MENA NWC
www.menanwc.org

22 October 2014
11th Gulf Water Conference
Muscat, Oman
MENA NWC Vision and Mission

VISION
• A water secure Middle East and North Africa

MISSION
• Build an alliance of governments, research and educational institutions, nongovernmental organization, and the private sector to advance:
  • Collaborative research
  • Innovation
  • Capacity building
  • Knowledge exchange
Governance

• Founders Committee created in March 2013
• Incorporated in Washington DC in December 2013
• Founders Committee recharacterized as Interim Board of Directors in February 2014
• Bylaws prepared in March 2014
• Application for tax exempt status as not-for-profit submitted in September 2014
• Permanent Board seated in September 2014
Governance Structure

• Board of Directors
• Executive Director
• Directorate
• Assembly of Governing Members
• Scientific Advisory Council
Board of Directors

- **Lee Addams**, Vice President for Corporate Strategies, Chief Strategy Officer, Valmont Industries, Inc., USA
- **Thameur Chaibi**, Head of Department of Rural Engineering, National Institute for Research in Rural Engineering, Water, and Forestry (INRGREF), Tunisia
- **Manar Fayyad**, Professor, Vice President, German Jordanian University, Jordan.
- **Abdel Kawi Khalifa**, Former Chairman of the Egyptian Holding Company for Water and Wastewater, Egypt
- **Ralf Klingbeil**, Regional Advisor Environment and Water, UN Economic and Social Commission for Western Asia (UN ESCWA) and AWARENET Network Coordinator in Lebanon, Germany
- **Elisabeth Kvitashvili**, Deputy Assistant Administrator, Bureau for the Middle East, USAID
Board of Directors

- **Said Ouattar**, Director General, Institute for Agronomy and Veterinary Science Hassan II, Morocco
- **Harvey Perlman** (Vice Chairman), Chancellor, University of Nebraska, USA
- **Muwaffaq Saqqar** (Chairman), Water and Environment Consultant Engineer, Arab Fund for Economic and Social Development, Kuwait
- **Jill Shaunfield Smail**, Science and Technology Advisor, Bureau of Near East Affairs, U.S. Department of State
- **John Waterbury**, Former President, American University in Beirut and currently Visiting Global Professor at New York University in Abu Dhabi, USA
- **Hanna Zaghloul**, Chief Executive Office, Kawar Energy, Jordan
- **Waleed Zubari**, Professor of Water Resources Management and Acting Director of the Water Resources Management Program, Arabian Gulf University (AGU), in Bahrain
Strategic Direction

• Developed five-year strategic business plan
• Approved by Board of Directors
• Developing fundraising strategy and action plan
MENA NWC Members

• Water Research Centers and Educational Institutions
• Non-MENA NWC Research and Educational Institutions
• Government Institutions
• Civil Society Organizations
• Private Sector Entities
MENA NWC Programs

- A collaborative research program forges meaningful partnerships, develops and disseminates policy tools, and conducts technical and management interventions.

- A regional capacity building program strengthens technical, financial, managerial, and leadership skills.

- A knowledge sharing program encourages long-distance collaboration and exchanges regional know-how to improve water resources planning and management.
Research Program

POLICY, RESEARCH & DEVELOPMENT GRANTS
• Ten projects awarded for $3.2 million

SMALL GRANTS
• Young Water Scientists: $250,000, $158,000 awarded
• Water Innovative Fellowships: $250,000, $145,000 awarded

US-ME RESEARCH PARTNERSHIPS
• Three projects awarded for $1.7 million
Technical Communities

- Water Efficiency and Productivity
- Groundwater
- Non-Conventional Water
- Water/Energy/Food Nexus
- Water Supply and Sanitation
# Water Efficiency and Productivity Research Projects

<table>
<thead>
<tr>
<th>Research Project Title</th>
<th>MENA NWC Research Team</th>
<th>Value</th>
</tr>
</thead>
</table>
| Global Yield Gap Atlas for Middle East and North Africa | • University of Nebraska-Lincoln (UNL)  
• Hassan II Agronomy and Veterinary Institute (IAV), Morocco  
• National Center for Agricultural Research and Extension (NCARE), Jordan  
• National Institute of Research for Rural Engineering, Water and Forestry (INRGREF) | $450,000 |
| Improving Water Use Efficiency in the River Basin in Jordan, Morocco, and Tunisia | • National Institute of Research for Rural Engineering, Water and Forestry (INRGREF)  
• National Center for Agricultural Research and Extension (NCARE), Jordan  
• Hassan II Agronomy and Veterinary Institute (IAV), Morocco | $300,000 |
| Drought Mitigation for MENA | • International Center for Biosaline Agriculture (ICBA)  
• National Center for Agricultural Research and Extension (NCARE), Jordan | $45,000 |
# Water Efficiency and Productivity Research Projects

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<tr>
<th>Research Project Title</th>
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<tbody>
<tr>
<td>Mitigating Environmental Risks of Wastewater Reuse for Agriculture</td>
<td>• Sultan Qaboos University (SQU), Oman</td>
<td>$350,000</td>
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<td></td>
<td>• University of Jordan</td>
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<tr>
<td></td>
<td>• National Research Institute for Rural Engineering, Water and Forestry (INRGREF)</td>
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<tr>
<td>Application of Near Real-Time Monitoring Systems for Irrigated Agriculture</td>
<td>• International Center for Biosaline Agriculture (ICBA)</td>
<td>$350,000</td>
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<tr>
<td></td>
<td>• Sultan Qaboos University (SQU), Oman</td>
<td></td>
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<tr>
<td></td>
<td>• National Center for Agricultural Research and Extension (NCARE), Jordan</td>
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<tr>
<td></td>
<td>• Sana’a University, Yemen</td>
<td></td>
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<tr>
<td></td>
<td>• National Research Institute for Rural Engineering, Water and Forestry (INRGREF)</td>
<td></td>
</tr>
<tr>
<td>Upgrading Treatment Processes to Improve Effluent Quality for Irrigation</td>
<td>• Technion – Israel Institute of Technology</td>
<td>$550,000</td>
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<tr>
<td></td>
<td>• National Center for Agricultural Research and Extension (NCARE), Jordan</td>
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<td></td>
<td>• Al Quds University, West Bank</td>
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## Groundwater Research Projects

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</table>
| Radar Probing of Groundwater in Hyper-arid Environments: Understanding Aquifer Dynamics in High Discharge Areas | • California Institute of Technology, USA  
• Hassan II Agronomy and Veterinary Institute (IAV), Morocco  
• Sultan Qaboos University (SQU), Oman                                                | $600,000  |
| Understanding the Dynamics of Managed Aquifer Recharge                                 | • Sultan Qaboos University (SQU), Oman  
• University of Jordan  
• University of Nebraska – Lincoln                                                      | $300,000  |
### Non-Conventional Water Research Projects

<table>
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<tr>
<th>Research Project Title</th>
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</table>
| Mitigating Red Tide Algae Blooms                | • Middle East Desalination Research Center (MEDRC), Oman  
• Sultan Qaboos University (SQU), Oman  
• Regional Organization for the Protection of the Marine Environment (ROPME), University of California Santa Cruz  
• Woods Hole Oceanographic Institution, National Oceanic and Atmospheric Administration (NOAA) | $650,000 |
| Solar Energy for Large Scale Irrigation         | • University of Jordan  
• An Najah National University, West Bank                                                                                                                                | $100,000 |
| Use of Nanoparticles as a Biofouling Resistant Technology | • Jordan University of Science and Technology (JUST), Jordan  
• International Institute for Water and Sanitation, National Office for Electricity and Potable Water (ONEE-IEA), Morocco                                                                 | $300,000 |
## Water/Food/Energy Nexus Research Projects

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<tr>
<th>Research Project Title</th>
<th>MENA NWC Research Team</th>
<th>Value</th>
</tr>
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</table>
| Water-Energy-Food Nexus – In Design | • University of Jordan  
• National Institute of Research for Rural Engineering, Water and Forestry (INRGREF) | TBD   |
## Water Supply and Sanitation Research Projects

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<tr>
<th>Research Project Title</th>
<th>MENA NWC Research Team</th>
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<tbody>
<tr>
<td>Non-Revenue Water in Middle East Water Utilities</td>
<td>• Arab Countries Water Utilities Association (ACWUA), Jordan&lt;br&gt;• Africa Water Association (AfWA)</td>
<td>$330,000</td>
</tr>
<tr>
<td>Expanding Access to Sanitation for Unsewered Communities</td>
<td>• International Institute for Water and Sanitation, National Office for Electricity and Potable Water (ONEE-IEA), Morocco&lt;br&gt;• Hassan II Agronomy and Veterinary Institute (IAV), Morocco&lt;br&gt;• Royal Scientific Society, Jordan&lt;br&gt;• University of Jordan&lt;br&gt;• University Cadi Ayyad, Morocco</td>
<td>$450,000</td>
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## MENA NWC Small Grants

<table>
<thead>
<tr>
<th>YOUNG WATER SCIENTISTS</th>
<th>WATER INNOVATION FELLOWSHIPS</th>
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</thead>
<tbody>
<tr>
<td>• Funded at $250,000</td>
<td>• Funded at $250,000</td>
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<tr>
<td>• Requires two scientists from two Centers</td>
<td>• Single individual may apply but must be ME national, living in ME, and currently employed</td>
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<tr>
<td>• Age requirement: 21-40 years</td>
<td>• No age requirement</td>
</tr>
<tr>
<td>• Funding provided through two Centers to researchers</td>
<td>• Funding provided through MENA NWC Center to grantees</td>
</tr>
<tr>
<td>• Requires technical proposal and budget</td>
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<tr>
<td>• Limit is $50,000 total</td>
<td>• Limit is $25,000</td>
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<tr>
<td>• Likely range $10,000-$30,000</td>
<td>• Likely range $5,000-$15,000</td>
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<tr>
<td>• Four awards</td>
<td>• Nine - award or provisional award</td>
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Private Sector Engagement

• Finalized private sector mapping in Jordan
• Three businesses actively engaged with PR&D research teams: ICT International, Kawar Energy and DHI Group
• Workshop with private sector at IWA Congress in Lisbon is September 2014
Capacity Development Program

Proposal writing and research management

Engaging the private sector in research

Technical Topics
• Water footprint
Knowledge Sharing Program

• MENA NWC website in December 2014
• Initiate Communities of Practice for MENA NWC research scientists through the website
• Regular MENA NWC newsletters
• Open the MENA NWC Clearinghouse
• Upcoming Events:
  – Arab Water Week in January 2015
  – MENA NWC Biennial Congress in April 2015
  – With ACWUA, strategic partner of IWA at Development Congress in October 2015
Connect with Us

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www.menanwc.org