

NEWSLETTER WATER JPI NEWS 03 | 2016

PROGRESS ON WATER JPI

2016 IWA CONFERENCE DUBLIN, OCTOBER 2016 WATER JPI WORKSHOP

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DROPLETS

RADON IN DRINKING WATER: OVERVIEW OF MEASUREMENTS METHODS

The <u>Euratom Drinking Water Directive</u> (E-DWD) from 2013 introduces new areas of regulation with the aim of protecting the citizen from the dangers of ionizing radiation.

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OPPORTUNITIES

APPROVED 144 NEW LIFE PROJECTS ON ENVIRONMENT, NATURE AND CLIMATE

It was published the <u>list of LIFE projects approved</u> this year relating to the notice of 2015: 144 new projects at European level, but of which Italy and Spain will realize more than half (37 and 39 projects respectively).

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EVENTS

PUBLIC SESSION ON "THE ROLE OF WATER IN ADAPTATION TO THE CLIMATE CHANGE"

The MEP Water Group is organizing a public session dedicated to 'The role of Water in adaptation to Climate Change' on 6th of December 2016 from 17h30 to 19h30 at the European Parliament,

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PROGRESS ON WATER JPI

2016 IWA CONFERENCE **DUBLIN, OCTOBER 2016** WATER JPI WORKSHOP

The 2016 IWA regional conference was attended the anywhere project with a focus on floods and by 150 delegates from 26 countries. flood management. The Water JPI organised during this conference a onsultation on topics for 2017 funding This was an occasion for the Water JPI to identify: opportunities for inclusion in the 2017 Water possible research and innovation gaps, JPI Joint Call; the aim was to exchange with the • how to improve the transfer and uptake of attendees on the topics to be considered in the upcoming Water JPI 2017 Joint Call on the UN flood-related research results, sustainable development goals (focus on Multiple • how to strengthen links with this community at Pressures on Water). The outcomes of the 3 the different decision-making levels. World Café tables will serve in the development of Contact: Philippe.Quevauviller@ec.europa.eu the 2017 joint call.

Photo of the roundtable (by courtesy of DCU)



COMMUNITY OF USERS ON FLOOD EMERGENCY Response

The European Commission, Directorate General Migration and Home Affairs, organised the Side-& Research innovation Agenda Theme 5 - Closing Event to the FLOODRISK2016 conference on Friday 21/10 to discuss needs related to transfer resource management. of FP7 / H2020 flood research information to policy-makers and practitioners, in particular were to: on flood emergency response. The aim was to • gather relevant experts in the topic, which identify practical, efficient and intuitive ways will present and discuss their findings to other to support practice of the emergency response experts and stakeholders (end-users, policy community in relation to flood risks management makers and industry), and emergency response. Group discussions were organised to assess how interactions amongst identify knowledge gaps and RDI needs in that science, policy, industry, practitioners (first



responders) and citizens via local actors could be orchestrated at different levels (international/ EU, national, regional/local) with discussions facilitated by the EU "Community of Users on Secure, Safe and Resilient Societies" as well as the disaster risk management knowledge centre, and with inputs from various <u>H2020</u> projects, such as

2016 WATER JPI **EXPLORATORY WORKSHOP** - THEME 5 "CLOSING THE WATER CYCLE GAP -**IMPROVING SUSTAINABLE** WATER RESOURCE MANAGEMENT" **DUBLIN NOVEMBER 14TH**

The Water JPI held its first Exploratory Workshop on the 14th November 2016 in Dublin. The workshop was focussed on the Water IPI Strategic the water cycle gap - improving sustainable water

The objectives of the 2016 Exploratory Workshop

10 area (emerging needs / flexible fiches), • further elaborate the SRIA RDI needs. Interesting contributions have been assured by the high variety of 62 attendees: Water JPI members involved in the JPI and other initiatives activities, Water JPI Advisory BoardsB, guest speakers from relevant FP7/H2020/other EUfunded projects, selected national experts, representing different communities (research, economic sector managers, policy-makers, water resources managers). The presentations gave an overview of the research projects(NETLAKE **COST Action: Networking Lake Observatories** in Europe, TERENO Terrestrial Environment Observatories, SOLUTIONS for present and future emerging pollutants in land and water resources management, RISC-KIT: Resilience-Increasing Strategies for Coasts -toolKIT, EPI-WATER: **Evaluating Economic Policy Instruments for** Sustainable Water Management in Europe and ENHANCE project: Enhancing risk management partnerships for catastrophic natural disaster in Europe), an assessment of gaps and how their main issues are fitting or complimentary to the Water JPI SRIA in particular respect to the scientific, policy and end-users/economic perspectives on the Water JPI SRIA RDI needs within theme 5.

Invited round table panellists (Panos Balabanis, EC; Richard Howell, JPI FACCE; Torill Engen Skaugen, JPI CLIMAT&OCEAN; Dominique Darmendail, Water JPI) presented their perspectives on the following key questions: *Q1: How can you make calls more attractive to industry and bringing the research outputs to market?*

• Q2: (a) What have previous collaborative research options found to be advantageous and what are the pitfalls of these collaborative actions?

(b) Based on their past experience, what are the criteria in making a decision on whether your initiative would/could collaborate with the Water JPI (joint calls/activities)?

• *Q3:* How can you focus to avoid overlaps with other funding instruments?

The presentations and the workshop proceedings will be soon available on the <u>Water JPI</u> website.

WATER JPI PRESENT AT THE Annual Joint Programming Conference

The Annual Joint Programming Conference 2016, organized by ERA-LEARN 2020 and the European Commission, DG Research and Innovation, will be held in Brussels on 22-23 November 2016. It will focus on "Impacts of public-public partnerships expectations and experiences". The objective is to raise awareness and collect evidence of outcomes and impacts of P2Ps at european and national level. This will be an important contribution also for the Horizon 2020 interim evaluation and prepare for the next framework programme. The potential of P2Ps to deliver high european and national added value is underexploited and the event will provide you with an opportunity to understand the expectations from policy makers as well as exchanging with other networks on how to better show and assess the impacts of P2Ps.

The Water JPI will be present and will contribute to the breakout session on "Impacts in the thematic context – expectations and achievements – environment and climate change".



UPCOMING EVENTS OF THE WATER JPI

Water JPI 9th Governing Board Meeting Vienna, Austria 29 November 2016

The ninth <u>Governing Board</u> meeting will take place in Vienna at the <u>University of Veterinary</u> <u>Medicine</u> followed by two workshops dedicated respectively to the alignment of on-going projects on "Emerging pollutants, including pathogens" and their mid-term review.

The Water JPI GB will be duly informed on the progress of the several on-going activities :

- success of the CSA WatEUr,
- update on CSA IC4WATER,
- advisory boards meeting outcomes,
- first exploratory workshop outcomes,
- position papers,
- recommendations for the H2020 WP 2018-2020,
- contributions to the newsletter
- update on the calendar of events; participation in international events and supporting documents will be presented together with the feedback on Water JPI activities related to the H2020 2018-2020 and the Implementation Plan 2017-2019 covering all JPI activities (Update of the SRIA- toward a SRIA 3.0, WaterWorks2017, other calls, workshops). A Water JPI 5-year business plan and possible scenarios for the Water JPI Sustainability, a vision document 2020-2030 will be also discussed.

Workshop on Alignment of On-going Projects "Emerging Pollutants, including pathogens" Vienna, Austria November 30th 2016

The workshop will be held at the Austrian Federal

Water JPI

Ministry of agriculture, forestry, environment and water management in Vienna on November 30th 2016. Attendees will be representatives of the <u>Water JPI Pilot Call projects</u>, Water JPI WaterWorks2014 projects, other JPI funded projects, other FP7 and H2020 projects, national projects, Water JPI Partners and Advisory Boards. The objective of this workshop is to foster exchange among the projects, find synergies and means of collaboration, discuss how the outcomes can be targeted to stakeholders, and explore future consortia.

The workshop will gather the projects funded in the Water JPI Pilot Call and other projects related to emerging pollutants funded by the Water JPI WaterWorks2014 Call, FP7, H2020 and national programmes.

As part of the workshop, a poster session is scheduled to provide the participants with the basic data on each project and promote networking.

The workshop is organized by the <u>Water Joint</u> <u>Programming Initiative</u>, which currently counts on RDI programme owners and managers from 20 partner countries and aims at aligning the national and regional water RDI programmes through actions such as joint calls and elaboration of RDI agendas, among others.

MID-TERM REVIEW MEETING OF THE WATER JPI PILOT CALL PROJECTS

The meeting will be hosted by the <u>Federal</u> <u>Ministry</u> of agriculture, forestry, environment and water management, Vienna, Austria on December 1st 2016.

An open-for-all morning session with Pilot Call project representatives, Pilot Call Followup Group, Pilot Call Steering Committee, Call Secretary, Water JPI Advisory Groups, Water JPI partners will be dedicated to the presentation of the current development of the projects and will be followed by a restricted afternoon session for Pilot Call project representatives, <u>Pilot Call</u> Follow-up Group, Pilot Call Steering Committee.

| Pilot Call Projects | Торіс | Coordinator | Countries |
|---------------------|---|-------------------------------------|--|
| FRAME | A novel Framework to Assess and manage contaminants of Emerging concern in indirect potable reuse | (Thomas Ternes Germany) | France, Italy, Norway |
| METAWATER | New METAgenomics and molecular based tools for European scale identification and control of emergent microbial contaminants in irrigation WATER | Rosina Girones (Spain) | Cyprus, Denmark, Germany |
| MOTREM | Integrated processes for MOnitoring and Treatment of Emerging contaminants for water reuse | Javier Marugan (Spain) | Finland, France, Germany, Italy |
| PERSIST | Persistence and fate of emerging contaminants and multi- resistant bacteria in a continuum of surface water groundwater from the laboratory scale to the regional scale | Corinne Le Gal La Salle (France) | Germany, Spain |
| PROMOTE | PROtecting water resources from MObile TracE chemicals | Thorsten Reemtsma (Germany) | France, Norway, Spain |
| StARE | Stopping antibiotic Resistance Evolution | Célia M. Manaia (Portugal) | Cyprus, Finland, Germany, Ireland, Norway, Spain |
| TRACE | Tracking and assessing the Risk from Antibiotic Resistant genes using Chip technology in surface water ecosystems | Wolfgang Fritzsche (Germany) | Ireland, Italy, Portugal, Spain |

WATER JPI FRAME **PROJECT MEETING** MILAN, NOVEMBER 29TH DECEMBER 1ST 2016



The meeting of the Water JPI-FRAME project will take place in Milan, Area della Ricerca CNR. The FRAME project "A novel Framework to Assess and Manage contaminants of Emerging concern in indirect potable reuse" is funded for 3-years (2015-18) under JPI-WATER initive. Leading European scientists, engineers and practitioners from seven institutes in four countries (Germany, Italy, France and Norway) are closely working together to develop new strategies to minimize the impacts of a broad range of chemical and

biological contaminants when reusing treated municipal wastewater via subsurface treatment to augment drinking water resources coordinated by the German Federal Institute of Hydrology (<u>BfG</u>).

The project's main aim is to provide sufficient quantities of safe drinking water, while preserving ecosystems and human health. The practice of recycling treated municipal wastewater effluents to augment drinking water supplies is defined as "indirect potable reuse".

IC4WATER GRANT AGREEMENT SIGNED AND **KICK-OFF MEETING DATE ESTABLISHED**

The first January 2017, the Water JPI will launch the new Coordination and Support Action ...dedicated to the development of international cooperation in the Water area.

The action is pooling resources from 19 partners in total, including 18 participating research programme owners / managers of 17 european countries, and the Water Supply and Sanitation Technology Platform (<u>WssTP</u>). Among all the activities planned:

 a transnational call on water related UN SDGs and its related new knowledge hub,

a common action plan with the economic sector,

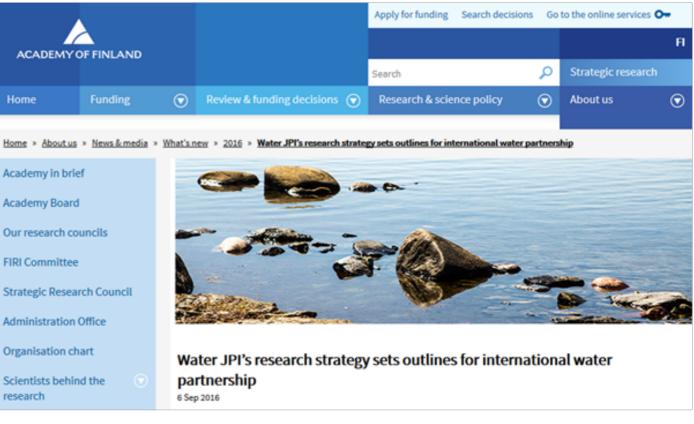
 new cooperation models with the Water IPI peers in targeted countries,

 and a global strategy for such international development

will be launched next year in the frame of the action.

WATER JPI MEMBERS' INVOLVEMENT THE ACTIVITIES OF ACADEMY OF FINLAND

The Academy of Finland coordinates Finland's solutions to water-related issues. An article is participation in the management and highlighting finnish contribution to the initiative development of Water JPI, a pan-European water and it can be found on the AKA website and AKA's research programme that seeks to find common Newsletter October 2016.





This action will be coordinated with partners (other JPIs, Policy - Makers and European public RD initiatives (GPC, ERA-Learn, EIP Water) in order to avoid overlap, ensure information flow and foster a multiplicative effect of international cooperation activities for all involved. In-depth review, the identification of opportunities for future research collaborations at the international level and the development, if possible, of a common strategy for addressing specific countries of interest are envisaged.

DROPLETS

RADON IN DRINKING WATER: OVERVIEW OF **MEASUREMENTS METHODS**

The Euratom Drinking Water Directive (E-DWD) from 2013 introduces new areas of regulation with the aim of protecting the citizen from the dangers of ionizing radiation. A very important source of radiation is the naturally occurring inert gas radon (Rn). Its radioactive isotope 222Rn is produced in the decay of 238U and 226Ra, which are omnipresent (rocks, building materials, sand, etc.).



The Euratom Article 35-36 experts have expressed their concern about this and have asked the Joint Research Centre of the European Commission (JRC) via the Directorate-General for Energy to perform a study and a proficiency test on the member states laboratories' capabilities and techniques of measuring 222Rn in drinking water.

A new article written by JRC and DG Energy staff presents an overview of the national regulations and status of transposition following the new E-DWD and the measurement techniques being used. The results of this study will guide the design of a proficiency test amongst member state laboratories that JRC-geel will perform in May 2018.

Read more in: V. Jobbagy et al., <u>A brief overview</u> on radon measurements in drinking water, J. Environ. Radioact. (2016), doi:10.1016/j. ienvrad.2016.09.019

SUSTAINABLE DRAINAGE SYSTEM SITE ASSESSMENT METHOD USING URBAN **ECOSYSTEM SERVICES**

Sustainable drainage systems (SuDS) could be made better for biodiversity and local people with the help of two new evaluation methods presented by a recent study. The methods, which assess the value of SuDS sites for wildlife habitat, carbon sequestration, recreation and education, are described by the study's authors as costeffective, quick and reliable, and could help designers plan and retrofit SuDS that are wildlifefriendly and socially inclusive.

SuDS mimic nature to manage and treat storm water. There are various forms of SuDS which help prevent flooding and clean up contaminants; these include ponds, green roofs, artificial wetlands and absorbent pavements. The green infrastructure provided by SuDS is seen as an important way of helping EU member states achieve good surface water status under the Water Framework Directive.

In the UK, where this study was conducted, the **Construction Industry Research and Information** Association (CIRIA) has recently updated its influential SuDS manual1, which provides guidance on the planning, design, construction, operation and maintenance of SuDS. This latest version promotes the design of SuDS design that provide a range of ecosystem services. The evaluation methods presented by this study are intended to support this ecosystemsservices approach (1). They can help designers understand and improve the value of a SuDS site. They also give designers a better understanding of which features of a SuDS site provide which ecosystem services, to help guide new developments.

The *first method* considers which features provide biodiversity-related services, specifically habitat for wildlife and carbon sequestration. It is adapted from an existing method (2) and based on evidence that diverse vegetation, at various heights, is best for providing habitat.

The method involves assessing which broad types of vegetation are present, such as trees and grasses, at which heights (e.g., upper canopy of a tree, low bush, long grass, cropped grass), and if there are any plants in water.

Designers can then give a SuDS site a score to with permanent aquatic features such as ponds indicate its potential for providing habitat and tended to be more capable of providing habitat carbon ecosystem services. In general, points and carbon sequestration services. Scores for are given for every layer of vegetation (including habitat and scores for recreation were positively aquatic plant species, if present). However, the linked to each other. method considers ecosystem disservices as well The researchers acknowledge that there is some as services, and the scoring system deducts points subjectivity to the evaluation methods, but say for some layers; for example, cropped grass, that they provide the right balance of reliability, which is unbeneficial for carbon sequestration. speed and cost-effectiveness. The presence of any built and impermeable layers at a site (e.g. concrete surface) also leads to points 1. Scholz, M., Uzomah, V., Almuktar, S., Radetbeing deducted.

The second method considers which features contribute to recreational and educational ecosystem services. It assesses public accessibility to a site (both legal and physical), evidence of the site being used for educational purposes by community groups, educational signs, the distance to the nearest educational establishment, and recreational infrastructure (e.g. benches and footpaths). Again, ecosystem disservices are considered, so the presence of litter and dog faeces is also assessed, as well as bins, which help reduce these two problems.

Each feature is scored on a scale of 0 to 3. Scores for recreational features and scores for





educational features are combined separately t produce two total scores.

The researchers tested the two methods on 49 SuDS sites in and around the city of Manchester, UK. This revealed that large sites (over 5 500 m2)

Taligot, J. (2013). Selecting sustainable drainage structures based on ecosystem service variables estimated by different stakeholder groups. Water, 5:1741-1759. DOI:10.3390/w5041741.

2. Tzoulas, K., James, P. (2009). Making biodiversity measures accessible to nonspecialists: an innovative method for rapid assessment of urban biodiversity. Urban Ecosystems>, 13: 113-127. DOI:10.1007/s11252-009-0107-x.

Source: Mak, C., Scholz, M., & James, P. (2016). Sustainable drainage system site assessment method using urban ecosystem services. Urban Ecosystems. DOI:10.1007/s11252-016-0593-6.

OPPORTUNITIES

Approved 144 new LIFE projects on environment, nature and climate

The list of LIFE projects approved this year

relating to the notice of 2015 was published: 144 new projects at European level, but of which Italy and Spain will realize more than half (37 and 39 projects respectively). Many possible addressed environmental issues, among them dominate the environment and the efficient use of resources, protection of nature, climate, public awareness. Water related projects are present in the different sections of the call:

LIFE Lech (Bundeswasserbauverwaltung Tirol – Baubezirksamt Reutte): the project targets the conservation of the natural dynamics of the Lech river system and surrounding landscape and associated rare or endangered habitats and species. The project aims to protect and develop the river's unusual, dynamically shaped gravel bars and to stop the deepening of the river bed and thus, stabilise ground water levels.

LIFE BEVERAGE (Anheuser-Busch InBev): the project aims to demonstrate a new technological process at breweries in Belgium and the UK that is designed to save water and energy in the brewing process. It will pilot a new technological process in which an inert gas is used to simulate the effects of boiling, thereby reducing energy consumption and the amount of water lost to evaporation. If successful, the process improvement could be introduced in more than 60 breweries worldwide.

ISOBEL (BEW Bayerische Elektrizitätswerke GmbH): the project will demonstrate a new approach to re-naturalising the free-flowing parts of the river Iller in Germany. The integrated bed load management system that will be installed is designed to enable the river to reach a good ecological status, as required by the <u>Water</u> <u>Framework Directive</u>. The main added value of the system is its reduced environmental impact, with aggressive excavation being avoided so as to be much less disruptive to the river and river banks. Through varied structure and habitat creation, it will also make the ecosystem more robust and climate resilient. The project will publish guidelines to promote the implementation of its system across Europe.

LIFE AGROWETLANDS II (Alma Mater Studiorum – University of Bologna): wetlands from which water is drawn for agricultural irrigation are vulnerable to degradation and salinisation, especially in arid and semi-arid regions. The project will test the use of sensors, sophisticated decision-making software and other management measures to reduce pressure on a pilot site in northern Italy, returning soil salinity to levels that are appropriate for wetland conservation.

RainBo LIFE (Lepida SpA): the project aims to develop and implement a climate change adaptation strategy and action plan for the municipality of Bologna. In particular, this will focus on coping with the increased likelihood and effects of severe rainfall as a result of climate change. Using advanced systems for environmental monitoring and forecasting models, the project will identify specific vulnerabilities and engage with stakeholders to limit the consequences of sudden rainfall events and flash floods in the urban landscape.

LIFE FRANCA (Università degli Studi di Trento): the project aims to raise awareness on flood risks in Italy and support spatial planning capacities to help anticipate such risks, in particular in Alpine areas. It will train staff of public bodies to anticipate risks and encourage the general public to adopt practices that can minimise the risks in a given territory. The project will also produce customised maps of flood risks for different user groups, set up a digital platform to disseminate information about flood risk maps and scenarios and draft guidelines for the communication and anticipation of flood risks.

LIFE AERFIT (Gemeente Putten): the project aims to demonstrate that Fast High Volume Infiltration (FHVI) technology is an effective adaptation strategy for dealing with the increase in urban pluvial flooding caused by climate change. The FHVI technology will be installed in the town of Putten in Gelderland, with the goal of having no water on the street at the peak precipitation levels of a T10 (once in 10-years) flood event. The project will monitor and disseminate the results to help other European cities implement FHVI, prioritising the sharing of best practice for effective technology transfer.

LIFE IPORSEN (Slovak Ornithological Society/ BirdLife Slovakia): the main aim of LIFE IPORSEN is to reduce factors adversely affecting wetlands of international importance – located in three Natura 2000 network sites. This will be achieved by restoring their ecological functions in favour of targeted water bird species, including both the black stork (Ciconia nigari) and white stork (Ciconia ciconia). The project will restore at least 850 hectares of wetlands, repairing sluice gates and channels and reconnecting oxbow arms, as well as restoring nesting islands and create nesting platforms for storks.

LIFE ANSWER (MAHOU S.A.): the project will demonstrate an integrated and innovative technology for treating wastewater from breweries, and other food and drink sectors. This will combine electrocoagulation and bioelectrogenesis microbial treatments for the complete removal of pollutants. It will be implemented on a pilot-scale at a wastewater treatment plant in Alovera (Castilla-La Mancha). The resulting dry residue will be reused onsite to produce energy and as a fertiliser.

LIFE DrainRain (PROYFE): the aim of the project is to mitigate the environmental impact of rainwater runoff in water bodies, by coupling sustainable urban drainage systems (SUDS) with an innovative modular treatment system for diffuse pollution, to enable water reuse for irrigation and other applications. The project will design and implement pilot systems in Galicia and Murcia (Spain), using photocatalytic pavements, to decrease concentrations of substances of concern entering receiving water bodies. These include heavy metals, polycyclic aromatic hydrocarbons (PAHs), pesticides and polychlorinated biphenyls (PCBs).

LIFE EMPORE (Laboratorios Tecnológicos de Levante S.L.): emerging pollutants are chemicals whose effects on the environment and



human health are unknown. This project will demonstrate a cost-efficient and highly-replicable technology for removing emerging pollutants from urban wastewater. The mobile prototype, which will be installed at a wastewater treatment plant in Benidorm, will consist of four principal processing units, which remove emerging pollutants using different mechanisms: filtration/ adsorption by columns, filtration by membrane technology, Electrochemical Advanced Oxidation Processes (EAOPs), and Advanced Oxidation Processes (AOPs). The pilot plant is expected to demonstrate significantly reduced levels in treated wastewater of 12 emerging pollutants.

LIFE MCUBO (School of Engineering, University of Navarra, San Sebastian): the objective of the project is to minimise environmental impacts related to water use in three food industry sectors with high water consumption: meat, juices, and canned vegetables. In production plants representing each of these subsectors, the project will demonstrate an integral management system based on new low-cost wireless monitoring technology, and mathematical models of energy and water consumption for each company's processes.

LIFE REWATCH (Fundació CTM Centre Tecnològic): the project will demonstrate an innovative water recycling system for the petrochemical industry. It will analyse wastewater samples from different petrochemical plants and use this knowledge to design and build a prototype plant in Tarragona. The plant, which will combine mechanical separation and biological processes, will be highly versatile and able to treat wastewaters of different qualities to standards required for various reuse applications.

LIFE CERSUDS (Asociación de Investigación de las Industrias Cerámicas): the aim of this project is to improve the resilience of cities to climate change and to promote the use of green infrastructure as a way of managing surface water flooding. It will develop and implement a pilot low-carbon sustainable urban drainage system (SUDS) with very low environmental impact, for the rehabilitation of urban areas. The system will use permeable pavements to reduce flooding caused by torrential rain. This will cut runoff volumes, allowing water to be stored for use during periods of drought and protecting water quality. **ReBorN LIFE** (County Administrative Board of Västerbotten): this project targets protected habitats of six river systems in the boreal region of Sweden whose conservation status has been assessed as 'inadequate'. It will also work to maintain or improve the conservation status of three species found in these river systems: the freshwater pearl mussel (*Margaritifera margaritifera*), atlantic salmon (*Salmo salar*), and european otter (*Lutra lutra*). The project will restore 202 km of rivers and create some 2 300 spawning grounds for salmon and trout.

EU to launch new initiative to address water stress in Mediterranean area The PRIMA initiative

PRIMA Joint Programme

PARTNERSHIP FOR RESEARCH AND INNOVATION IN THE MEDITERRANEAN AREA

In recent years, the agricultural sector in the mediterranean has been suffering from severe water shortages and decreasing crop yields. Today, 180 million people in the mediterranean basin are considered 'water poor'. The lack of clean water and nutritious food has adverse effects on the health and stability of the populations. The Commission has agreed on a proposal for a Partnership for Research and Innovation in the Mediterranean Area, PRIMA, which is set to develop much-needed novel solutions for sustainable water management and food production. The partnership is expected to boost local business and investment opportunities, thereby address unemployment and migration issues in the region. The proposal will now be passed to the European Parliament and the Council of the EU for political discussion and legislative approval.

The Commission's proposal already includes

Cyprus, Czech Republic, Egypt, France, Greece, Israel, Italy, Lebanon, Luxembourg, Malta, Morocco, Portugal, Spain and Tunisia. The participation of Germany is currently under negotiation. As the initiative is evolving over time, more participants are expected to follow, both EU and non-EU countries. Funding for the €400 million partnership will come from the participating countries (currently around €200 million), matched by a €200 million contribution from the EU through its current research framework programme Horizon 2020. The partnership is scheduled to run for 10 years, starting in 2018.

On 22 December 2014, nine Member States of the European Union (EU) – Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Slovenia and Spain - submitted a proposal for the participation of the EU in a joint research and innovation programme focused on the development and application of innovative solutions for food systems and water resources in the Mediterranean basin. This would be through an Article 185 initiative under Horizon 2020. The proposal has been named **PRIMA** "Partnership for Research and Innovation in the Mediterranean Area". The following seven non-EU countries are taking part in PRIMA: Algeria, Egypt, Jordan, Lebanon, Morocco, Tunisia and Turkey. A total of two hundred million euros have been committed for this initiative over a 10 year period starting in 2018. This figure includes the contribution from the Czech Republic and Luxembourg, which joined PRIMA at a later stage. According to the proposal, the general objective of PRIMA is to reinforce cooperation in Research and Innovation in Mmditerranean countries in order to contribute to the challenges of sustainable food production and water provision in the mediterranean region. The submission of the PRIMA proposal followed the adoption of the Competitiveness Council's conclusions of 5 December 2014.

In line with the indications provided in the <u>Better Regulation Guidelines</u>, and with the support of an external group of experts, the european Commission services performed an impact assessment of the PRIMA initiative. The purpose of this process was to analyse the need for an EU action in this domain and the potential economic, social and environmental impacts of the alternative policy options. On <u>18 October 2016</u> the Commission has been transmitted the <u>legislative proposal</u> for PRIMA to the Council and the Parliament both of which will need to approve it before the partnership is set up.

At the same time, international agreements with countries not associated to Horizon 2020 are being negotiated. Currently, the countries concerned are Morocco, Lebanon and Egypt. Also, the PRIMA Implementation Structure (PRIMA-IS) is being established.

When the proposal is finally adopted in the inter-institutional process, the Commission will start the implementation of the partnership by finalising technical details. Finally, the first Annual Work Plan will be elaborated to outline the scope and details of the project calls. Subsequently, the evaluation procedure will be launched, following the <u>Horizon 2020</u> rules for project selection.

Carlos Moedas, Commissioner for Research, Science and Innovation, said: "EU research and innovation is open to the world so we can tackle global challenges together. This Euro-Mediterranean partnership is an excellent example of where pooling knowledge and money can make a huge difference. It will bring more clean water and food to the people, boost local economies and create jobs. Through PRIMA, research and innovation will play a crucial role in addressing the root causes of migration."

Public consultation: have your say on Horizon 2020

The European Commission launched a <u>public</u> <u>stakeholder consultation</u> which will feed into the interim evaluation of <u>Horizon 2020</u>, the EU's €77 billion research and innovation funding scheme running from 2014 to 2020. This interim evaluation will help improve the functioning of Horizon 2020, and will also be an important element in preparations of a next EU research and innovation programme.

Carlos Moedas, European Commissioner for Research, Science and Innovation, said: *"I hope as many people as possible will use the chance to have their say on Horizon 2020, its first three years and its future direction. We are already analysing* WssTP is organising its <u>annual Brokerage &</u> Working Groups event that will take place on 23rd and 24th of November at the Diamant Centre in Brussels.



available data, facts and figures. But in order to have a full overview, it is very important to get direct feedback from researchers, entrepreneurs, innovators, citizens and all types of organisations that have participated in the programme."

FACCE ERA-GAS call: Full proposal stage started 18 October

The Steering Committee of <u>FACCE ERA-GAS</u> has selected the pre-proposals to be invited to submit full proposals for the FACCE <u>ERA-GAS</u> joint call.



On 18 October 2016 the research consortia received an invitation to participate in the second application step. The joint call for transnational research projects on monitoring & mitigation of greenhouse gases from agriculture and forestry has an indicative total budget of 14 M €.

JOIN WSSTP ANNUAL BROKERAGE & WGS EVENT ON THE 23RD TO 24TH OF NOVEMBER 2016, BRUSSELS The main objective of the event is to facilitate networking among its participants and provide guidance and special instructions on the preparation of participants' proposals for the upcoming H2020 calls and other EU funding opportunities.

Participants will have the opportunity to present their own project concepts. In addition, a matchmaking session will support them in building successful consortia for the calls.

The second day of the event will be dedicated to the WssTP Working Groups which will present their latest advances, current activities and future plans, as nurseries for project ideas.

TRAINING COURSE ERA LEARN 28th to 30th November 2016, Vienna

ERA-LEARN 2020 offers a training course on the application of foresight-processes for the transnational coordination of strategic research and innovation, 28-30 November 2016, Vienna; The aim of this training course is to empower management structures of Public-Public-Partnerships in their endeavor to develop, align and update their Strategic Research and innovation agendas in the trans-national context of Joint Programme Initiatives.

The target groups for this training are:

• representatives from JPI management and governing bodies responsible for implementation of Strategic Research Agenda and for evaluation,

- the training is open for policy makers in preparation of an ERANET, ERANET managers and mnagers of article 185 programs,
- participation from countries with less experience in trans-national joint programming is explicitly encouraged.

Horizon 2020 Info Day and Brokerage Event «Innovative by Nature: Responding to Societal Challenges through Nature-Based Solutions and Cultural Heritage»

The EU Research and Innovation Funding Programme, <u>Horizon 2020</u>, is opening calls for proposals for large demonstration projects related to:

• nature-based solutions for inclusive urban regeneration

- <u>heritage-led rural regeneration</u>
- <u>nature-based solutions for hydro-meteorological</u> <u>risk reduction</u>.



The aim of the <u>event</u> that will be hold on 8 December 2016 at Madou Auditorium, Brussels is twofold:

to present the Horizon 2020 Work Programme for the 2017 "Innovating with Nature and Culture" calls. Keynote speakers and Commission officers will provide tips and information on: innovative nature-based solutions in cities; cultural heritage as a driver for sustainable growth; nature-based solutions for hydro-meteorological risk reduction
to facilitate networking, information exchange and partnerships of actors interested in bilateral meetings, during the afternoon brokerage event.





FINANCING FUTURE WATER PROJECTS AND INNOVATION A VIEW FROM THE ARABIAN GULF

Abu Dhabi - January 2017

Whilst innovation is a key component in a diversified local economy, financing and acceptance of new technology could be significant barriers. Can water projects be truly sustainable if clients award to the lowest bidder? The International Water Summit in Abu Dhabi in January 2017 puts a spotlight on funding available for water projects, and investigates if taking a longer-term view of upfront project costs will reduce the total cost of ownership for the asset. Industry leaders will also discuss how to balance the risk associated to climate change and environmental impact into a project, and whether PPP is the best approach for the private and public sectors.

EVENTS

PUBLIC SESSION ON "THE ROLE OF WATER IN ADAPTATION

TO THE CLIMATE CHANGE"

The MEP Water Group is organizing a public session dedicated to 'The role of Water in adaptation to Climate Change" on 6th of December 2016 from 17h30 to 19h30 at the European Parliament, József Antall Building, Room 202. The session will feature as keynote speaker, Mr Jos Delbeke, Director-General of the European Commission's Directorate for Climate Action.



UN CONFERENCE OF THE PARTIES - COP22 - ON THE

CLIMATE

The The UN Conference of the Parties – <u>COP22</u> – on the Climate was held from 7 to 18 November 2016 in Marrakech, Morocco.

As part of the Global Climate Action Agenda - GCAA (successor of the Lima-Paris Action Agenda -LPAA), the International Network of Basin Organizations (INBO) was designated as facilitator of the official events dedicated to water and climate, in partnership with the WWC and the Moroccan Delegate Ministry in charge of water.

Two official events were organized on 9 November in two segments: a "Water Showcase", in the morning, dedicated to promoting practical initiatives and a "Water Dialogue", in the afternoon, built as a high-level debate on major water and climate policy issues. The events represented an opportunity to present the actions carried out and the new commitments made by the three alliances on water and climate established during the COP21:

• the Alliance of the 357 signatories of the Paris Pact on water and adaptation to climate change in the basins of rivers, lakes and aquifers, facilitated by INBO in partnership with UNECE,

• the Business Alliance for Water And Climate Change – BAFWAC, launched by the Carbon Disclosure Project - CDP, the CEO Water Mandate, the World Business Council for Sustainable Development and SUEZ, which has now 44 member organizations, including 30 leading companies,

• the Alliance of Megacities for Water and Climate, facilitated by UNESCO, ICLEI, SIAAP and Arceau-IDF, gathering 16 Megacities for a total population of 300 million inhabitants.

In addition to these high level official events, the International Network of Basin Organizations (INBO) organized with its partners a series of other side events on the Paris Pact implementation, adaptation to climate change in the basins and, more broadly, innovative solutions to water and climate issues:

- *AfriAlliance:* Social innovation needs in water and climate: regional priorities in Africa;
- Paris Pact on water and adaptation to climate change: Results and perspectives a year after COP21;
- Official: Global Climate Action event on water Water Showcase;
- Official: Global Climate Action event on water Water Dialogue;
- Declaration of the Global Alliances for Water and Climate;
- Adaptation to Climate Change in the basins of rivers, lakes and aquifers: Paris Pact;
- Cooperation on Integrated Water Resources Management (IWRM) for Climate Change adaptation.

"WATER AND DEVELOPMENT: SCIENTIFIC CHALLENGES IN ADDRESSING SOCIETAL ISSUES" - 2017 IAHS GENERAL ASSEMBLY

Port Elizabeth, South Africa, 10-14 July 2017 IAHS 2017 SCIENTIFIC ASSEMBLY The South African National Committee of the International Association of Hydrological Scientists (SANCIAHS) invites researchers to participate in the 2017 IAHS General Assembly to be held from July 10-14 in Port Elizabeth, South Africa.

The theme of the meeting is "Water and Development: scientific challenges in addressing societal issues" which is particularly appropriate in the context of an IAHS General Assembly meeting being held for the first time in sub-Saharan Africa and is well aligned with the IAHS Panta Rhei.

South Africa has a rich and varied hydrological history and has been a research leader in many aspects of hydrology through years of paired catchment and process hydrology research, model development and in the inclusion of scientific knowledge as exemplified by the South African National Water of 1998. SANCIAHS IAHS is a strong and active network representing South African hydrologists and has been active for nearly 40 years recently hosting it's 18th national AISH symposium. SANCIAHS is joined by Waternet as a major scientific partner in hosting the 2017 General Assembly. WaterNet is a southern Africa regional network of university departments and research and training institutes active in integrated water resources management.



H2O: THE INTERNATIONAL WATER EXHIBITION IS GROWING AN INCREASE IN THE NUMBER OF EXHIBITORS AND VISITORS, NEXT EDITION DUE IN 2018



XIII MOSTRA INTERNAZIONALE DELL'ACQUA

The figures are increasing for H20, the international water exhibition, which has just concluded in Bologna. The event registered an increase of 10% in the number of visits and also an increase in the number of companies exhibiting. Organized by BolognaFiere, H2Ois in its 13th edition and is part of the SAIE platform, the network of events (including also Expotunnel, Ambiente Lavoro(Working Environment), Smart City Conference and SAIE3) that represents the entire production chain for the sector of construction in all of its diverse areas of specialization. Overall "SAIE 2016" concluded with a significant increase in attendance (+10%): over 70,000 visits and more than 1000 exhibits. "H2O 2016" involved 343 exhibitors in an exhibition space of around 16 thousand m2 including 77 conventions and workshops with a total of 430 high profile speakers and visits of foreign buyers from 5 countries (Bosnia Herzegovina, Montenegro, Czech Republic, Serbia and Turkey).







During the event the "Prize for Innovation 2016" was awarded. The prize is divided into four categories: software applications and services; pipes and wells; pumps, machines and systems; tools. The prize was awarded to 12 new technological innovations selected from 144 products proposed by 81 exhibiting companies. Also awarded was the "2016 Sustainability Prize" to the University of Perugia and the Turin Polytechnic. Exhibitors and visitors enjoyed the new structure of "H2O 2016", which followed three themed pathways. "H2O Urban" relating to the management of the civic water supply, processes and sewage disposal; "H2O Industry" for the management of water for industry; and "CH4" relating to the transportation and distribution of natural gas. The intense programme of conventions and workshops also included the section "H2O Academy" dedicated to education and training. There were also three important international events taking place, the conferences of the International Water Association (IWA), the European Water Regulators (WAREG) and the Smart Water Networks Forum (SWANN).

ECOMONDO 2016 Green and Circular Economy, Rimini November 8th-11th



Rimini Fiera Rimini over the four days (2% more than 2015), with over 11,000 from abroad. The event hosted several <u>conferences on water and wastewater</u> (08/11/2016: "Drinking water: emerging pollutants and initial applications of safety plans", "Sustainable food and water nexus in the Mediterranean area"; 09/11/2016: BEACON EVENTs "Water management within the circular economy. Resource recovery from the water cycle: market, value chains and new perspective for the water utilities and chemical industry", "Ready-to-Market resource recovery technologies. Scale-up of low-carbon footprint material recovery techniques for upgrading existing wastewater treatment plants: the smart-plant Horizon2020 innovation action"; 11/11/2016: "Sewage sludge: not any more a problem but a resource in the framework of the circular economy") and a <u>technological exposition</u> GLOBAL WATER EXPO.

