

EMWIS Flash - January 2013

**Euro-Mediterranean Information System on the know-how
in the Water Sector**

EMWIS is a program of the Union for the Mediterranean.

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*** EMWIS Technical Unit wish you all Happy New Year 2013 full
of Success and Achievements ***

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HEADLINE

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1- The effects of climate change, population growth and economic development in the Mediterranean are posing a threat to the water supply in the region. As part of ESA's TIGER initiative, satellite data are supporting water management by identifying water resources. The demand for water is growing around the Mediterranean and is especially crucial in areas that do not receive regular rainfall. This is especially true for the southernmost parts of Europe and the countries lying along the African coast and in the eastern Mediterranean Basin. Owing to the increasing population, the demand for water is growing for drinking and irrigation, representing 70-80% of the water use in the region. To get a better grip on water management, satellites are increasingly acknowledged as indispensable tools for collecting information on available water resources and their use. This information is also necessary for planning infrastructure, such as where to build a dam, how to divert a waterway or manage a flood event. TIGER is currently collaborating with the Euro-Mediterranean Information System on Know-How in the Water Sector (EMWIS), organising water observation systems and building

capacity in the Mediterranean region. In this context, a short training session and workshop was organised in early December at ESA's ESRIN centre in Frascati, Italy, with participants representing national water authorities and remote sensing institutions from Morocco, Tunisia, Egypt, Lebanon and Jordan. Earth observation can not only increase knowledge on the water cycle and irrigation efficiency at river basin level, but also provides comparable, independent and objective information across the boundaries. Further information on [EMWIS website](#).

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IN BRIEF ([Full news](#))

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2- The North African Centre of Remote Sensing (CRTEAN) organized in Tunis a national workshop last 22-23 November 2012 in the framework of the project "Use of remote sensing for water resources management" financed by the World Bank and USAID. The project covers five countries: Tunisia, Morocco, Egypt, Lebanon and Jordan, with the participation of the Arab Water Council (Egypt), and the International Centre for Agriculture Bioscience ICBA (Dubai / UAE) with the technical support of NASA. The objective of the workshop was to define implementation priorities for the project topics : Monitoring water resources availability; Monitoring the agricultural activities, using evapotranspiration models; Flood mapping, forecasting and monitoring; Establishing a mechanism for data dissemination, and finally Monitoring drought. EMWIS participated in this workshop to discuss complementarity with initiative led by ESA-EMWIS on the use of remote sensing data for better water management. Further information on [EMWIS website](#).

3- On 21 November 2012, ESA concluded a successful two-day Council meeting at ministerial level in Naples, Italy. Ministers from ESA's 20 member states and Canada allocated €10 billion for ESA's space activities and programmes for the years to come. Ministers focused the investments on fields with high growth potential or with a direct and immediate impact on the economy such as telecommunications and meteorology. They approved ESA's level of resources for 2013-17, the proposals for the domain of Earth Observation and confirmed Europe's commitment to the exploitation of the International Space Station (ISS). The last Resolution initiates a process for the further evolution of ESA. The objective is to capitalise on the competences and the achievements of ESA while taking full benefit of EU policies. The process will ensure the continued success of ESA as the research and development space agency for Europe, Member States and the EU. Further information on [EMWIS website](#)

4- As many countries seek solutions for the urgent problem of water scarcity, governments, businesses and water experts from around the world are gathering in Abu

Dhabi from 15-17 January 2013 in an effort to provide tangible solutions on water sustainability. The inaugural International Water Summit (IWS), hosted by Masdar and supported by prominent entities, will gather water experts from around the globe in an effort to create an international think-tank dedicated to water sustainability and the water-energy nexus. Further information on [EMWIS website](#)

5- On 30 November 2012 in Rome, the Meeting of the Parties (MoP) to the United Nations Economic Commission for Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) adopted several decisions and a new programme of work that mark a crucial turning point in the globalization of the Convention. Parties adopted a decision on simplifying the procedure for the accession of non-UNECE countries to the Convention. With this decision, it is expected that non-UNECE countries will be able to accede to the Water Convention as of the end of 2013. Countries outside the UNECE region were encouraged to join the Convention by United Nations Secretary-General Ban Ki-moon. Other important decisions included the establishment of an Implementation Committee for the Convention. The Committee will render practical case-tailored assistance to prevent water-related disputes and support Parties in their efforts to implement the Convention. Two decisions on cooperation - with the Global Environment Facility and with the United Nations Educational, Scientific and Cultural Organization - were also adopted. Further information on [EMWIS website](#)

6- Mutual trust and understanding the real needs of communities have been emphasized as key factors for successful water cooperation by the participants of the International UN-Water Conference on water cooperation which took place from 8 to 10 January in Zaragoza, Spain. The participants shared a wide range of initiatives, including experiences in rural and urban areas, and cases at country and basin level, to identify lessons learned and key success factors. "Achieving water cooperation is the result of a long term process which requires time, patience and mutual trust" summarized Josefina Maestu, director of the UN Office to support the International Decade for Action 'Water for Life' 2005-2015 when closing the Conference. Further information on [EMWIS](#)

7- The United Nations Climate Change Conference in Doha, Qatar, took place from 26 November to 8 December 2012. Marking the first time that UN climate change negotiations took place in the Middle East, the conference drew approximately 9,000 participants, including 4,356 government officials, 3,956 representatives of UN bodies and agencies, intergovernmental organizations and civil society organizations, and 683 members of the media. Negotiations in Doha focused on ensuring the implementation of agreements reached at previous conferences. The package of "Doha Climate Gateway" decisions adopted, included amendments to the Kyoto Protocol to establish its second

commitment period. Key elements of the outcome also included agreement to consider institutional mechanism to address loss and damage in developing countries that are particularly vulnerable to the adverse effects of climate change. While developing countries and observers expressed disappointment with the lack of ambition in outcomes on countries' mitigation and finance, most agreed that the conference had paved the way for a new phase, focusing on the implementation of the outcomes from negotiations. Further information on [EMWIS website](#)

8- The Arab Forum for Environment and Development (AFED) held its fifth annual conference in Beirut on 29-30 November 2012, dedicated to discussing the Ecological Footprint of Arab countries and the options for sustainability, based on available resources. At the conference, delegates deliberated the findings and recommendations of the AFED 2012 report, *Survival Options: Ecological Footprint in Arab Countries*, which advocates regional cooperation and sound management of resources as the main options for survival in a region characterized by high ecological deficits. A new Atlas of Footprint and Biocapacity in the Arab countries was presented at the conference, which analyzes the demand for resources (footprint) and available supply (biocapacity) to shed light on the resource constraints in Arab countries from the perspective of the regenerative capacity of nature. The data in the Atlas reveals that, over the past 50 years, the Ecological Footprint per capita in the Arab region increased by 78 percent, while biocapacity per capita decreased by 60 percent. The report asserts that in this era of globalization and socio-economic insecurity, tracking the demand for natural capital is essential to meeting the basic needs of food and water security, and ultimately to ensuring economic competitiveness while strengthening ecological health. Further information on [EMWIS website](#)

9- An earthquake that killed nine people in Lorca, Spain, last year could have been triggered by groundwater being drained from the area for use in irrigation, according to scientists. The study found that the ground moved in the same places as subsidence has been occurring since the 1960s, due to the extraction of groundwater. In Europe, earthquakes are most common in southern and Mediterranean regions, from Portugal across Spain and Italy towards Greece. As part of their study, researchers from Canada, Italy and Spain analysed satellite data for the Lorca region and developed models incorporating groundwater drainage to try to understand if drainage could have contributed to the earthquake. The results suggest that the earthquake was due to movements of the Earth's crust at unusually shallow depths of around 2-4 kilometres, and link the earthquake to a change in weight caused by the removal of groundwater from aquifers in the nearby Alto Guadalentin region. Water management plans due for implementation under the EU's Water Framework Directive aim to ensure a balance between groundwater removal and replenishment. However, groundwater abstraction limits are set by Member States and groundwater abstraction volumes vary. In 2009,

Spain had one of the highest rates of groundwater removal in Europe. In that year, Spain, France and Germany each extracted more than 5700 million cubic metres of water from underground sources. Greece, which is also earthquake prone, extracted over 3600 million cubic metres. Data are not available for Italy or Portugal. Elsewhere, groundwater removal was generally below 800 million cubic metres. Further information on [EMWIS website](#)

10- Morocco and the African Development Bank (AfDB) signed, last December in Rabat, three loan and guarantee agreements and a donation agreement benefitting the state-run electricity and drinking water facility (ONEE) and the Economy and Finance Ministry for an amount of 7 billion dirhams. The money will be used to fund the wind, water and rural electrification program (5.1 bln dirhams), and the water supply project for the Marrakech region (1.7 bln dirhams). The first program is part of the government strategy to develop renewable energy, preserve the environment, ensure sustainable development and reduce economic and social differences between regions. Further information on [EMWIS website](#)

11- A Pilot Project to improve irrigation water use in Doukkala (Morocco): "Coping with water scarcity through the collective modernization of irrigation systems" was launched in 2007 and has now been completed. This project, funded by the Spanish Ministry of Agriculture, was a pilot experience in the framework of the National Plan for Irrigation Water Conservation in Morocco (PNEEI). The main objective of the project was to set up conditions and concrete approaches for an efficient irrigation water use, at both, farm and institutional level. The synthesis report presents the results of the project and its achievements, and it gives concrete recommendations for the implementation of the PNEEI. Further information on [EMWIS website](#)

12- Population growth among Europe's North African neighbours, Morocco and Tunisia in particular, is putting increasing pressure on the demand for clean water. As supplies slowly dwindle, there is a growing need for efficient technologies to improve water quality and treatment in a bid to cut down on waste water. The EU FP7-funded project 'Network in solid waste and water treatment between Europe and Mediterranean countries' (SOWAEUMED) is supporting these two countries to improve their water quality and treatment. The water in Morocco and Tunisia is not only scarce but is also under threat from pollution. The project is strengthening the capacities of the participating institutions through the upgrading of research equipment, the hiring of new senior researchers, and fostering of contacts and exchanges between researchers. The connections between the Moroccan and Tunisian laboratories and the wider research community has allowed sharing research results, ideas and new technology. It has also empowered the laboratories in Morocco and Tunisia to enhance their contribution in the European Research Area, and increased interest in them from

European scientists as potential research partners. Further information on [EMWIS website](#)

13- An action plan for cooperation between Tunisia and Bavaria (South-East of Germany) for the period (2012-2014), was signed on 12 December 2012. The action plan includes a program of decentralized cooperation between Bavaria and many regions Tunisian Interior (South, Midwest and Northwest). These include the creation of a tourism project and a unit of water management in the region of El Hama (governorate of Gabes) and the development of an irrigated perimeter in Sidi Bouzid. Further information on [EMWIS website](#)

14- The Red Sea-Dead Sea Water Conveyance Project is feasible, according to a World Bank study, but it will have manageable social and environmental effects. The World Bank has posted the draft executive summaries of the economic feasibility study, the environmental and social impact assessment and the study of alternatives on its website in Arabic, English and Hebrew. Initial plans for the Red-Dead project, which includes Jordan, Palestine and Israel, propose pumping one billion cubic metres of water annually from the Red Sea into the rapidly shrinking Dead Sea to stop its depletion. Results of the studies, launched in 2008, indicated that six potential Red-Dead project configurations have been considered based on three alternative conveyance systems, including a tunnel alignment option, a tunnel/canal alignment option and a pipeline alignment option. All the documents are available now online. These documents will be discussed in the next round of public consultations in mid-February 2013. Further information on [EMWIS website](#)

15- Lebanon abounds in water resources without reaching its needs. Still blessed by the gods for water resources, Lebanon still fails to meet the water needs of its population. Its mild climate, snowy mountains in winter, its 2000 sources and its 40 rivers, which earned him the nickname "water tower in the Middle East", should yet be sufficient to supply the consumption, irrigation and industry. But this potential remains untapped water and water resources of the country are used only 10%, with a loss rate of around 40%. Dumping of solid waste, lack of storage facilities and surface water supply networks deficient: the constraints affecting water resources are plentiful. "And the situation will even worsen in the years to come," warned Dr. Fadi George COMAIR, General Director at the Ministry of Energy and Water. "The hydrological balance of the country (the difference between needs and renewable resources) could reach 1.7 billion cubic meters per year by 2040, against 300 million today, if integrated water resources management is not implemented with sufficient investments". Further information on [EMWIS website](#)

16- The Egyptian Minister Water Resources and Irrigation asserted that the national

water grid sent samples from all Nile branches to labs which showed the good quality of water. He pointed out that the ministry launches a test of water twice a year. Tests by the Ministry of Water Resources and Irrigation showed that the quality of water in the Nile and major canals as well as Lake Nasser is fit for household, agricultural and industrial purposes. On the materials and pesticides disposed into the Nile, the minister said that the amounts do not exceed the standards in law 48 of 1982. The Ministry's media spokesman Khaled Waseef said the ministry speeded up releasing the report after rumors and fake statements that were made by some managers of water bottling companies on cable TV stations in which they pointed to the contamination of the Nile water, prompting the ministry to swiftly release that report to reassure the citizens and refute such rumors. Further information on [EMWIS website](#)

17- "Development of New Water Resources in Egypt with Earth Observation data: Opportunities and challenges": This paper presents the preliminary hydro-geological investigation and tested scenarios for the aquifer storage which used to evaluate the technical environmental, consideration in Abu Rawash farm as a case study. In addition to applying environmental impact assessment (EIA) of artificial recharge experiment to assess the feasibility guidelines for the future recharge projects. Results indicated that artificial recharge for groundwater aquifer using treated wastewater is promising whoever it needs more detailed study to assess the aquifer feature influences the mechanism of recharge with treated wastewater. The health risk due to changes in the physical and chemical conditions prevailing in the aquifer or due to limited adsorption capacities as well as the microorganisms survive and toxic pollutants degradation. Further information on [EMWIS website](#)

18- In 2011, Global Water Intelligence estimated a global market size of US\$316 billion, of which approximately US\$203 billion is accounted for by industrial and utility water-related expenditures, (excluding energy and labor). The water market can be subdivided into several distinct components. First, waterworks companies provide water and wastewater utility services (e.g., water utilities, wastewater/sewer utilities and regulated and utilities services). Second, water-technology and infrastructure companies provide products and services that support municipal water and wastewater utilities, industrial customers and residential water treatment. These first two categories combined account for about 50% of water revenue, according to Snet Global Water Indexes. Third are the providers of technical equipment (21%), ranging from basic infrastructure (e.g., pumps, pipes and valves) to measurement (e.g., meters) and treatment (e.g., chemicals, activated carbon and ion exchange). And finally there are the service providers (26%), from engineering and construction to consulting, drilling, water-rights trading and storage and bottled water. In addition to France's Veolia and Suez, the global water-services market is dominated by Spanish companies, including Acciona Agua, Sacyr/Valoriza, Aqualia, Cadagua, Cobra and Tecnicas Reunidas. Spain's

leadership in global water dates back to the 1970s, when the government and large infrastructure companies bet on membranes. These technologies today are used in 70% to 80% of existing desalination capacity and close to 100% of new projects. Further information on [EMWIS website](#)

19- The Middle East and North Africa region is the most water scarce region of the world. The region is home to 6.3 percent of world's population but has access to measly 1.4 percent of the world's renewable fresh water. The average water availability per person in other geographical regions is about 7,000 m³/year, whereas water availability is merely 1,200 m³/person/year in the MENA region. The region has the highest per capita rates of freshwater extraction in the world (804 m³/year) and currently exploits over 75 percent of its renewable water resources. Due to burgeoning population and rapid economic growth, the per capita water availability is expected to reduce to alarming proportions in the coming decades. By the year 2050, two-thirds of MENA countries could have less than 200 m³ of renewable water resources per capita per year. Around 85 percent of the water in the MENA region is used for irrigation. MENA's average water use efficiency in irrigation is only 50 to 60 percent, compared to best-practice examples of above 80 percent efficiency under similar climate conditions in Australia and southwest US. Similarly, physical water losses in municipal and industrial supplies in the region are way above world averages, around 30 to 50 percent in some cities, compared to global best practice of approximately 10 percent. In general, MENA countries are beginning to recognize the importance of an integrated approach to water management. The demand for water will continue to rise across the region, due to population increase and economic growth. Further information on [EMWIS website](#).

20- Agriculture, and especially irrigated agriculture, is the sector with by far the largest consumptive water use and water withdrawal. To estimate the pressure of irrigation on the available water resources AQUASTAT, FAO's global information system on water and agriculture, has undertaken a major review of irrigation water requirement and water withdrawal for irrigation for 167 countries. Detailed irrigated crop calendars have been prepared by country. The improved methodology used has made it possible to show additional variables in the database: water withdrawal for irrigation, irrigation water requirement, as well as harvested irrigated crop areas. The database provides policy- and decisions-makers as well as the scientific community with a complete dataset containing reliable data, calculated in a uniform way, and comparable with each other at country level. Further information on [EMWIS website](#)

21- The aim of the Thematic Consultation on water is to facilitate voices from a broad range of stakeholders to build consensus around key future challenges in water in the post-2015 development agenda. The water consultation is part of the UN-system led

"global dialogue" comprising of 50-100 Country Consultations and eleven global Thematic Consultations, including one on water. The water consultation is mainly taking place as an online discussion using different social media. The challenges and opportunities tied to this development are great and have been recognised in different ways by major development institutions. The World Economic Forum ranks water supply challenges at number three on their Global Risk Ranking for the coming years. In the UN report titled "Secretary-General's Initial Input to the Open Working Group on Sustainable Development Goals" (2012), the entire nexus of water, energy and food security is ranked as separate topics on the top three positions for priority areas among member states. SIWI encouraged everyone to take the opportunity to participate in the consultation on water and energy. The outcome from the different discussions will be summarised into policy recommendations in a final report that will be transmitted to the High-level Panel on Post-2015 appointed by the UN Secretary General at the end of March. Further information on [EMWIS website](#)

22- The EEA has concluded a license agreement with the company Navteq to use Corine Land Cover data in maps being developed for Navteq's mother company Nokia. The Corine dataset will improve mapping and navigation with its broad coverage and high consistency. Initially the data will be used to identify woodlands, but at a later stage it may be used to also identify other land cover categories such as agricultural land. The Corine land cover database was finalised in the early 1990s. The European Commission programme stands for 'COoRdinate INformation on the Environment' (Corine). Responsibility for hosting, maintenance and updating was taken over by the EEA when the Agency was set up in the mid-1990s. The dataset is regularly updated, with the most recent version published in 2006. The Nokia agreement is just one example of the many uses of environmental information. The EEA actively encourages reuse of both its datasets and its reports, following the same policy as the Commission and other EU institutions. Reuse is not restricted to environmental purposes. Regardless of whether it is used for commercial or non-commercial purposes, the information is available free of charge for the users. Further information on [EMWIS website](#)

23- NASA scientist Essam Heggy is turning radar sounding technology developed to search for water on Mars towards Earth in an effort to map desert groundwater and monitor the changes that climate change can have on them. "There is an urgent need for large-scale surface and subsurface measurements similar to those being carried out in the Arctic and Antarctic using sounding radars and other techniques," says Dr. Essam Heggy. In 2011 scanned the subterranean desert at depths of up to 65 metres. They found two fossil aquifers and chartered their various inflows and outflows. The team is now preparing for his next mission, this time to cover more of the region's aquifer system. His team also plans to develop an 'orbital mission' concept that will attempt to explore and monitor aquifers underneath the Earth's driest deserts in the North

African Sahara and the Persian Gulf. Further information on [EMWIS website](#)

24- NASA's Landsat Data Continuity Mission (LDCM) is scheduled to launch Feb. 11 2013 from Vandenberg Air Force Base in California. A joint NASA and U.S. Geological Survey (USGS) mission, LDCM will add to the longest continuous data record of Earth's surface as viewed from space. LDCM is the eighth satellite in the Landsat series, which began in 1972. The mission will extend more than 40 years of global land observations that are critical in many areas, such as energy and water management, forest monitoring, human and environmental health, urban planning, disaster recovery and agriculture. Further information on [EMWIS website](#)

25- Two EU projects, STEP-WISE and STREAM, concluded their work with the issuing of a "Roadmap for Uptake of EU Water Research in Policy and Industry" at the European Parliament in Brussels, Belgium. The final conference of the two projects convened under the theme "Building Bridges - Facilitating Water Information Exchange between Science, Policy and Industry" and concluded with a session at the European Parliament on 4 December 2012. The conference focused on how to enhance communication and dissemination of the projects' water research results. Discussions fed into development of a "roadmap" document on the subject. The roadmap recommends: adopting a professional communication strategy, including e-learning; having the European Commission (EC) provide resources and online tools for making research results available after the project ends; disseminating research results by linking them to policy guidelines available on the WISE-RTD Water Knowledge Portal; using standardized policy briefs describing how results are relevant to the EU and its member States; and organizing information campaigns and thematic conferences. Further information on [EMWIS website](#)

26- Water is the most important component of a plant's growth, but researchers have discovered that some plants can survive with less. Researchers in Europe are now working on developing crops that can tolerate droughts, specifically for bioenergy and bioproducts. The WATBIO ('Development of improved perennial non-food biomass and bioproduct crops for water stressed environments') project is funded under the 'Food, agriculture and fisheries, and biotechnology' Theme of the EU's Seventh Framework Programme (FP7) to the tune of EUR 9 million. Led by the University of Southampton in the United Kingdom, the WATBIO consortium is investigating the productivity of crops in a future climate. Particular focus is being given to increasingly more episodes of drought and water shortage. The WATBIO project partners, with various areas of expertise like crop breeding, academics and commercial work, have put the following non-food crops for energy use in the spotlight: poplar, miscanthus and giant reed. They are using sophisticated technologies now available for deoxyribonucleic acid (DNA) genome sequencing. Further information on [EMWIS website](#)

27- A 12 month long project was launched on 01/10/2012 aiming to expand the examples of waterworks from the Mediterranean countries presented in the HYDRIA website (www.hydraproject.net). HYDRIA promotes Water Related Cultural Heritage sites through online multimedia tools, including photos, texts and animations. The project, funded mainly by the Anna Lindh Euro Mediterranean Foundation, is lead by MIO-ECSDE in partnership with 18 partners from Mediterranean countries. In parallel, MIO-ECSDE has prepared some promotion material for the HYDRIA project, that is a 2013 Calendar and a series of "Cartes Postales". Further information on [EMWIS website](#)

28- Internationalization was the recurring recommendation emanating from the 13th European Forum on Eco-innovation that took place in Lisbon on 26-27 November 2012. Particularly in times of economic crisis, Europe needs to look beyond its borders to "develop new markets for eco-innovation" as the title of the forum implied - in this case with a special focus on the water sector. Scientists and specialists have been warning about the looming water crisis for decades. This map of global water stress shows increasingly dark areas for where water scarcity is most prevalent, particularly in the Mediterranean region where over 60 million people already live in conditions of water scarcity. European Commissioner for the Environment, Janez Potočnik warned that by 2030 there will be a 40% reduction of water resources due to the incremental demand of human consumption. He stressed the need to "mobilize the sustainable energy and innovation value chain" and inferred that the approval of the European water blueprint in the fall of 2012 is a step in that direction. Timo Makela, Director of International Affairs, LIFE and Eco-innovation unit within the Directorate-General for the Environment provided more details about the 2020 strategy of the European Commission that includes increased regulations, more demonstration projects, higher standards, as well as financing and support mechanisms for small and medium enterprises (SMEs). Further information on [EMWIS website](#)

29- In the latest issue of A World of Science, a group of experts on water politics provide an overview of the issues likely to dominate the International Year of Water Cooperation beginning in January, of which UNESCO is lead UN agency. The authors explain that arid climates are no more conflict-prone than humid ones, and that conflicts over water erupt in equal measure in rich and poor countries, democracies and autocracies, fortunately on rare occasions: over the past 70 years, incidences of cooperation have actually outnumbered conflicts by two to one. We learn from a third article that, in less than 50 years, countries bordering the Mediterranean Sea have nearly tripled their demand for natural resources. Today, all 24 countries are ecological debtors. These findings were revealed on 1 October by Global Footprint Network, at a regional meeting in Venice (Italy) organized jointly with UNESCO. UNESCO's Venice office plans to encourage Southeast European countries to introduce the ecological

footprint concept into school curricula, in order to help prepare pupils for their future role as responsible, active citizens. Further information on [EMWIS website](#)

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NOMINATIONS and VACANCIES

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30- France: President of the PACA Region, **Michel Vauzelle**, appointed Special Envoy for the Mediterranean: The Regional Council of Provence Alpes Côtes d'Azur officially confirmed last 13 December that its President Michel Vauzelle will be leading a mission in the Mediterranean at the request of François Hollande, President of France. As Vice-President of the Mediterranean Parliamentary Assembly, Michel Vauzelle is also Co-President of the Mediterranean Committee of United Cities and Local Governments (UCLG) and Co-President of the Sustainable Development Committee of the Euro-Mediterranean Regional and Local Assembly (ARLEM). Further information on [EMWIS website](#).

31- France: **Serge Telle** became head of the new inter-ministerial delegation to the Mediterranean. The French mission to the Union for the Mediterranean no longer exists. This new cell, formalized by a decree published in the Official Journal of 8 January 2013, is directed by Serge Telle under the control of the French Prime Minister Jean-Marc Ayrault. The Inter-ministerial Delegate for the Mediterranean will lead and coordinate the actions implemented by France towards the southern shore of the Mediterranean. In his new role, Serge Telle should work with Michel Vauzelle promoted in December 2012 chargé de mission in the Mediterranean by French President François Hollande. Further information on [EMWIS website](#)

32- The European Environment Agency (EEA) is organising an open competition with a view to recruiting a contract agent to work as Project Manager within the area of public procurement and related legal matters and further with a view to establishing a reserve list. Closing date for application: **11 February 2013**, at 12.00 Central European Time (noon). Further information on [EMWIS website](#).

33- The Water Footprint Network is seeking a candidate for its new post "Knowledge Exchange and Engagement Officer (m/f)". Start Date: 1 March 2013. Based in: Enschede, the Netherlands. Deadline: **January 28, 2013**. Further information on [EMWIS website](#)

34- Future Earth is looking for an Interim Director to lead the programme during the transition phase to it becoming fully operational in 2014, starting as soon as possible and lasting 18 months. The closing date for applications is **February 15th**. Further information on [EMWIS website](#)

35- "Vacancy: Monitoring & Evaluation Officer in London": Water & Sanitation for the Urban Poor (WSUP) is a non-profit partnership between the private sector, NGOs and research institutions focused on solving the global problem of inadequate water and sanitation in low-income urban communities. Applications for this exciting role are invited by **31st January 2013**. Further information on [EMWIS website](#)

36- Third Call of Mediterranean Office for Youth (MOY): The Mediterranean Office for Youth (MOY) finances the mobility of students and young professionals in the Mediterranean area. The eligible countries of the Mediterranean basin that can apply to this initiative are the following: Albania, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Italy, Lebanon, Malta, Morocco, Montenegro, Slovenia, Spain, Tunisia and Turkey. Applications must be submitted both electronically and by mail, **no later than January 31, 2013**. Further information on [EMWIS website](#)

37- Stockholm Environment Institute (SEI) Asia Centre is hiring Senior Research Fellow: The Stockholm Environment Institute (SEI) seeks a senior research leader with expertise in biophysical processes and the conditions that enable sustainable land and water management considering uncertain future climate conditions. **Application deadline: Until position is filled**. Further information on [EMWIS website](#)

38- UNESCO-IHE: Apply now and enter the water world. The application deadline for many MSc fellowships is approaching; NFP fellowships applications will close on **5 February 2013!** Further information on [EMWIS website](#)

39- Senior Project Manager, IRC International Water and Sanitation Centre, The Netherlands. Apply before: **03 February 2013**. Further information on [EMWIS website](#)

40- Call for entries open for 2014 Nestlé Prize in Creating Shared Value: Nominate innovative initiatives in nutrition, water or rural development. The Nestlé Prize in Creating Shared Value is awarded every other year to an innovative, commercially viable and high-impact initiative. The winning entry is given financial support to achieve social scale and financial sustainability. The call is open until **31st March 2013**. Further information on [EMWIS website](#)

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PUBLICATIONS
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41- Tunisia: The inclusion of the right to water in the new Tunisian constitution. Mr. Moez Allawi, the legal director of the SONEDE. Further information on [EMWIS website](#)

(in French)

42- "Temperatures to rise by six degrees in Middle East countries": World Bank report says there will be lower rainfall, higher temperatures and continuing desertification in the region. Further information on [EMWIS website](#)

43- Report on the Review of the European Water Scarcity and Droughts Policy: Over the past decade, the concerns about drought events and water scarcity have grown within the EU, especially with regard to long-term imbalances of water demand and water availability in Europe. Following one of the most widespread droughts in 2003 affecting over 100 million people, a third of the EU territory, with a cost of at least € 8.7 billion, the EU Council of Ministers asked the European Commission to address the challenges of water scarcity and droughts (WS&D) in the EU. Further information on [EMWIS website](#)

44- The 2nd SWIM Steering Committee (SC) Meeting took place on 17-18 October 2012 in Brussels. The final report of the meeting is now available. Further information on [EMWIS website](#)

45- The Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) reports on the capacity of countries to make progress towards the MDG water and sanitation target and on the effectiveness of external support agencies to facilitate this process. The UN-Water GLAAS is coordinated by the World Health Organization (WHO). Further information on [EMWIS website](#).

46- Tool measures environmental impact of municipal waste management by using carbon footprint as an indicator: developed by researchers of the UAB group Sostenipra, with Inèdit Innovació (spin-off of the UAB Research Park). The new tool can be downloaded free. Further information on [EMWIS website](#)

47- The African Association of Remote Sensing of the environment (AARSE) and the Chouaib Douakkali University, Faculty of Sciences (CDU_FS), in partnership with the International Islamic Organization for Education, Science and Culture (ISESCO) and the Moroccan Association of Remote Sensing of the Environment (MARSE); organized the 9th International Conference of the African Association of Remote Sensing of the Environment (AARSE) on: "Earth Observation and Geoinformation Sciences for Environment and Development in Africa: Global Vision and Local Action Synergy" held at El Jadida (Morocco) from 29th October to 2nd November 2012. It focused on the characterization of dynamic Earth processes, assimilation, today's and upcoming satellite missions and integrated Earth observing systems that will allow the formation of a most interesting technical program. El Jadida declaration is now available. Further information on [EMWIS website](#)

48- Declaration from the 9th International Conference of the African Association of Remote Sensing of the Environment (AARSE) is now available on: "Earth Observation and Geoinformation Sciences for Environment and Development in Africa: Global Vision and Local Action Synergy" held at El Jadida (Morocco) from 29th October to 2nd November 2012. Further information on [EMWIS website](#)

49- Fact sheet on 'Water & Sanitation in the Access Restricted Areas of the Gaza Strip' prepared by EWASH Advocacy Task Force. The factsheet provides information and figures on the impact of the Israeli restrictions on access to water and sanitation services in the Access Restricted Areas. Further information on [EMWIS website](#)

50- "Water Sheikhs and Dam Builders: Stories of People and Water in the Middle East": by Francesca de Chatel. The book deals with a variety of themes, such as the role of water in religions and ideologies, the impact of large-scale water projects on people's perception of the resource, and the politics of water pricing. Further information on [EMWIS website](#)

51- Water Supply Crisis maintains its position as one of the top 5 global risks according to WEF (Davos): The aim of this report, is to present a prototype framework to measure a country's overall resilience via a five-part initial framework. Further information on [EMWIS website](#)

52- Water, Cultural Diversity, and Global Environmental Change: Emerging Trends, Sustainable Futures? A product of the UNESCO-IHP (United Nations Educational, Scientific and Cultural Organization - International Hydrological Programme) project on Water and Cultural Diversity. Further information on [EMWIS website](#)

53- The World Bank has released a report on integrated urban water management (IUWM) in Africa, titled "The Future of Water in African Cities: Why Waste Water?" Further information on [EMWIS website](#)

54- ARABTERM: The quadrilingual online technical dictionary - "Water Technology": a joint publication of the Arab League Educational, Cultural and Scientific Organization (ALECSO) and the German Federal Ministry for Economic Cooperation and Development (BMZ). Further information on [EMWIS website](#)

55- Strategic Environmental Assessment and Habitats Regulations Assessment - Guidance for Water Resources Management Plans and Drought Plans. Further information on [EMWIS website](#)

56- "Groundwater resilience to climate change in Africa": This one-year DFID-funded research project aimed to improve the understanding of the resilience of African

groundwater to climate change and links to livelihoods. Further information on [EMWIS website](#)

57- "Governing International Watercourses: River Basin Organizations and the sustainable governance of internationally shared rivers and lakes": with detailed case studies are the Senegal (West Africa), Mekong (South-east Asia) and Danube (Europe) rivers. Further information on [EMWIS website](#)

58- STEP-WISE - Policy brief 3: The STEP-WISE Project ended on 31 December 2012 successfully. Its last Policy Brief has just been released with the STEP-WISE Final Conference results and the "Roadmap for Uptake of EU Water Research in Policy and Industry" with all our findings and recommendations. Further information on [EMWIS website](#)

59- Water Harvesting in Sub-Saharan Africa: It provides lessons to promote sustainable development of dryland agriculture in the face of changing environmental conditions. Further information on [EMWIS website](#)

60- CIHEAM "Statistical Review 2012": This database includes indicators for the 13 CIHEAM's Member Countries and for 6 other Mediterranean countries (Bosnia & Herzegovina, Croatia, Jordan, Libya, Montenegro and Syria). More than 70 factsheets providing information on Agriculture, Economics, Production, Food Security, Environment, Demography and Societies in the Mediterranean Area. Further information on [EMWIS website](#)

61- UNEP has launched a new report that highlights how green economy indicators can measure progress towards sustainable societies and inform policy makers with useful data and methodologies for all stages of policy interventions. Further information on [EMWIS website](#).

62- Adaptation to a Changing Climate in the Arab Countries, extreme weather events are the new norm for the region. Further information on [EMWIS website](#)

63- Roadmap for uptake of EU Water Research in Policy and Industry. Further information on [EMWIS website](#)

64- Review AE & S: vol.2, n° 2, Crop Rotation and quantitative Water Management, from operating to territory; is online. Further information on [EMWIS website](#)

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CALL FOR TENDERS and PROPOSALS
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65- ENPI CBC MED: **77 proposals preselected** for the Second call for standard projects out of 1095 Concept Notes submitted under the second call for standard projects. The proposals, worth € 107 million (ENPI contribution), cover the 4 Programme Priorities and 10 related Measures while the available budget is € 56.5 million. While enhancement of innovation processes, development of economic clusters, protection of environment, promotion of sustainable tourism and support to artistic creativity still appear as some of the most relevant challenges in the cooperation area, new meaningful issues have emerged under this last call for the 2007-2013 period. Improvement of port logistics, integration of migrant communities together with the support to active citizenship, employment policies and vocational training constitute as many answers proposed by project partnerships to the current needs of the Mediterranean region. Balanced participation continues to be a key driver of the Programme: among the 596 organisations (Applicants and partners) involved in the preselected proposals, more than 45% come from Mediterranean Partner Countries. Further information on [EMWIS website](#)

66- The European Commission has published a contract forecast notice for the second phase of the Euromed programme for the Prevention, Preparedness and Response to natural and man-made Disasters (PPRD) South with a budget of €5 million. The reference is EuropeAid/133524/C/SER/Multi. The overall objective of this technical assistance contract is to reduce vulnerability to, and the social, economic and environmental costs of, natural and man-made disasters in the ENP South region (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Occupied Palestinian Territory, Syrian Arab Republic, Tunisia), thereby enhancing regional and national sustainable development and climate adaptation. Deadline for receipt of applications: **31 January 2013 (16:00)**, Central European Time. Further information on [EMWIS website](#).

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CALL FOR PAPERS

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67- UN WWAP Survey on potential themes for world water development report 6 & 7: The Theme for the WWDR5 that will be published in 2014 is "Water and Energy". In view of the next publications and to fulfill UN Water specific request, WWAP has decided to carry out a consultation with stakeholders from various fields to identify emerging and water-related critical issues originated inside and/or outside the water box, which could become potential WWDR themes for the 6th and 7th editions to be published in 2015 and 2016. A survey is prepared for this purpose. Deadline **21 January 2013**. Further information on [EMWIS website](#)

68- UN Special Rapporteur's Handbook on realising the rights to water and sanitation:

Survey! You are called to send back the questionnaire by **January 25**. Further information on [EMWIS website](#)

69- Call for abstracts for the 17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region to be held in Istanbul/Turkey from September 28th to October 1st in 2013. This year's symposium will focus on Impact of climate change in the Mediterranean region. For oral and poster contributions, a one-page abstract should be submitted not later than **April 30, 2013**. Further information on [EMWIS website](#)

70- CIGR (International Commission of Agricultural and Biosystems Engineering) and CIHEAM - Mediterranean Agronomic Institute of Bari are organizing 1st Inter-regional Conference on Land and Water Challenges entitled "Water, environment and agriculture: challenges for sustainable development". The Conference will be held in Bari (Italy), from 10 to 14 September 2013. The deadline for the submission of abstracts is **March 31, 2013**. Further information on [EMWIS website](#).

71- The 8th Conference on Sustainable Development of Energy, Water and Environment Systems - SDEWES Conference, to be held in Dubrovnik in 2013. The call for abstracts is now open. Abstracts deadline: **February 15th, 2013**. Further information on [EMWIS website](#)

72- The XIth International Symposium on Environment, Catalysis and Process Engineering (ECGP'11), 26-28 June, 2013, Villeneuve d'Ascq, France calls for abstracts submission up to **31th of January, 2013**. Further information on [EMWIS website](#).

43- Call for abstracts for the 12th International Conference CCWI 2013: Computing and Control for the Water Industry: "Informatics for Water Systems and Smart Cities". The main focus of the conference is on water supply/distribution and urban drainage/sewerage systems. **Submission of abstracts: 1 February 2013**. Further information on [EMWIS website](#).

45- Call for abstracts for the CMTDE 2013: The 4th Maghreb Conference on Desalination and Water Treatment to be held in Hammamet (Tunisia) from 15 to 18 December 2013. Deadline for abstracts: **30 June 2013**. Further information on [EMWIS website](#).

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TRAINING

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47- Water Security for Policy Makers and Practitioners Short Course 10-14 June 2013: The course is designed for entry and mid-level water and development policy-makers

and professionals in government, donor, NGO or implementing agencies, environmental journalists, consultants and activists wishing to take their knowledge of water resources further. This course will be held at the University of East Anglia, Norwich, UK from the 10-14 June 2013 for a fee of £1,500 (inc. of accommodation). Further information on [EMWIS website](#).

49- Call for applications for the International training course: "Integrated Sustainable Coastal Development - MENA region": September 9-27, 2013 in Sweden & February 2-13, 2014 in Jordan. Closing date for application is: **February 15, 2013**. This course will be organized next year for participants from Tunisia, Egypt, Palestine, Jordan and Lebanon. The participants would only have to pay their international travel to Sweden; all other costs are covered. Further information on [EMWIS website](#).

50- The European Association of Environmental and Resource Economists (EAERE) , Fondazione Eni Enrico Mattei (FEEM) and Venice International University(VIU) announced their annual European Summer School in Resource and Environmental Economics for postgraduate students. The 2013 Summer School will take place from June 30th to July 6th, at the VIU campus on the Island of San Servolo, in Venice, located just in front of St. Mark's Square. The theme of this Summer School is Uncertainty, Innovation and Climate Change. Deadline for applications: **February 1st, 2013**. Further information on [EMWIS website](#)

51- [2013/02/18 - 2013/02/22] Regional Training Course on Paleoflood Hydrology in Flood Risk Assessment, Bangkok, Thailand.
Further information on [EMWIS website](#)

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EVENTS ([Full Agenda](#))

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[2013/02/25 - 2013/02/27] ESA - SMOS Land Applications Workshop, Frascati, Italy
Further information on [EMWIS website](#)

[2013/02/24 - 2013/02/26] International Conference on Agriculture Engineering: : New Technologies for Sustainable Agricultural Production and Food Security, Sultan Qaboos University (SQU), Sultanate of Oman
Further information on [EMWIS website](#)

[2013/02/24 - 2013/02/25] 5th International Conference: Water Resources and Sustainable Development, Algiers, Algeria
Further information on [EMWIS website](#)

[2013/02/22 - 2013/02/22] National Consultation Workshop on the Review and Analysis of the Status of Implementation of Wastewater Strategies and/or Action Plans in Tunisia, Tunis, Tunisia

Further information on [EMWIS website](#)

[2013/02/20 - 2013/02/23] 4th Water Week of Beirut, Beirut, Lebanon

Further information on [EMWIS website](#)

[2013/02/20 - 2013/02/22] International Workshop on Hydraulic Design of Low-Head Structures: IWLHS 2013, Aachen, Germany

Further information on [EMWIS website](#)

[2013/02/19 - 2013/02/21] WEX Global 2013 (The Water & Energy Exchange), Madrid, Spain

Further information on [EMWIS website](#)

[2013/02/15 - 2013/02/17] TerraGreen13 International Conference: Advancements in Renewable Energy and Clean Environment, Beirut, Lebanon

Further information on [EMWIS website](#)

[2013/02/12 - 2013/02/14] The Second International Conference on Water Resources and Environmental Management: Water, Food, Energy Security and Climate Change, Marrakech, Morocco

Further information on [EMWIS website](#)

[2013/02/06 - 2013/02/08] 30th Anniversary of the Mediterranean Water Institute: regional seminar on the issue of Water & Energy in the Mediterranean, Marseille, France

Further information on [EMWIS website](#)

[2013/02/05 - 2013/02/05] Preparatory meeting of the Monitoring Committee MED-3R: "Euro-Mediterranean Strategic Platform for an adapted waste management", Nice, France

Further information on [EMWIS website](#)

[2013/01/29 - 2013/01/31] Attractive trade fair combination for energy and environment enertec and TerraTec + BIOGAS, Leipzig, Germany

Further information on [EMWIS website](#)

[2013/01/27 - 2013/01/31] Second Arab Water Week 2013: New Prospects and Challenges for the Water Sector in the Arab Region, Amman, Jordan

Further information on [EMWIS website](#)

[2013/01/23 - 2013/01/24] 14th Carrefour for Local Management of Water, Rennes, France

Further information on [EMWIS website](#)

[2013/01/21 - 2013/01/22] The Final NOVIWAM Conference, Seville, Spain

Further information on [EMWIS website](#)

[2013/01/15 - 2013/01/17] International Water Summit, Abu Dhabi, UAE.

Further information on [EMWIS website](#)

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[PROJECTS \(Projects database\)](#)
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[WATER PROJECTS DATABASE](#) (MEDA-NIPs, MEDA-Water, LIFE, SMAP, INCO-MED, FP4-FP7, INTERREG, etc.)

Halting Desertification in the Jucar River Basin (HALT-JÚCAR-DES). Further information on [EMWIS website](#).

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[EMWIS NATIONAL WEBSITES](#): [Algeria](#), [Egypt](#), [Israel](#), [Jordan](#), [Lebanon](#), [Morocco](#), [Palestine](#), [Syria](#), [Tunisia](#), [Turkey](#), [Cyprus](#), [Malta](#), [Spain](#), [France](#), [Italy](#), [Portugal](#), [Austria](#), [Greece](#), [Belgium](#), [Luxembourg](#)

[EMWIS WATER MULTILINGUAL THESAURUS](#) (Available in English, French, Arabic, Spanish & Italian)- [Water glossaries](#)

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