

EMWIS Flash - September 2013

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

EMWIS is a program of the Union for the Mediterranean.

For further information: www.emwis.net & check [our page at facebook](#)

Monthly Flash produced by the EMWIS Technical Unit- [OIEAU](#),
[CEDEX](#), [SOGESID](#)-

[Mediterranean Water Information Mechanism](#) / [Geo-Catalogue](#)
/ [UfM-Water](#)



=====
In this issue N° 113 (www.emwis.net/thematicdirs/eflash/flash113)
=====

HEADLINE

1- Water Information Systems to support IWRM indicators in the Mediterranean

IN BRIEF

2- Turkey: Starts work on its National Water Information System (NWIS)

3- The 2013 Stockholm Statement

4- EU Council Adopts Conclusions on Water Diplomacy

5- The Water Challenge in the Mediterranean Region

6- INBO 2013 Fortaleza Declaration: "Better water management at river basin level to face the large world challenges"

7- Data exchanges enabling better water cooperation

8- World Bank & ESA: Satellite Data Informs Development

9- TIGER Workshop 2013: Achievements Review and Future Planning

10- Satellite data can improve landslide monitoring prediction

11- EEA: Water balances and water resources management targets

12- Greece: Right against privatisation of water

13- Jordan launches water conveyance project

14- Jordan: Water tariffs expected to increase after electricity rise

15- Jordan: Grey water reuse systems installed in Karak village

16- Israelis mulling Jordanian desal water swap offer

17- Libya takes small steps to restart desal pipeline

18- Tunis: The sanitation tax increases

19- Tunisia's Sonede Gets 60 Million Euro Loan to Fund Sea Water Desalination Facility

20- Algeria: Fights against the irrigation with wastewater

21- Algeria: The non-waste recycling is costly

22- U.N. launches inventory of shared water resources in Middle East

23- FAO Launches Initiative on Water Scarcity in the Near East

24- World Bank Highlights Market Opportunities in Water and Sanitation for the Poor

25- GWP Examines Role of International Law in Transboundary Water Cooperation

26- CLICO project: Climate change, water conflicts and human security

27- Spanish project develops environmental rules for publications

- 28- New Landsat data just a few clicks away
- 29- Jordan: Biomass Energy
- 30- New tool to make waste collection routes more efficient
- 31- Improved waste recycling will benefit environment and boost European industry
- 32- Satellite flood maps reach crisis teams via Internet

[NOMINATIONS and VACANCIES](#)

[PUBLICATIONS](#)

[CALL FOR TENDERS and PROPOSALS](#)

[CALL FOR PAPERS](#)

[TRAINING](#)

[EVENTS](#)

[PROJECTS](#)

[BRIEF EMWIS SITE MAP](#)

[CONTACT US / COMMENTS](#)

=====

HEADLINE

=====

1- In the framework of the UfM regional project “Creating Shared National Water Data Management Systems towards a Mediterranean Water Knowledge Hub”, Plan Bleu (Regional Activity Center of UNEP Mediterranean Action Plan) and EMWIS are organising a technical workshop on integrated water resources management (IWRM) indicators at the premises of the of Secretariat the Union for the Mediterranean (UfM) in Barcelona on 30 September and 1st October. This is one preliminary activity of this project launched in parallel to the UfM label process. The objective is to make an assessment of indicators used for Integrated water resources management in the four pilot countries of this project (Jordan, Lebanon, Morocco and Tunisia) as well as in the framework of international initiative acting the Mediterranean area in order to design National Water Information Systems able to feed the indicators with the necessary datasets. This action also aims to facilitate monitoring of Mediterranean Strategy for Sustainable Development (MSSD) and its outputs will feed the MSSD revision process planned in 2014 and 2015. Further information on [EMWIS website](#).

=====

IN BRIEF ([Full news](#))

=====

2- Turkey initiated broad concertation to define its National Water Information System (NWIS). During a workshop organised by the Ministry of Forestry and Water Affairs on 23 September in Ankara, EMWIS Technical Unit provided some initial training building Shared Water Information Systems to various Turkish institutions. The development and operation of such NWIS is supported by an article in the new draft water legislation and a definition study as started in early September for an implementation planned between 2014 and 2016. Further information on [EMWIS website](#).

3- As an outcome of broad consultations prior to and during the 2013 World Water Week in

Stockholm, the 2013 Stockholm Statement called upon the United Nations and its Open Working Group to propose a Sustainable Development Goal on Water. Water is at the core of sustainable global development and is a cross cutting resource. Within the post-2015 development agenda water should be considered and integrated into all relevant areas, such as energy and food security. Given the centrality of water for individuals, ecosystems and economic development, water is a powerful tool for cooperation across borders, sectors and communities. A dedicated goal on water is necessary for a world where all people can live in safety and dignity. Further information on [EMWIS website](#).

4- The EU Council adopted conclusions on water diplomacy at the Foreign Affairs Council meeting. The conclusions highlight the EU's commitment to reducing tension and conflict over shared water resources, and emphasize the importance of water and sanitation in the post-2015 development agenda. The conclusions stress water security challenges including: climate change; economic development; population growth; and the balance between water uses such as water and sanitation, agriculture, industry and energy. The conclusions acknowledge the commitment of the EU to address causes of water insecurity including through water and sanitation programmes designed to help achieve the Millennium Development Goals (MDGs). The conclusions also highlight the outcomes of the EU Water Security Mapping Initiative and the importance of working in regions of the world faces water security challenges such as the Nile Basin, Central Asia, the Mekong Basin and Sahel region. The conclusions emphasize that EU water diplomacy should focus on systematic promotion of UNECE Water Convention and UN Watercourses Convention as the basis for addressing water security issues and for the development of regional and bilateral river basin agreement addressing transboundary watercourses. Further information on [EMWIS website](#)

5- In the framework of an official visit to Slovenia, UfM Secretary General Sijilmassi was invited to address the Bled Strategic Forum, a platform for high-level strategic dialogue among leaders from the private and public sectors on key issues facing the world in the 21st century. The Forum held a special session on the Water challenge in the Mediterranean region. Secretary General Sijilmassi explained the activities and projects undertaken in this sector by the Secretariat of the Union for the Mediterranean. He said: “The UfM continues to both expand partnerships and develop common activities with institutions and organizations active on the subject of water in the Mediterranean. Promoting consensus building and regional cooperation on water issues will help strengthen national and regional stability, peace and security”. Further information on [EMWIS website](#).

6- The 9th World General Assembly of the International Network of Basin Organizations (INBO) convened from 12-16 August 2013, in Fortaleza, Brazil, on the theme “for better river basin management over the world.” INBO 2013 brought together 285 participants from 46 different countries around thematic roundtables and statutory sessions of the INBO General Assembly. It concluded with the adoption of the Fortaleza Declaration and Final resolutions. Among its recommendations, the Fortaleza Declaration stresses integrated water resources management (IWRM) is essential worldwide, the creation and strengthening of River Basin Organizations (RBOs) should be supported, adaptation to the

effects of climate change should be a local and global priority, and cooperation between riparian countries sharing transboundary rivers, lakes and aquifers should be improved. In particular the Declaration emphasizes that better water governance should be a priority as water resource availability is a limiting factor for sustainable development. A number of other resolutions and decisions were adopted by the General Assembly, including election of Lupericio Ziroldo Antonio, President, Brazilian Network of Basin Organizations (REBOB), and Technical Secretary, Latin-American Network of Basin Organizations (LANBO), as president of INBO. The 10th INBO General Assembly will be held in Mexico in 2016. Further information on [EMWIS website](#)

7- At the United Nations high-level international conference on water cooperation that took place in Dushanbe, Tajikistan last August 20-21, the importance of water information systems and data exchanges were strongly highlighted for most of the main themes and cross-cutting issues addressed by the conference. The Dushanbe Action Plan stresses that reliable and timely access to data and information will improve governance, transparency and accountability necessary for water cooperation. EMWIS took part in this conference to share its experience with Eastern Europe, Caucasus and Central Asia (EECCA) countries during a side event focused on "reinforcing the integrated and shared water data management for a better cooperation in transboundary water management". This meeting was the closing event of the successful project managed by the International office of Water and financed by the French Fund for Global Environment. Further information on [EMWIS website](#)

8- With the increasing prevalence of Earth Observation (EO) technologies being employed in development work, the World Bank and the European Space Agency (ESA) have partnered for the purpose of mainstreaming the use of EO into the World Bank's lending operations, across all of the Bank's Sustainable Development Network's sectors. The first small-scale demonstrations were provided to the World Bank by ESA in 2008. In July 2010, the collaboration was scaled up. Twelve World Bank Teams from across a variety of sectors and representing all regions of Sustainable Development Network were selected and received the pro-bono assistance of ESA to apply Earth Observation services in selected operations. This initiative aims to establish a stable connection between the specific information needs of World Bank projects and the new developments in Earth Observation programmes and services. In particular, eoworld gives the World Bank the opportunity to benefit from ESA's 30 years of experience in collecting and distributing Earth Observation (EO) data to users around the world, and in developing innovative information services for various applications to be used by public organizations, national authorities and private sector. With the start of the EU-ESA flagship space program - GMES (Global Monitoring for Environment and Security) and the emergence of new national space missions in Europe and Canada, EO technology is moving towards a long-term sustainable data flow, forming the basis for its operational use. Further information on [EMWIS website](#)

9- In 2002, responding to the urgent need for action in Africa expressed at the World Summit on Sustainable Development (WSSD), the European Space Agency (ESA), within the context of the Committee of Earth Observation Satellites (CEOS), launched the TIGER initiative. The overall scope is to assist African countries to overcome problems faced in

the collection, analysis and use of water related geo-information by exploiting the advantages of Earth Observation (EO) technology. Since its launch, the TIGER initiative has involved 250 African Researchers, and more than 100 stakeholder institutions in various service demonstration or pre-operational projects. A special part of the initiative is the TIGER Capacity Building Facility (TCBF), which organizes the capacity building actions and events including biannual workshops for the whole TIGER community. The main objectives of the workshop to be organised in Tunis next 21-22 October 2013 are to present the achievements of the different TIGER components namely the TCBF, the pre-operational TIGER-Net project and the Alcantara research fellowships. Building on its achievements in the last ten years, we aim at identifying the main strengths and weaknesses of the TIGER initiative and preparing the basis for future activities. Further information on [EMWIS website](#).

10- According to a group of researchers from the University of California, satellite data give crucial and reliable information for identifying, especially in remote mountainous regions, hotspots for landslides as well as for predicting these events, reducing therefore their potentially devastating effects. Recognizing the limitations of ground-based observations in many developing countries due to lack of investment, researchers created a model that makes use of satellite data, and therefore a global reach that includes remote and topographically complex regions. "Landslides typically occur in mountainous regions where other sources of information, including radar and gauge measurements (used in standard global landslide models), are not available," according to a co-author. Indeed, the model uses satellite data on rainfall, topographical features of slopes, and land cover. Once tested on a dataset of previous landslides it will help predicting landslides, constituting the basis of a real-time, global landslide prediction system. However, the model also presents some limitations: it "cannot be considered as a general landslide model", since it does not cover earthquake-triggered. Such model can help to improve landslide monitoring and preparedness. Further information on [EMWIS website](#)

11- Water balances and water resources management targets: A project for the elaboration of physical water balances at sub-catchment level with monthly resolution was carried out for DG Environment with technical support from the European Environmental Agency. The final reports are available online. The project demonstrates the benefits of building a consistent framework for physical water accounts at EU level with a high degree of geographical, temporal and sectoral accuracy, for the consistency of data collection, the development of water accounting methodologies and the assessment of water balance and water efficiency. This will allow the improvement of water scarcity and water efficiency indicators. The data collection and calculation was based on water use data reported at EU level via various reporting streams. The project highlighted important gaps in the availability of key data and confirms the need to design a more cost-effective process and to improve interaction between modelled and reported data. The study was complemented by 3 pilot projects carried out in 6 river basins across the EU, in the context of a 2011 Call for Proposals concerning preparatory action on development of prevention activities to halt desertification in Europe. Moreover, the European Environment Agency (EEA) prepared an overall synthesis of the EU-wide water balance

process. A new Call for Proposals 2012-2013 on preparatory action on development of prevention activities to halt desertification in Europe was also launched. The main objective of the Call is to continue pilot projects on the building of water balances at the local level. These projects will all start in Autumn 2013. Further information on [EMWIS website](#).

12- EYATH, the water workers union from Thessaloniki thanks the European Federation of Public Service Unions (EPSU) for its support to their fight against privatisation of the Greek water utilities. EPSU stands with the Greek unions and citizens, because privatisation of water will only increase suffering for the Greek people and will make that the borrowed EU money will leave Greece again as profits for the foreign owner of the water company, once it is privatised. Further information on [EMWIS website](#)

13- Jordan opened the Disi Water Conveyance Project. The project is now pumping drinking water from the Disi basin aquifer, located to the east of the port of Aqaba on the Red Sea, and transporting it via a 325-kilometre pipeline to areas around the country. Jordanian Water Minister Hazem Nasser said he hopes Jordanians will feel the impact of the project after water pumping proceeds on a regular basis and the amount of water pumped increases. Amman housing project owner Annan al-Bdareen told Al-Shorfa there was a noticeable improvement in the amount of water he received after the Disi project's launch. This project could encourage Jordan to invest in the regional 'Two Seas Canal' project, which aims to pump water from the Red Sea to the Dead Sea, and would contribute to the provision of sustainable energy and water sources to Jordan. Further information on [EMWIS website](#)

14- An imminent rise in electricity prices is expected to affect water tariffs, which will witness a gradual increase, Water Minister Hazem Nasser said recently, without specifying when. In the meantime, Nasser said that raising the tariff of irrigation water is an almost certain decision and will be implemented soon. The minister said the rise in water prices is not a result of the launch of the Disi Water Conveyance Project, but a result of the rise in electricity prices, whose cost takes up the majority of the ministry's budget. "It is vital for the public to preserve water and rationalise their use, because it is very expensive," Nasser noted. The decision to raise electricity prices, which is set to take effect after Ramadan, is aimed at addressing the National Electric Power Company's losses, which currently stand at JD1.2 billion and could reach around JD7.5 billion by 2017, according to government officials. Meanwhile, tariffs of irrigation water will be increased soon, according to Nasser, who noted that the ministry is conducting its final deliberations with farmers at the Jordan Valley about the imminent raise. A recent study jointly carried out by the World Bank and the ministry concluded that raising prices is "inevitable" in light of the sector's fiscal constraints and ageing infrastructure, and that the current practices and mandates of the Jordan Valley Authority (JVA) are not sustainable, warning that the authority cannot continue to pump water to customers for free. Nasser said in previous statements that the JVA recovers only 50-60 per cent of the operational and maintenance costs of pumping irrigation water from farmers. The minister said that infrastructure projects and donor-funded ventures will be disrupted if irrigation water tariffs remain unchanged. Further information on [EMWIS website](#)

15- Grey water reuse systems have been installed at a mosque and a school in Karak Governorate's Faqou village (Jordan) to address the water shortage and raise awareness on water use efficiency, conservationists. Water from the public school and the mosque are filtered using pebbles and stones and then used for irrigating green spaces at the two facilities, according to the conservationists. Under the "Improving Resilience of Vulnerable Communities in Faqou Village Project", the Royal Society for the Conservation of Nature (RSCN) is implementing schemes that support livelihood of residents, while raising their awareness on water and energy usage efficiency at the same time, project manager Ehab Eid said. The installation of the two grey water reuse systems started in April, when the EU-funded project was launched. Further information on [EMWIS website](#)

16- Jordan has floated the idea of selling water from a new seawater desalination project to Israel in exchange for increased access to water from northern Israeli sources. The 85MCM/yr (232,876m³/d) first stage of the Aqaba Desalinated Water Pipeline is a scaled-down version of the \$10 billion Jordan Red Sea Project, which aimed to desalinate water at Aqaba for northern parts of the country while using the outflow to generate electricity and refill the shrinking Dead Sea. However the cost of the project, combined with the difficulty of transporting water north to where it is needed most, has been a stumbling block. A senior source at Israel's Water Authority said that water supplies in the southern region of Israel are under pressure, and the authority is considering the Jordanian offer. "We have set up a team of experts to assess the proposal and are in direct contact with the Jordanians." Further information on [EMWIS website](#)

17- The body behind Libya's desalination programme has restarted work on its pipeline of projects for the first time since the revolution that ousted the Gaddafi regime. The General Desalination Company of Libya (GDCOL) hopes to take on a consultant before the end of the year to provide project supervision and technical studies for a number of facilities. These include expansions to existing plants and three proposed new SWRO installations in Tripoli, Benghazi and Misrata, with a combined capacity of just under 1 million m³/d. GDCOL chairman Abdulmonem Ali Elhassadi said that the company is in discussion with a number of consultants, and is still open to offers from others. He emphasised, however, that discussions remain at a relatively early stage. The current planning seems to foresee new desal projects as EPC contracts, rather than the ambitious plans for BOTs envisaged before the revolution. Further information on [EMWIS website](#).

18- A joint ministerial order made by the Tunisian Minister of Finance, Equipment and Environment has increased the tax on sanitation for domestic, tourism, commercial and administrative consumption, at rates varying depending on the volume of water consumed. For domestic consumption in particular, users consuming no more than 20 cubic meters per quarter will pay 1.310 dinars under the flat tax, in addition to 17 millimes per cubic meter. If the quarterly consumption exceeds 20 cubic meters, and below 40 cubic meters, the price per cubic meter is increased to a range between 28 and 170 millimes per cubic meter. Regarding the consumption of more than 70 cubic meters, the fixed fee is 4.095 dinars in addition to 180 and 285 millimes per cubic meter. The fixed fee was increased to 8.055 dinar for quarterly consumption of 70 cubic meters in addition to a rate between 285 and 472 millimes per cubic meter. Further information on [EMWIS website](#)

19- A loan agreement worth 60 million Euros (120 MTD) was signed by Tunisia's National Water Development and Distribution Corporation (SONEDE) and Germany's KfW Development Bank for the setting up of sea water desalination plant in Djerba (governorate of Medenine). Repayable over 15 years including a five-year grace period, the loan is secured by the Tunisian and German governments. Further information on [EMWIS website](#).

20- In the Algerian market there are watermelon all sizes and up to the ones about 17 kg . Watermelon is sugar water to nearly 92%. This is what distinguishes it from other fruit says M'hamed Rebah. "But it is in this advantage also lies the risk if the watermelon field was irrigated with wastewater. This culture requires regular irrigation if you want to get a good return . " Precaution is perfectly justified in our country where irrigation with wastewater is a fairly common practice ". The correspondent of "Reporters" said that in this wilaya , five fields of vegetable crops were destroyed after the conclusion drawn by a specialized committee, they were irrigated by water drains and sewerage network. The law prohibits irrigation from raw sewage water, which is considered a major cause of water-borne diseases. In 2012, 33 cases of illegal and immoral activities related to irrigation with wastewater were recorded, according to the report of environmental activities. To address this, the government has decided to provide farmers with free treated wastewater meeting the criteria of the WHO (World Health Organization) for agricultural use. A program for the development of wastewater treatment is implemented by the ONA (National Sanitation Office). Further information on [EMWIS website](#)

21- Algerian Secretary of State for the environment revealed last 26 August 2013 that the non recycling waste costs € 300 million annually to Algeria. Experts estimate that 60% of the 13.5 million tons of annual waste in Algeria are recyclable. However, only 5-6% are currently recycled. More than 2000 micro-enterprises involved in Algeria for the protection of the environment. But there is much room for improvement. The State required from the investors to move towards waste recycling. Such investments would protect the environment and create jobs. Dalila Boudjemaâ chaired an awareness campaign to sort household waste launched in Dely Brahim, a suburb of Algiers. This pilot project should be extended to end all the capital. Further information on [EMWIS website](#)

22- The United Nations Economic and Social Commission for Western Asia (ESCWA) and the German Federal Institute for Geosciences and Natural Resources (BGR) have catalogued trans-boundary surface and groundwater resources in the parched Middle East. Launched during the World Water Week in Stockholm at early September 2013, the Inventory of Shared Water Resources in Western Asia provides accurate and up-to-date information crucial to inform stakeholders and foster dialogue in one of the driest parts of the world. "This unique publication in its groundbreaking information and distinctive preparation process that actively involved ESCWA member countries will provide new insights for future research on shared water resources in the region and will serve as a basis for continuing regional cooperation on water as well as other natural resources that are strategic for this region and often of shared nature," said Roula Majdalani, director of the Sustainable Development and Productivity Division of UN-ESCWA, in a statement. Further information on [EMWIS website](#).

23- With the goal of supporting countries to build partnerships and streamline action on agriculture water management, the Food and Agriculture Organization of the UN (FAO) has launched a regional Initiative on Water Scarcity in the Near East. The Initiative will work on a Regional Collaborative Strategy on sustainable agriculture water management for increasing the level of food security, and a Regional Partnership to support countries in the level of implementation of the collaborative strategy. The launching workshop took place in June 2013, and described the process of developing a regional review, followed by a series of National Assessments that will include, water accounting/auditing, the development of a water and food supply cost curve, and a knowledge gap analysis. The Initiative builds on the FAO's publication, *Coping with Water Scarcity: an Action Framework for Agriculture and Food Security*. Recommendations will be presented for endorsement to the 32nd FAO Regional Conference for the Near East in February 2014. Further information on [EMWIS website](#)

24- The World Bank's Water and Sanitation Program (WSP) and the International Finance Corporation (IFC) have released a study showing "enormous market potential" in the sanitation business. Through the cases of Bangladesh, Indonesia, Peru, and Tanzania, it argues that these countries together represent a market for improved on-site sanitation services of around US\$2.6 billion. The study, titled 'Tapping the Markets: Opportunities for Domestic Investments in Water and Sanitation for the Poor,' was released during the World Water Week in Stockholm, Sweden, on 3 September 2013. It highlights three areas of focus to strengthen sanitation and water solutions, namely: cost-effective solutions at affordable prices; improvement of the relationship between the private and the sanitation/water sectors; and better investment environment. Further information on [EMWIS website](#).

25- The Global Water Partnership (GWP) has published a policy brief, titled 'International Law: Facilitating Transboundary Water Cooperation.' The brief highlights that even in the absence of transboundary water treaties, customary international law ensures States' right to the equitable and reasonable use of transboundary waters, tempered by the obligation not to cause significant harm. The brief's key messages include: that transboundary water treaties should address core elements such as scope, substantive rules, procedural rules, institutional mechanisms and dispute settlement; that effective cooperation is more likely when institutional mechanisms, such as river basin organizations (RBOs) or commissions, are established, supported and fully functional; and that the central tenant of international law of transboundary water resources is the duty to cooperate. Further information on [EMWIS website](#).

26- Are the effects of climate change - e.g., water scarcity, droughts and floods -- worsening social tensions and intra-/inter-state conflicts in the Mediterranean, Middle East and Sahel region, or might they be able to serve as a catalyst for cooperation and peace? A new UNU-EHS report offers an assessment and makes recommendations. The Mediterranean, the Middle East and Sahel (MMES) are regions that are prone to extreme weather events, such as frequent droughts or floods, which are likely to be triggered by climate change and existing conflicts or tensions. The CLICO project sought to discover whether the effects of climate change in terms of water scarcity, droughts and floods in

the region present a threat to human security, not least by exacerbating social tensions and intra- and inter-state conflicts. The study also considered the proposition that climate change might be a catalyst for cooperation and peace. Further information on [EMWIS website](#)

27- The LIFE 'Ecoedición' project (LIFE08 ENV/E/0000124) has developed Product Category Rules (PCR) for printed books and e-books. The rules establish common and harmonised ways of calculating the environmental impacts of publications at a European level. More specifically, PCR define the requirements for obtaining a type III eco-label or Environmental Product Declaration (EPD) according to ISO 14025. An EPD is a communication tool that provides relevant, verified and quantitative data on the environmental impacts of a publication throughout its lifecycle. Such data enable clear comparisons of the environmental performance of publications to be made. The effect is to facilitate decision-making within green public procurement processes and to increase responsible consumption by consumers and readers. It also introduces the concept of ecodesign and fosters continuous improvement in publishing and printing houses. Further information on [EMWIS website](#)

28- Thousands of never-before-seen data products from the US Landsat satellites acquired over 30 years have been released for online access. In addition, the newest data over Europe from the latest satellite in the series, Landsat-8, are now accessible in near-real time through a new portal hosted by ESA. About 150 000 new products from the Landsat-5 satellite are available for direct download, free of charge. The products are now aligned with those from the Landsat-8 satellite, paving the way for ESA's provision of data from the latest satellite in the series. The next phase of Landsat archive processing will include the rest of ESA's unique data holdings, including all Thematic Mapper data acquired by the Matera (Italy) and Maspalomas (Canary Islands, Spain) stations. Sentinel-2, being developed for the Copernicus programme, will deliver high-resolution optical images, providing enhanced continuity of Landsat-type data, but with a higher number of channels and a broader scanning swath. Launch is foreseen in 2014. Further information on [EMWIS website](#).

29- Jordan has promising biomass energy potential in the form of municipal solid wastes, crop residues and organic industrial wastes. Municipal solid wastes represent the best source of biomass in Jordan. In terms of quantity per capita and constituents, the waste generated in Jordan is comparable to most semi-industrialized nations. Agricultural biomass offers a low energy potential due to arid climate in most of the country. The major biomass energy resources in Jordan are: Municipal waste from big cities; Organic wastes from slaughterhouse, vegetable market, hotels and restaurants; Organic waste from agro-industries; Animal manure, mainly from cows and chickens; Sewage sludge and septic; Olive mills; Organic industrial waste. Anaerobic digestion is fast gaining popularity as one of the best waste management method for biomass utilization. The use of anaerobic digestion technology for biomass waste management would be a significant step in Jordan's emergence as a renewable energy hub in the MENA region. Jordan is planning to implement 40-50 MW of waste-to-energy projects by 2020. The Government of Jordan, in collaboration with UNDP, GEF and the Danish Government, established 1MW biogas plant

at Rusaifeh landfill near Amman in 1999. The plant has been successfully operating since its commissioning and has recently been increased to 4MW. The project consists of a system of twelve landfill gas wells and an anaerobic digestion plant based on 60 tons per day of organic wastes from hotels, restaurants and slaughterhouses in Amman. The successful installation of the biogas project has made it a role model in the entire region and several big cities are striving to replicate the model. Further information on [EMWIS website](#)

30- Significant savings on mileage and vehicle costs can be achieved by using computer optimisation to plan waste collection routes, new research suggests. When applied to a case study of cooking oil recycling in Portugal, it was found that the technique could lead to a reduction of 13% in annual distance travelled and a fleet hiring cost reduction of 11%. The increased interest in recycling has led to the growth and development of collection services which recover and transfer recyclable materials to a variety of depots for processing. However, transport routes themselves carry an environmental and financial burden. Optimising route planning in waste management is a complex problem. The problem involved a total of 303 collection sites and three depot sites. A computational tool using 'Mixed Integer Linear Programming' (MILP) was used to find the optimal solution, in this case, the solution that minimised the total routing cost. The MILP was formulated to take into account all possible depots, closed and open routes between depots, collection of full and distribution of empty containers for waste cooking oil, as well as associated vehicle hire and mileage costs, among others. The new vehicle routing results suggest that, if implemented, an annual 13% reduction in total mileage travelled and an 11% reduction in vehicle fleet hiring cost could be achieved compared to currently used routes. In addition, the reduced travel distances from optimised vehicle routes results in lower vehicle emissions, reducing the environmental impact of waste collection systems. The study's authors note that the approach can also be used to support decision makers by assessing the impact of proposed changes to waste collection systems, such as collection frequency or number of collection sites. Further information on [EMWIS website](#).

31- Waste from electrical and electronic equipment is one of the fastest growing waste streams in the European Union (EU). The increasing prevalence of affordable electronics means landfill sites are filling up with the consequent waste from sources such as light bulbs, spent batteries, printed circuit boards, liquid crystal displays and cathode ray tubes. The quantity of such waste doubles every 12 to 15 years. What's more, this waste contains rare and precious metals. Emerging green technologies such as solar cells and energy-efficient light bulbs depend heavily on raw materials like gallium, indium and rare-earth elements. Improved electronic waste recycling could thus not only reduce the environmental impact from new mining, but also boost European industry and provide resource security. That is the aim of the EU-funded project HydroWEEE Demo ('hydro' for hydrometallurgical, and 'WEEE' for waste from electrical and electronic equipment). HydroWEEE Demo builds upon the earlier success of HydroWEEE, an EU-funded project that concluded in February 2012. That project laid the groundwork for a design of a mobile plant using liquid solvents to extract metals like yttrium, indium, lithium, cobalt, zinc, copper, gold, silver, nickel, lead and tin in a high purity from electronic waste. The objective of HydroWEEE Demo is to build two demonstration plants - one stationary and

one mobile - to test the performance of the techniques devised. Further information on [EMWIS website](#).

32- Building on its use of satellites for responding to disasters, the European Space Agency (ESA) has helped to create a service that makes flood maps available simply via the Internet. Floods can be devastating, as seen recently in Germany and central Europe. Knowing the extent of a flood and understanding how it might develop is essential for teams responding to the emergency. Traditionally, this is often worked out using ground and airborne sensors along with historical flood maps. Invariably, these different sources of information, often from incompatible systems, must be pieced together in a hurry by emergency teams. But they cannot provide the full picture, especially when it comes to extensive floods and bad weather. ESA has collaborated with Capgemini, GeoVille Information Systems, Vienna University of Technology and Luxembourg's Gabriel Lippmann research centre to develop a simple, easy-to-use system that could be available to anyone online. Near-real time satellite radar measurements are processed to create location-specific flood maps and deliver them via the Internet. Satellite readings are processed using cloud computing and made available within hours to workstations as well as common devices such as PCs, laptops, tablets and smartphones. The service provides historical flood maps for crisis planning, near-real time flood maps for use by emergency response units, and damage assessment maps after a flood. This Fully Automated Aqua Processing Service, or FAAPS, was developed and demonstrated through ESA's Integrated Application Promotion. Further information on [EMWIS website](#).

=====

NOMINATIONS and VACANCIES

=====

33- MEDRC Awards 16 Scholarships to Palestinian Students for MSc Degree Studies: As part of its annual scholarship program to Palestinian students, MEDRC has awarded 16 scholarships to students in Gaza to study for MSc degrees in subjects relevant to desalination and water reuse. Scholarships are for Al Azhar University and the Islamic University, both in Gaza. An additional 12 MSc scholarships will be awarded to students in the West Bank. Candidate selection for these is in progress. Further information on [EMWIS website](#).

34- Global Water Forum - Topic Editor Vacancies for Postgraduate Students: The Global Water Forum has vacancies for new Topic Editors to join our Editorial Team. They are looking for postgraduate students with an interest in freshwater issues whom are self-motivated, have a high level of proficiency in written English, ability to work both independently and within a team, and have a keen attention for detail. **Applications will close 15 October 2013**. Further information on [EMWIS website](#).

35- Savewater! International Photography Competition: In its sixth year, the Savewater! photography competition calls both aspiring and professional photographers to get snapping and capture the value of water in an image. Winners and finalists will be published on the website on Friday 8th November 2013. Further information on [EMWIS website](#).

36- Prince Sultan Bin Abdulaziz International Prize for Water. Nominations for the 6th Award in 2014 are now open. **The deadline is December 31, 2013.** Further information on [EMWIS website](#)

37- Global Young Academy (GYA) Membership - Deadline: **06/10/2013**: The GYA provides a rallying point for outstanding young scientists from around the world to come together to address topics of global importance. As of 2013, the GYA has 155 members, leading young scientists (defined as an average age of 35 years and at the beginning of their independent academic career) from 55 countries and all continents, and 63 alumni. The GYA membership will expand to a maximum of 200 members, each serving four-year terms. The members are selected for the excellence of their science and their commitment to service. The vibrancy of the GYA results from the energy of its members who are passionate about the role of science in creating a better world. Further information on [EMWIS website](#).

=====
PUBLICATIONS
 =====

38- SIWI Releases Report on Water Cooperation Ahead of World Water Week: The Stockholm International Water Institute (SIWI) has released a report, titled 'Cooperation for a Water Wise World: Partnerships for Sustainable Development.' The report served as an input to World Water Week, that took place from 1-6 September 2013, in Stockholm, Sweden, on the same theme. The report includes an introduction, overview of the thematic scope of the 2013 World Water Week and sections on: promoting ecosystem health and conservation through water cooperation; water resources and the private sector; using information and communication technology (ICT) to improve water governance and cooperation; transboundary water cooperation; thirsty energy, i.e. the importance of water for power generation; unpacking the water-energy-food nexus; reducing greenhouse gases (GHGs) while building resilience; and bridging divides between land, water, coast and sea. Further information on [EMWIS website](#)

39- "Water: Charging full cost can encourage more efficient use": Flat-fee water charges are still common in parts of Europe. Such schemes, where users pay a fee regardless of the volume used, do not encourage efficient behaviour, either in households or agriculture, according to a new report from the European Environment Agency (EEA). Further information on [EMWIS website](#)

40- GWP Launches New and Improved IWRM ToolBox: Thirteen years after it was first launched, GWP's online database [IWRM ToolBox](#) gets a facelift. It is not the first time a change is made, but it is the most radical. The new version, now integrated with the main GWP website, has more features and is easier to navigate. Further information on [EMWIS website](#).

41- AQUASTAT: New section on wastewater: New wastewater section added to the global information system. More that 120 data sources have been reviewed and thousands of

national data collected and checked against systematic validation criteria, offering information on more than 100 countries. This new addition paves the way to have the first global and comprehensive information system on the wastewater cycle, in collaboration with other partners such as the International Water Management Institute. Further information on [EMWIS website](#).

42- WPP Annual Report 2012: "Sharing Smart Solutions in Water": The Water Partnership Program (WPP) report, Sharing Smart Solutions in Water summarizes the achievements and impact of WPP's Phase I (2009 - 2012). The report showcases the Program's results across six regions, as well as its global impact on knowledge and innovation. It also demonstrates how the WPP has strengthened the quality of World Bank projects and shaped policy dialogue in areas calling for immediate action, such as climate change, energy and food security, and urban water management. Further information on [EMWIS website](#)

43- Post 2015 Water Thematic Consultation Report: It synthesises the active thematic consultation on defining the role of water in the post 2015 development agenda. Summarising the sub-consultations on water, sanitation and hygiene, water resources management and wastewater management and water quality, the report also reveals a growing desire for a development framework that will reduce inequalities around water through rights-based approaches to service provision and governance. Further information on [EMWIS website](#)

44- Integrated analysis of climate change, land-use, energy and water strategies: Land, energy and water are our most precious resources, but the manner and extent to which they are exploited contributes to climate change. Meanwhile, the systems that provide these resources are themselves highly vulnerable to changes in climate. Efficient resource management is therefore of great importance, both for mitigation and for adaptation purposes. Further information on [EMWIS website](#)

45- WGF Releases Publications on Transboundary Water Management, Water Governance and Knowledge Management: The UN Development Programme's (UNDP) Water Governance Facility (WGF) at the Stockholm International Water Institute (SIWI) published three reports, titled: 'Transboundary Water Management;' a 'User's Guide on Assessing Water Governance;' and 'Learning from Experience: Conclusions from a Knowledge Management Initiative. 'Transboundary Water Management: Why it is Important and Why it Needs to be Developed' describes transboundary water management challenges and recommends development partners support cooperation processes and best practices to achieve cooperative transboundary water management. Further information on [EMWIS website](#)

46- Study Reveals Large, Untapped Potential for Water and Sanitation Services for the World's Poor: Many of the poorest, un-served people in developing countries, for whom public water and sanitation services are out of reach, could increasingly rely on service provision through the domestic private sector. Further information on [EMWIS website](#)

47- Earth's albedo maps are available for free online: Changes in Earth's surfaces can therefore affect how much of the Sun's energy is absorbed - such as a decrease in snow

cover or an increase in the area used for agriculture. If the amount of energy absorbed changes, this has an effect on Earth's energy budget and ultimately affects our weather and climate. To help scientists build better simulations of weather and climate, ESA's GlobAlbedo project is using satellite data to map changes in Earth's reflectivity. Led by University College London, the team used readings from the Envisat and Spot-Vegetation satellites to produce global surface albedo maps from 1998 to 2011. The maps, [available for free online](#), provide the most accurate measure of Earth's reflectivity to date. Further information on [EMWIS website](#).

48- New book on climate change policy making: Hot Science, High Water: The book addresses the roles of scientists, policy makers and NGO representatives in crafting a response to climate change in Vietnam during 2007-2012. Further information on [EMWIS website](#)

49- The European Geosciences Union (EGU) newsletter, GeoQ, is now online! This issue is dedicated to young scientists and their research. Further information on [EMWIS website](#).

50- Decentralized cooperation for water in Palestine: Good Practices Guide, 40 pages, July 2013: Produced by the Adour-Garonne Water Agency and the French Development Agency, in partnership with the Consulate General of France in Jerusalem, the Palestinian Water Authority and HAMAP association. Further information on [EMWIS website](#).

51- The 43rd edition of the Water Guide "Millésimée" 2013-2014 has just been published. This tool (paper + Internet) is eagerly awaited each year by all those involved in water management (drinking water, wastewater, industrial wastewater), in public institutions, decentralized state services, local and regional authorities and of course in the industry. Further information on [EMWIS website](#)

52- Guide on decentralized cooperation on waste management in developing countries: To help the agents of decentralized cooperation, AMORCE published a guide for communities that wish to develop projects related to waste management with partners in developing countries. This guide was produced in collaboration with ADEME, the French Agency of the Environment and the Control of Energy, communities, associations which Enda Europe and specialized structures. Further information on [EMWIS website](#)

53- UNU-INWEH Study Identifies Gaps in Wastewater Data, Treatment and Reuse: A study by the UN University's Institute for Water, Environment and Health (UNU-INWEH) finds a lack of data on wastewater generation, treatment and use around the world. The study, titled 'Global, regional and country level need for data on wastewater generation, treatment and use,' predicts wastewater use will increase worldwide in response to growing water scarcity and provides recommendations for ensuring safe wastewater management. Further information on [EMWIS website](#).

54- Palestinian rights to water and sanitation: A new call for action on Avaas website has been launched to push European governments to take action in support of Palestinian rights to water and sanitation. Further information on [EMWIS website](#).

=====

CALL FOR TENDERS and PROPOSALS

=====

55- New EU support for sustainable urban development in the European Neighbourhood: The European Commission has announced last August 30th, a new programme which will help cities in the EU's Eastern and Southern Neighbourhood to address local sustainable development challenges such as energy efficiency, security of energy supply and sustainable economic growth. This programme is part of the EU's efforts to encourage municipalities to sign up for the Covenant of Mayors (a voluntary initiative to reduce CO2 emissions) and boost local economies in the region in a more sustainable way. From the total of €35.5 million available for the SUDeP programme, about €25 million is expected to be invested in the Eastern Partnership countries and €10.5 million in the Southern Neighbourhood. The project is expected to start in the beginning of 2014. Further information on [EMWIS website](#).

56- Call for proposals: Innovations and changes in practice - Fight against chemical micro-pollutants in urban water (France). If you are responsible of a local authority, an office, a research laboratory, a business, or artisan ... you want to innovate and act collectively to reduce micro and protect your water resources, Answer to this call for projects "Innovations and changes in practice: Fight against micro-pollutants in urban water." Faced with the growing problem of micro-pollutants, the Ministry of Environment, the National Office for Water and Aquatic Environments (ONEMA) and water agencies in partnership with the Ministry for Health, launched a joint call for proposals on how to fight against the micro-urban wastewater. **04/11/2013**: is the deadline for receipt of expressions of interest. Further information on [EMWIS website](#).

57- Call for Expression of Interest on Recycling and waste recovery (France): As part of the Future Investments (PIA) program, the government encourages the development of a "circular economy" by focusing on three complementary areas: waste management, rehabilitation of polluted sites and soils and eco. This call for expressions of interest (AMI) deals with the management, recycling and recovery of waste. It follows AMI Investments for the Future in 2011, which has supported a dozen projects. AMI closes on **January 16, 2015** and has two intermediate deadlines to 10 January 2014 and 6 June 2014. The investigation will be conducted in three successive waves. It is about financing technological innovations and innovative industrial solutions to increase the reuse, recycling and recovery, including energy, waste. Further information on [EMWIS website](#).

58- Water JPI Pilot Call for Translational Collaborative Research Projects: Twelve organizations of eleven countries participating in the WATER JPI have decided to fund transnational projects on the theme "Emerging water contaminants - anthropogenic pollutants and pathogens". The Joint Programming Initiative "Water Challenges for a Changing World" (the Water JPI) is an intergovernmental initiative aiming at strengthening European leadership and competitiveness in the field of water research and innovation whilst safeguarding water resources. The Water JPI is harmonizing and mobilizing National and Regional Research, Development and Innovation (RDI) Programmes. The overarching

aim of this Pilot Call of the Water JPI is to identify new ways to efficiently assess, prevent, control and remove emerging pollutants and pathogens and thereby prevent human health risks and secure ecological functions of water ecosystems now and in the future. The call also intends to stimulate mobility of researchers between participating countries, consequently enhancing European collaborative research during the project life and beyond. Proposals submission deadline: **19th December 2013** at 12. 00 (CET) and 13.00 (FI). Further information on [EMWIS website](#).

=====
CALL FOR PAPERS
 =====

59- Call for papers for the 5th World Congress of Environmental and Resource Economists (WCERE): The 5th World Congress of Environmental and Resource Economists (WCERE) will take place in **Istanbul, Turkey**, from June 28 to July 2, 2014. **Deadline: 1st December 2013**. Further information on [EMWIS website](#)

60- Call for abstracts for the 4th SCARCE International Conference: Towards a better understanding of the links between stressors, hazard assessment and ecosystem services under water scarcity; 25-26/11/2013, Cadiz (Spain): **Deadline: October 15th, 2013**. Further information on [EMWIS website](#)

61- Call for abstracts for the Scientific Meeting WIS MED DAY: "Water Information Systems in the Mediterranean Region": The Moroccan Association of Young Geomatics (AMJG) announced the organization of a scientific meeting which has as theme "Water Information Systems in the Mediterranean Region", in partnership with the Faculty of Sciences of Rabat and the University Mohammed V Agdal, which will take place at the Faculty of Sciences Rabat - Morocco, 20 & 21 March 2014. Deadline for receipt of abstracts: **November 15, 2013**. Further information on [EMWIS website](#).

62- Call for Papers for the 3rd National Meeting of the Research on contaminated land - National Technical Days: Initiated by the French ADEME (Agency of the Environment and the Control of Energy) in 2002, these national meetings have become a must-attend event for all scientists and technical professionals wishing to be informed about the progress and highlights of research in the field of soil pollution due to agricultural industrial activities in urban soils, industrial. Excluded from the scope of this conference the agricultural and radioactive pollutions. From the perspective of the third National Meeting of the Research on contaminated land to be held on 18 and 19 November 2014 in Paris, ADEME launched a call for papers. Closing Date: **January 31, 2014**. Further information on [EMWIS website](#)

=====
TRAINING
 =====

[2013/10/24 - 2013/10/24] Training on the evaluation of the dangerousness of waste by INERIS, Aix-en-Provence, France
 Further information on [EMWIS website](#)

[2013/10/06 - 2013/10/08] Solar Desalination Course, Muscat, Oman

Further information on [EMWIS website](#)

[2013/09/30 - 2013/10/04] Optimal Design & Operation of RO Systems, L'Aquila, Italy

Further information on [EMWIS website](#)

=====
EVENTS ([Full Agenda](#))
=====

[2013/11/14 - 2013/11/15] International conference - - XI Jornada de Prevenció de Residus: "Beyond Waste Prevention: towards Circular Economy" and ACR+ General Assembly 2013, Barcelona, Spain

Further information on [EMWIS website](#).

[2013/11/14 - 2013/11/15] Decentralized water management: a Franco-German perspective, Nancy, France

Further information on [EMWIS website](#).

[2013/11/14 - 2013/11/14] 5th International Conference on Energy production from Waste, Valencia, Spain

Further information on [EMWIS website](#).

[2013/11/13 - 2013/11/16] **11th International Conference "EUROPE INBO 2013" on the Implementation of the Water Framework Directive**, Plovdiv, Bulgaria

Further information on [EMWIS website](#).

[2013/11/13 - 2013/11/14] Extreme flood events: the study of the hazard risk management for water infrastructures, Lyon, France

Further information on [EMWIS website](#).

[2013/11/13 - 2013/11/14] The 3rd Annual Effluent & Waste Water Management Conference - EWWMC 2013, Nairobi, Kenya

Further information on [EMWIS website](#).

[2013/11/12 - 2013/11/14] 2013 International Workshop on Membrane Bioreactor for wastewater reuse: Fundamental, Design and operation, Tunis, Tunisia

Further information on [EMWIS website](#).

[2013/11/12 - 2013/11/13] The 3rd Steering Committee meeting of the EU funded SWIM-SM project, Athens, Greece

Further information on [EMWIS website](#).

[2013/11/08 - 2013/11/08] London meeting 'Water and the Green Economy', London, UK

Further information on [EMWIS website](#).

[2013/11/07 - 2013/11/08] Symposium: "Hydraulic Numerical Modeling and Environment:

Issues, Uncertainties and Limitations (SimHE2013)", Casablanca, Morocco

Further information on [EMWIS website](#).

[2013/11/04 - 2013/11/08] Amsterdam International Water Week, Amsterdam, Netherlands

Further information on [EMWIS website](#).

[2013/11/04 - 2013/11/06] WFD Lille 2013, Lille, France

Further information on [EMWIS website](#).

[2013/11/02 - 2013/11/02] **Scientific Roundtable on "Water Information System: Innovations, Challenges and Prospects"**, Rabat, Morocco

Further information on [EMWIS website](#).

[2013/10/28 - 2013/10/29] Water and Sanitation in Africa and the Middle East Conference, Alexandria, Egypt

Further information on [EMWIS website](#)

[2013/10/24 - 2013/10/26] IWA Workshop on Traditional Qanats Technologies, Marrakech, Morocco

Further information on [EMWIS website](#)

[2013/10/23 - 2013/10/24] A Cruise to MED Future: MED Annual Event, Lisbon, Portugal

Further information on [EMWIS website](#)

[2013/10/22 - 2013/10/24] WATEC - 2nd Cleanvest Summit 2013, Tel Aviv, Israel

Further information on [EMWIS website](#)

[2013/10/21 - 2013/10/22] TIGER Workshop 2013: Achievements Review and Future Planning, Tunis, Tunisia

Further information on [EMWIS website](#)

[2013/10/21 - 2013/10/21] Joint Ministerial Conference of Ministers of Environment and Ministers of Education, Monaco

Further information on [EMWIS website](#)

[2013/10/20 - 2013/10/21] 1st International Symposium on the Conservation of the Environment of Semi-Arid Areas, Tebessa, Algeria

Further information on [EMWIS website](#)

[2013/10/08 - 2013/10/11] Budapest Water Summit, Budapest, Hungary

Further information on [EMWIS website](#)

[2013/10/08 - 2013/10/12] WasteECo-2013 Cooperation for Waste Issues: Exhibition and Conference, Kharkiv, Ukraine

Further information on [EMWIS website](#)

[2013/10/07 - 2013/10/11] International Solid Waste Congress: Vienna 2013, Vienna,

Austria

Further information on [EMWIS website](#)

[2013/10/07 - 2013/10/09] **RWKN project Regional Meeting, Amman, Jordan**

Further information on [EMWIS website](#).

[2013/10/07 - 2013/10/09] **HYDRO 2013 - Promoting the Versatile Role of Hydro, Innsbruck, Austria**

Further information on [EMWIS website](#)

[2013/10/07 - 2013/10/10] **7th HyMeX Workshop, Cassis, France**

Further information on [EMWIS website](#)

[2013/10/03 - 2013/10/04] **International Workshop Maghreb-Waste, Marrakech, Morocco**

Further information on [EMWIS website](#)

[2013/10/03 - 2013/10/04] **Water Indicators Workshop, Tour du Valat, France**

Further information on [EMWIS website](#)

[2013/10/03 - 2013/10/03] **Symposium: "Energy Management in Wastewater Treatment", Paris, France**

Further information on [EMWIS website](#)

[2013/10/01 - 2013/10/04] **The 4th World Congress of UCLG, Rabat, Morocco**

Further information on [EMWIS website](#)

[2013/09/30 - 2013/10/01] **Workshop on data needs for indicators of Integrated Management of Water Resources (IWRM), Barcelone, Spain**

Further information on [EMWIS website](#)

[2013/09/30 - 2013/09/30] **Conference: "Water: France-Israel cooperation", Cannes, France**

Further information on [EMWIS website](#)

[2013/09/29 - 2013/10/01] **The 2nd Annual WaterNA Conference: "Driving public and private sector collaboration in water and wastewater management for sustainable water supply", Hurghada, Egypt**

Further information on [EMWIS website](#).

[2013/09/29 - 2013/10/05] **8th Asian Regional Conference & 64th IEC Meeting of ICID: Irrigation Management Under Drought Conditions, Mardin, Turkey**

Further information on [EMWIS website](#)

[2013/09/28 - 2013/10/01] **17th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, Istanbul, Turkey**

Further information on [EMWIS website](#).

[2013/09/26 - 2013/09/27] CNES Workshop "Contribution of spatial face to water issues", Toulouse, France.

Further information on [EMWIS website](#).

=====
PROJECTS ([Projects database](#))
=====

[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](#).

=====
BRIEF EMWIS SITE MAP
=====

[ABOUT EMWIS](#) ([Priorities](#), [Activities](#), [Objectives](#), [Structure](#), [Funding](#), [Team](#))

[WATER in the EURO-MED PARTNERSHIP](#) ([MEDA programme](#), [Key dates](#), [European Neighbourhood Policy](#))

[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](#)

[DOCUMENTATION](#) ([EMWIS meetings](#), [Documentary database](#), [Funding for water](#), [Key emwis-flash-ndeg100-may-2012-1uments](#), [Water Legislation](#))

[WHO DOES WHAT IN THE WATER SECTOR](#) (By contacts, organisations & information sources)

[PARTNERS & SPONSORS](#) ([OIEau](#), [CEDEX](#), [SOGESID](#), [EC](#), [INBO](#), [IME](#), [GWP-Med](#), [MED-EUWI](#), [SMAP-RMSU](#))

[MEDA-WATER PROJECTS](#) ([ADIRA](#), [EMPOWERS](#), [EMWater](#), [IrWA](#), [ISIIMM](#), [MEDAWARE](#), [MEDROPLAN](#), [MEDWA](#), [Zer0-M](#))

[WATER INITIATIVES](#) ([MED-EUWI](#), [WFD](#), [INCO-MED](#), [LIFE](#), [MEDSTAT](#), [SMAP](#), [EXACT](#), [UNEP-MAP](#), [MSSD](#), [HORIZON 2020](#), [Union for the Mediterranean](#)) & [Mediterranean Water Information Mechanism](#)

[FORUM](#) ; [FAQ](#) ; [TOPICS](#) ([MedWIP](#), [Water scarcity](#), [groundwater](#), [wastewater reuse](#), [desalination](#), [satellite data](#), etc)

[SEARCH EMWIS WEBSITE](#)

[EMWIS SITEMAP](#)
=====

CONTACT US
=====

- This is a monthly Flash provided by the EMWIS Technical Unit (sent to: 22435 subscribers), to which you can get a free subscription, [click here](#) for an open subscription.
- The EMWIS Flash gives you regular and quality information on the water sector in the

Euro-Mediterranean area. The main headlines are: Institutions, Documentation, Training, Research and Development, Data Administration. You will also find updates on: international events, relevant web sites, the Euro-Med Water programme of the European Commission, and much more ...

- This Flash exists also in French and Arabic, you can view it and also the previous issues in [our website](#).

- This Flash is also yours, please give us your comments and information to improve it
Contact [the EMWIS Technical Unit](#).

=====