



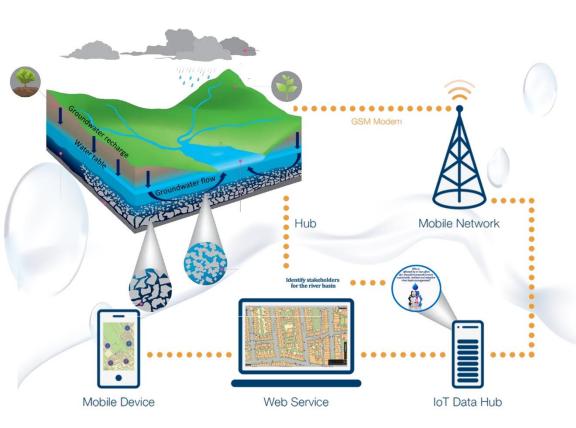








Improving Sustainable Groundwater Management of the Lower Valley of Medjerda Bassin



SMART_IWRM Medjerda

Newsletter # 04

April 2020



Improving Sustainable Groundwater Management of the Lower valley of Medjerda Bassin

> PEER Program Cycle 7 (NAS_USAID)

Newsletter Topics



Field trip to the study area





Technical meetings with national partners

Working Meeting the International Association of Hydrogeologists _ Tunisian Chapter

Event Dates: 24th January 2020

Participant Description: Researchers, project members

Event Description: In order to prepare the visit program of the Prof Clifford I. Voss (USGS) we made technical meetings with the Tunisian Chapter of the International Association of Hydrogeologists (IAH) to collaborate in the organization of the international Conference on Groundwater Modelling in honor of Prof. Clifford Voss & the Academic Day with PhD Students & Early Career Researchers





Agreement Signature with the Regional Commissariat of Agricultural Development (CRDA) of Ariana

Event Dates: 13th February 2020

Participant Description: CRDA Engineers, project members

Event Description: In order to install the smart groundwater monitoring system in the study area, a cooperative agreement was signed between the CRDA of Ariana and the project.





Working meeting of Prof Clifford I. Voss with project members

Event Title: Working meeting of Prof Clifford I.

Voss with project members at the ESIM Event Dates: 09th March 2020

Participant Description: Administrators,

Researchers, students

Description :

Prof Clifford I. Voss (USGS) has visited, the 09 March 2020, the Higher School of Engineers of Medjez El Bab (ESIM) to meet the members of the project and discuss the progress of its activities.





Agreement Signature with the Regional Commissariat of Agricultural Development (CRDA) of Bizerte

Event Dates: 10th March 2020

Participant Description: Engineers, members

Event Description: In order to install the smart groundwater monitoring system in the study area, a cooperative agreement was signed between the CRDA of Bizerte and the project where the piezometers of the study are fixed.





Field trip to the pilot area

Event Dates: 10th March 2020

Participant Description: Engineers, project members

Event Description : Prof Voss saw and understood the hydrogeological context of the study area and he helped us to resolve technical issues about hydrogeological data and modelling







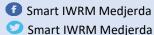












Conference on Groundwater International Modelling in honor of Prof. Clifford Voss (USGS)

- Event Dates: 11th March 2020
- Participant Description: researchers, young people, professionals from national authorities & organizations, NGOs, private sector
- Event Description: International Conference on Groundwater Modelling in honor of Prof. Clifford Voss (USGS) was organized in the aim to exchange of ideas and expertise that it can provide assistance in resolving specific issues of groundwater modelling in Tunisia.





During this event, the PEER program (USAID) was presented with four Tunisian projects benefited of this grant, then Prof. Voss presented a lecture entitled "Informing Management of the World's Largest Groundwater Systems with Simply- Structured Model Analysis". At the end of the conference, the president of Tunisian Chapter of the International Association of Hydrogeologists (IAH) was presented a lecture on the "Hydrogeology Tunisia: Challenges, topic: in Management and Research".

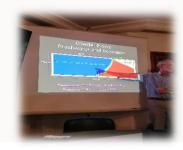




Academic Day: Meeting with PhD Students & **Early Career Researchers**

- Event Dates: 12th March 2020
- Participant Description: PhD students and early career researcher
- **Event Description**: The aim of this event is to strengthening the capacity of the PhD Students & Early Career Researchers in groundwater modelling and to benefit from the assistance of the senior expert in resolving specific issues of their case studies.

Prof. Clifford I Voss has presented a lecture on the topic: Groundwater "Density-Driven Flow: Seawater Intrusion, Natural Convection, and Other Phenomena". Then, the younger researchers have presented their research works during an oral and poster sessions.





Working Meetings with PhD and Master's Students involved in the project

- Event Dates: 09 & 13th March 2020
- Participant Description: PhD and Master's Students
- **Event Description**: Prof Voss, during his visit was met the PhD & Master students those involved in the project activities, where they have presented the advance of their works. He was assisted them to resolve the technical problems for their studies.







COVID-19 Pandemic **STAY SAFE**

















SMART_IWRM_Medjerda Project

SMART_IWRM_Medjerda

"Improving Sustainable Groundwater Management of the Lower valley of Medjerda basin" is the Research & Development project funded by the PEER cycle 7 program (NAS_USAID) and led by the Higher School of Engineers of Medjez El Bab (ESIM) and the U.S. Geological Survey USGS.

PEER program (NAS_USAID)

The Partnerships for Enhanced Engagement in Research (PEER) program is a competitive awards program that invites scientists in developing countries to apply for funds to support research and capacity-building activities on topics of importance to USAID and conducted in partnership with U.S. (USG)-funded Government and selected private sector partners. The program is supported by USAID but implemented by the U.S. NAS.

Specific Objectives

SMART_IWRM_Medjerda project aims to support groundwater resources management of the Lower valley of Medjerda River basin based on IWRM principles through three main pillars :

Overall initial assessment groundwater of resources availability and quality

Data management & Numerical simulation of water resources

Mobile Network

Capacity Development Expected Results

Implementation of a smart water monitoring system using IoT platform

Development of a GIS modelling platform based decision support system tool (DSS) that can be used by managers in water-resource decision making.

Improve capacity building of water stakeholders and **empowering women role** in water sector













