulation framework regarding Natural Water Retention Measures and storm/flood water management in the country.
  - The proposed guidelines/criteria for the selection of appropriate sites of retention and detention systems.

• Agree on a set of actions that the country could implement beyond the duration of the WES project.  $\rightarrow$  evaluation of the impact of this activity.



#### Agenda



Water and Environment Support in the ENI Southern Neighbourhood region

0:00-10:15	WELCOME & GENERAL INTRODUCTION
0:15-11:50	PRESENTATION OF THE ACTIVITY AND GENERAL DISCUSSION
	<ul> <li>Introducing the WES Activity in Jordan and the Terminology - Natural Water Retention Measures (15 min)</li> <li>Dr. Demetris ZARRIS, Non-Key Expert, specialised in Hydrology and Technical Coordinator representative of WES experts' Team</li> <li>Analysis of Natural Water Retention Measures in Natural Areas – Application in Azraq City Lowland Area (30 min)</li> <li>Dr. Demetris ZARRIS and Mr. Stelios VAVOULOGIANNIS, Hydrologist, WES</li> <li>Mr. Farouk TADROS, Local expert in Landscape Architecture, WES</li> <li>Analysis of Natural Water Retention Measures in Urban Areas – Application in Aljoun Town Area (30 min)</li> <li>Dr. Demetris ZARRIS:, Mr. Stelios VAVOULOGIANNIS, Mr. Farouk TADROS</li> <li>Q&amp;A (10 min)</li> </ul>
1:50-12:00	COFFEE BREAK
2:00-13:15	<ul> <li>Assessment of the adopted NWRMs overall efficiency ((technical and economical) (15 min).</li> <li>Dr. Demetris ZARRIS,</li> <li>Proposed economic incentives and regulation framework for NWRM &amp;</li> </ul>
	storm water management in the country (15 min) Dr. Demetris ZARRIS,
	<ul> <li>Proposed guidelines / criteria for the selection of appropriate sites of retention and detention systems (15 min)</li> <li>Dr. Demetris ZARRIS,</li> </ul>



Thank you for your attention and keep up with our latest news!





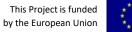


**QR Code Stakeholders Commitment Form** 











#### **QR Code Evaluation Form**









