

#### **GlobWetland II**

is a regional pilot project of the Ramsar Convention on Wetlands, funded through the European Space Agency (ESA) Data User Element (DUE) program. The primary objective of GlobWetland II is to facilitate the integration of remote sensing into the conservation and management of wetlands. For more information see <u>www.globwetland.org</u>

The purpose of that Newsletter is to keep you informed about the progress of the project, about highlights and upcoming events.

Please feel free to forward this Newsletter to people who might be interested. To **subscribe** or **unsubscribe** to the Newsletter please contact **globwetland@jena-optronik.de**.

## Globwetland II at the COP-10 of the UN-CBD

The Globwetland II project will be presented at the forthcoming 10th Conference of the Parties (COP-10) of the United Nations Convention on Biological Diversity (UN-CBD), which will take place in Nagoya, Japan from 18 to 29 October 2010. This will happen during a side event jointly organised by the European Space Agency, the Secretariat of the Ramsar Convention on wetlands and the UN-CBD environmental affairs for inland waters. The title of the side event is "SPACE AGENCIES SUPPORT TO RAMSAR/CBD FOR INLAND AND COASTAL WETLAND OBSERVATION AND REPORTING". The side event will present how a collaborative approach like the GW-II partnership can bring a significant breakthrough to the monitoring and assessment of essential environmental issues such as wetlands conservation. Similar approaches relevant to the CBD inland waters and coastal/marine programs will also be presented, in particular for those issues related to post-2010 target and indicators that will emerge from the CBD COP 10. More information on the UN-CBD COP-10 can be found at <a href="http://www.cbd.int/cop10/">http://www.cbd.int/cop10/</a>

### **Evaluation of User questionnaires – system SW integration into ArcGIS**

The Requirement Analysis for GlobWetland II which is based on the answers that the countries provided through the questionnaire survey has been almost completed. Most of the countries (8 out of 11) have responded and their answers have been consolidated by the GW-II team and considered in the first draft design of the GW-II system. One important outcome of the survey is that the integration of the GW-II system software into ArcGIS would be appreciated by all users. Detailed results of the Requirement Analysis will be presented and discussed during the 1<sup>st</sup> Workshop.

# First satellite images received – Map production for 10 pilot test sites has been started

The project team received first Landsat data and first very high resolution Kompsat satellite images from different test sites. ESA provided in addition to the foreseen data set very high resolution SPOT5 data of the Syrian test site Sabkhat al Jabbul for free.





GLOBWETLAND II NEWSLETTER NO. 2.0

October 2010

page 2

The received data will be used now to produce first maps for 10 pilot test sites in different countries. All project partners who will be responsible for map production agreed a common workflow for the production of the first maps to get comparable results. The selection of the proposed pilot sites, 10 wetlands in the total project area, has been done by the project team together with the Mediterranean Wetland Observatory based on a certain number of criteria (like being a Ramsar site, covering different types of wetland types or ecosystems, being well studied areas). The mapping results will be presented at the 1<sup>st</sup> workshop.

#### The various types of wetlands included in the GW-II project

The Globwetland-II project affects eleven countries of Middle-East and North Africa, from Morocco to Turkey. It focuses on the coastal areas, taking into account the major coastal Wetlands (Important Bird Area of Birdlife and Ramsar sites) as well as the Ramsar sites located at less than 100 km from the sea. Even if various types of wetlands are found in theses regions, a common characteristic is that they are often temporary, due to the arid climate. Chotts (temporary brackish lake) and wadi or oued (temporary rivers) are found in all the dry areas.

In North Africa, there are mainly coastal lagoons (brackish lake connected to the sea) and sebkha (temporary salty lake) along the Moroccan, Tunisian and Libyan coasts, as well as freshwater lakes and marshes in the Atlas Mountains. In Egypt, the Nile delta is the most important Mediterranean wetlands; it is constituted by two Nile's branches, a dense network of canals within the delta used for agricultural purposes and coastal lagoons near the shore.

In the Middle-East, water is scarce, except in Lebanon, a country rich in rivers and marshes, especially in the inland Beqaa plain. Rivers and wadis are especially important in this arid region.

Finally, the Turkish coast hosts the mouths of a lot of rivers running from the inland rivers. They constitute deltas that are complex wetlands composed of rivers, lagoons and fresh to salty marshes. Many coastal lagoons and inland freshwater lakes are also found along the Turkish coast.

#### UPCOMING GLOBWETLAND II EVENTS

## Technical User meetings at the end of October 2010

Given that the use of EO data and techniques require good knowledge of the area it is considered to initiate a more close collaboration between the project team. For that reason project partners will visit Users at different places at the end of October / beginning of November. The main scope of the on site meetings is to support the gathering of available and new ground information in the test sites as well as to get a common understanding of user requirements and learn more about the wetland classes and changes in different test sites.

In a first step Jena-Optronik will visit the Jordan partner organisations and the RAMSAR test site Azraq, TerraSphere will visit the partners in Egypt and the site Lake Burullus, Keyobs intends to visit Algeria.





GLOBWETLAND II NEWSLETTER NO. 2.0

October 2010

page 3

## WS1 and CDR at the ESA premises in Frascati

The 1<sup>st</sup> GlobWetland II workshop is scheduled at the ESRIN premises of the European Space Agency (ESA) in Frascati nearby Rome, Italy on 13–16 December 2010 and will be combined with the Critical Design review (CDR).

The draft agenda is defined and the User and partner organisations are invited to participate in a 2 days discussion about the design of the GW-II system as a major milestone in the development of the RAMSAR G-WOS system.

The purpose of the workshop is to ensure that the approach chosen for the GW-II system is in line with the User expectations and has the potential to be adopted into their daily work in the future.

As an outcome of this first GW-II workshop, the project team would like to refine and consolidate all user requirements and integrate them into a harmonised approach.

# LOOKING AT GLOBWETLAND II

# User's involvement: A vital dimension of the GW-II project

User's involvement is at the heart of the GW-II project. All the involved users, along with the developers, shall act like a big family; to share knowledge, expertise, skills and institutional capacities, and to work all together to develop and sustain a regional pilot wetland observation system, the GW-II system. This system shall serve not only local and national needs but also it shall reflect the wetlands status and threats at the regional level. This is not an easy task. However, it is an urgent task in view of the new climate change emergencies that oblige us to work locally and act jointly in a global dimension. Thus, GW-II incorporates several joint actions and events such as the requirement survey, information and technical workshops and training seminars. GW-II opens a great opportunity to the South East Mediterranean Countries, from Morocco to Turkey; to have the advance in innovative wetland assessment and monitoring and to take the lead in regional adventures.

#### *Point of view of a user: the importance of the GW-II project for the Mediterranean Wetlands Observatory (MWO)*

The MWO has been deeply involved in the GW-II project since its preparatory phase. As far as it is concerned, the development of an information system of land use and land cover around the main coastal wetlands in the Southern and Eastern shores of the Mediterranean is of great importance. By mapping these areas in 1975, 1990 and 2005, it will make possible to calculate four main indicators of the MWO: wetland surface, change in wetland area due to urbanisation, change in wetland area due to agriculture and inundation regime in the ecosystem. The dates were chosen in order to make possible the comparison with the European data (Corine Land Cover database). The development of a user-friendly information system will allow repeating this work for other dates, after the end of the project. Another important issue for the MWO is the test of a methodology for wetlands delineation using satellite images. Indeed despite its importance as a necessary initial state, a comprehensive map of the wetlands in the whole Mediterranean basin has never been produced.





# A main issue of the GW-II project: the usefulness of the developed system after the end of the project

The GW-II project aims to develop an information system and test the possibility to use it further as a Global Wetland Observing System, as needed by the parties of the Ramsar Convention. To reach this objective it is vital that the users, mainly the 11 countries and the MWO, are able to use it to map wetlands and to calculate indicators for other dates, after the end of the project in 2012. This is the main issue of GW-II.

Three levels of sustainability can be distinguished. First, the technical sustainability: the developed system has to be kept simple in order to allow its use by non-specialists, with few human resources, in various technical environments. Second, the institutional sustainability: the project team, helped by the users, has to identify which institutions are the most suited to own the process, regarding their level of interest and the likelihood of their sustainability (resources, staff, and expert availability to sustain the activities after the project period). Finally the financial sustainability: the budget needed to maintain and/or develop the activities is to be clearly evaluated.

*Contact: Kathrin Weise |JENOPTIK, Jena-Optronik GmbH, Pruessingstrarsse 41, 07747 Jena | Phone +49 3641 200160 | Fax +49 3641 200220 | email <u>kathrin.weise@jena-optronik.de</u>* 

