



ONEE-U.S. Water Partnership Water Week *Rabat, 25 -29 September 2017*

General Overview

Under the auspices of the U.S. Department of State's Water Consultant Program, the Office National de l'Electricité et de l'Eau Potable (ONEE) and the U.S. Water Partnership (USWP) are organizing a workshop on "Sustainable Management of Water Resources in a Context of Climate Change", on 25-29 September 2017 in ONEE's headquarters in Rabat.

During the workshop, American water expert, Dr. Barney Austin, will share best practices and expertise on sustainable water management with a focus on managing the negative impacts of climate change on water resources. Dr. Austin will engage with senior executives at ONEE and other Moroccan partner organizations in a strategic planning exercise to define how to best address water scarcity issues and manage the strains climate change is placing on local water resources. Focus will be on water resources planning, wastewater treatment and reuse, aquifer storage and recovery, water conservation and efficiency, desalination, and water-energy nexus.

Dr. Austin will discuss water resource planning trends in the United States and their relevance to the Moroccan context. Approaches to water resources management in the United States have evolved dramatically in the past 20 years for a number of reasons. Population growth in areas with little or no water continues, and evolving environmental awareness make it increasingly difficult for water providers to further develop water supply projects in sensitive areas. Extreme climatic events appear to be on the rise, compounding the problem, and stakeholders are demanding a more involved role in making decisions that affect their livelihood. These factors have caused water providers to think creatively about how to meet water needs, examining both demand reduction and supply augmentation approaches previously ignored.

Desalination of seawater and brackish groundwater are becoming viable options in some areas, while conservation has been very effective in others. Texas and other southern states with high inter-annual climate variability have successfully implemented Aquifer Storage and Recovery (ASR) projects and all states have explored options for wastewater reuse, in some cases adopting direct reuse for drinking water.

All of these approaches are being explored in the United States in a shifting framework for water resources planning, involving, in many instances what we refer to as "bottom-up" or "grass-roots" planning, where stakeholders play an increasing important role in major decision-making. A harsh climate and severe water resources pressure are not new to Morocco either.

Draft USWP-ONEE Water Week Schedule

Days	Time	Topics	
Monday 25/09/2017	09h30-10h45	General Opening Ceremony Launch of ONEE-USWP Water Week	<ul style="list-style-type: none"> Welcome speech by Chargé d’Affaires Stephanie Miley Welcome speech by ONEE CEO Ali Fassi Fihri Opening lecture by Dr. Barney Austin.
	Coffee Break		
	11h-12h30	Session N°1 Water resources planning	This presentation will explore the shifting approach to water resources planning in the United States where stakeholders having an increasingly important role and responsibilities on water providers are expanding from simple supply and demand considerations. The presentation will also discuss innovative approaches to meeting water needs in water-scarce regions.
	VIP Lunch		
	14h-15h00	Session N°2 Climate change	A politically charged topic in the United States, this presentation will compare and contrast the approach taken in different states – especially California and Texas – in dealing with this complex problem in the context of water resources management.
	Coffee Break		
Tuesday 26/09/2017	15h15-16h15	Session N°3 Environmental flows	A broad term encompassing minimum flows for streams and rivers and freshwater inflows to bays and estuaries, this presentation will address a range of methods for identifying environmental flow needs and discuss how industry and environmental groups collaborated on the development of legislation in Texas.
	09h-10h30	Session N°4 Wastewater reuse	Indirect wastewater reuse has been occurring throughout the world for centuries. This presentation will explore more direct uses for treated wastewater, including impediments to development in the United States.
	Coffee Break		
	10h45-12h15	Session N°5 Desalination	In hot and dry parts of the United States, brackish groundwater and seawater desalination have been explored extensively. An obvious source of water, desalination is nevertheless expensive and energy-intensive, and not practical for everyone. A further impediment is the disposal of the concentrate. Major considerations in feasibility studies for coastal and inland projects will be described, as well as recent developments that make the water management strategy more viable.

	Free Lunch		
	14h-15h30	Session N°6 Aquifer Storage and Recovery	Aquifer Storage and Recovery (ASR) involves the injection of water underground during periods of excess water and recovery of that water in times of need. In places with suitable geology, ASR may provide a more effective water supply enhancement strategy than building a new reservoir. Successful ASR projects will be explored as well as impediments to development.
Wednesday 27/09/2017	09h30-12h30 (coffee break at 11h)	Session N°7: The Water Energy Nexus	Thermoelectric power is the single largest user of water in the United States. Much of the power generated is used for pumping, treating and distributing water. The inextricable relationship was described as early as 1994 and by 2014 was identified as a matter of national security by the Department of Energy. This presentation will describe efforts to better quantify and address the water-energy nexus in the United States.
	11h00	Coffee Break	
	Lunch		
	14h-15h30	Session N°8 Water Conservation and Efficiency	A major strategy for meeting future water needs, water conservation continues to show tremendous promise in the United States. Examples from rural and urban sectors will be shared, and recent water conservation innovations described.
Thursday 28/09/2017	9h30-12h00	Meeting with ONEE Technical Directions (1)	
	Free Lunch		
	16h00	Lecture in AUI (Al Akhawayn University in Ifrane) @4p.m	
Friday 29/09/2017	11h00-13h00	Meeting with ONEE Technical Directions (2) (as needed)	