

A photograph of a waterfall cascading over rocks into a pool of water, surrounded by lush green foliage.

PROGRESS ON WATER JPI

The Water JPI held its 9th Governing Board meeting in Vienna on Tuesday 29th November 2016. The meeting was hosted by the Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria, and was organised by the Water JPI Governing Board representative Robert this colleague,

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A close-up photograph of several water droplets resting on a vibrant green leaf, with sunlight filtering through the background.

DROPLETS

BETTER UNDERSTANDING THE WORLD'S SURFACE WATER: A NEW INTERACTIVE TOOL TO GUIDE EUROPEAN AND GLOBAL POLICIES

The Global Surface Water Explorer is a new online interactive mapping tool that will be accessible to everyone and serve to improve European and global policies for example on climate change and water management.

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A photograph of a white bird, possibly a seagull, in flight against a plain white background.

OPPORTUNITIES

FUNDS 19 NEW RESEARCH PROJECTS

JPIAMR just awarded 28.3 M EUR to 19 research projects to bridge the knowledge gap on AMR transmission mechanisms. 19 project consortia with a total of 96 research groups from 16 countries were awarded 28.3 M EUR for 3 years

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A photograph of a modern building with a glass facade, reflecting the sky, with a set of stairs in the foreground.

EVENTS

WSSTP BROKERAGE & WGS EVENT 2016

WssTP Brokerage & WG event concluded with great success on 24th November 2016 at the Diamant Conference Centre in Brussels. This year's edition welcomed more than 130 participants from all around Europe during the two days of the event.

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PROGRESS ON WATER JPI

The [Water JPI](#) held its 9th Governing Board meeting in Vienna on Tuesday 29th November 2016. The meeting was hosted by the [Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria](#), and was organised by the Water JPI Governing Board representative Robert Konecny from the [Environment Agency Austria](#), and his colleague, Kristina Schaufler. During this meeting, the 5-year Business Plan and the Water JPI sustainability were discussed. The Water JPI Implementation Plan for 2017-2019 was also presented and approved with slight modifications. The European Commission (EC) represented by Panos Balabanis, deputy head of the Circular Economy unit of [DG Research and Innovation](#), presented the EC feedback on the Water JPI activities, highlighting in particular the actions to be strengthened.

Back-to-back with the Governing Board meeting, the Water JPI organised a workshop and a meeting gathering RDI funded projects on “Emerging contaminants, including pathogens”: The workshop on the “Alignment of on-going RDI projects” took place on 30th November 2016 and gathered about 30 researchers from projects funded in the Water JPI Pilot Call, the Water JPI [2015 Joint Call](#), FP7, [H2020](#) and national programmes. This workshop aimed to foster exchange among the projects in the field of “Emerging pollutants, including pathogens”, find synergies and means of collaboration, discuss how the outcomes can be targeted at stakeholders, identify RDI needs and

gaps in relation to the [Water JPI SRIA](#) and explore future consortia. This event provided a perfect opportunity for promoting networking and for strengthening the science and policy interface within the Water JPI, thanks to the organisation of a poster session and breakout sessions on specific issues: i) ecological status; ii) human risks and environmental risks; iii) chemical analysis; iv) microbial resistance; v) water treatment, reuse and management.

The second meeting was the mid-term review of the seven water research projects funded by the first Joint Call of the Water JPI, which was held on 1st December 2016. This meeting involved representatives of the Water JPI community, funding ministries and agencies of the countries, members of the Pilot Call Follow-up Group and researchers involved in the projects on the common topic of “Emerging water contaminants – anthropogenic pathogens and pollutants”. During the first half of the day, an overview of the current development of the projects [FRAME](#), [MOTREM](#), [PROMOTE](#), [METAWATER](#), [PERSIST](#), [StARE](#), and [TRACE](#) was presented and was followed by a panel discussion on the mid-term progress of the projects. During the second half of the day, the Pilot Call Follow-up Group, Water JPI funding partners and the project representatives had a confidential feedback and discussion session on the development of the projects.



PREDICTING JPIS LAUNCH BROCHURE HIGHLIGHTING KEY ACHIEVEMENTS

At the fifth anniversary of the launch of the second wave of Joint Programming Initiatives (JPI), the ten initiatives presented a new brochure and factsheets on each JPI.

The new brochure explains the benefits of participating in a Joint Programming Initiative, provides an overview of the governance model and highlights the implementation actions for transnational cooperation. In addition to the general introduction to Joint Programming, all JPIs developed a [factsheet](#) with an overview of member countries, objectives and key achievements.

The [brochure](#) was presented at the Annual Joint Programming Conference on 22-23 November 2016 in Brussels.

Joint Programming Initiatives?

Joint Programming Initiatives (JPIs) were launched via European Council conclusions in 2009 with the aim to tackle the Grand Societal Challenges. JPIs are Member State-led, bringing together national research funding organisations, ministries and research councils both in Europe and further afield. This ambition of aligning national programmes, strategies and policies



extends beyond the matching of RDI funds. The alignment process covers various phases, from setting joint objectives and forging a common vision and a Strategic Research and Innovation Agenda between countries to developing appropriate framework conditions and selecting appropriate instruments. After the first four JPIs paved the way, we celebrated the launch of the second wave of JPIs by the Council exactly 5 years ago on 6 December 2011.

STEPPING UP EU RESEARCH AND INNOVATION COOPERATION IN THE WATER AREA - SHORTLISTED AND RECOMMENDED FOR FUNDING THE 21 TOP RESEARCH PROJECTS



In 2016, the Water JPI launched a Joint Call in the frame of the ERA-NET Cofund WaterWorks2015 to support research on the sustainable management of water resources in agriculture, forestry and freshwater aquaculture sectors.

Supported by 25 national/regional funding organisations from 22 countries, this call was co-funded by the European Commission and covered the following challenges:

- Challenge 1: Increasing the efficiency and resilience of water uses
- Challenge 2: Monitoring and reducing soil and water pollution
- Challenge 3: Integrating social and economic dimensions into the sustainable management and governance of water resources

The [joint call](#) was launched on the 16th of February 2016 and, following the ranking list established by an independent evaluation panel of experts, the call steering committee - composed by the WaterWorks2015 partners participating in the call - has shortlisted and recommended for funding the 21 top research projects for a total grant amount of over 17 million euro (in cash, i.e. total costs over 21 million euro).

The 21 shortlisted projects are scientifically excellent projects, covering a wide range of disciplines (from social and economic sciences to nature sciences) and addressing a range of societal challenges related to water and agriculture.

The list of funded projects will be definitively known upon national decisions by WaterWorks2015 partners, in April 2017 at the latest.

List of 21 projects recommended for funding

Project Acronym	Project Title	Coordinator	Participating countries
ABAWARE	Advanced biotechnology for intensive – freshwater aquaculture wastewater reuse	Norway	Norway, Germany, Finland, Ireland, Romania, Sweden
AgriAs	Evaluation and management of As contamination in agricultural water and soil	Finland	Finland, Germany, France, Sweden
AGRISENSUS	Integrated monitoring and control of water, nutrients and plant protection products towards a sustainable agricultural sector	Portugal	Portugal, Spain, The Netherlands, Sweden, Turkey
AgWIT	Agricultural Water Innovations in the Tropics	Canada	Canada, Germany, Brazil, Costa Rica, Denmark, Sweden, Taiwan
AquaVal	Valorisation of water use in aquaculture using multi trophic systems	Portugal	Portugal, Spain, Italy
AWARE	Assessing the fate of pesticides and wastewater-borne contaminants in agricultural crops and their environmental risks	Spain	Spain, Germany, France, Norway
CLEARANCE	Circular Economy Approach to River pollution by Agricultural Nutrients with use of Carbon-storing Ecosystems	Poland	Poland, Germany, Denmark, The Netherlands
ECOSAFE FARMING	Development and testing of a novel photocatalytic system for efficient cogeneration of clean water and hydrogen for ecosafe agriculture	Turkey	Turkey, Germany, Canada, Spain
Eutro-Sed	Eutrophication hotspots resulting from biogeochemical transformations and bioavailability of phosphorus in the fluvial suspended sediment of geologically contrasting agricultural catchments	Ireland	Ireland, Canada, Sweden,
FORWARD	Operational monitoring and Forecasting system for Resilience of agriculture and forestry under intensification of the WAtER cycle: a bid Data approach	Spain	Spain, Belgium, Denmark
IMPASSE	Impacts of MicroPlastics in AgroSystems and Stream Environments	Norway	Norway, Canada, Spain, The Netherlands, Sweden
INNOMED	Innovative options for Integrated Water Resources Management in the Mediterranean	Spain	Spain, Cyprus, France, Italy, Moldova (Republic of), Portugal

LEAP	Legacies of Agricultural Pollutants (LEAP): Integrated Assessment of Biophysical and Socioeconomic Controls on Water Quality in Agroecosystems	Canada	Canada, Denmark, Portugal, Sweden
OPERA	Operationalizing the increase of water use efficiency and resilience in irrigation	The Netherlands	The Netherlands, South Africa, France, Italy, Poland
POTENTIAL	Variable rate irrigation and nitrogen fertilization in Potato; engage the spatial variation	Belgium	Belgium, Germany, Denmark, The Netherlands
ProWsper	How to PROtect Water, Soil and Plants production all togethER	Romania	Romania, France, Portugal
REWATER	Sustainable and safe water management in agriculture: Increasing the efficiency of water reuse for crop growth while protecting ecosystems, services and citizens' welfare	Portugal	Portugal, Spain, Romania, Sweden
SMARTECOPONICS	On-site microbial sensing for minimising environmental risks from aquaponics to human health	Spain	Spain, France, Italy
SOSTPRO	SORce STream (headwater) PROtection from forest practices: what are the costs and benefits, and how best to do it?	Canada	Canada, Finland, Sweden
water4ever	Optimizing water use in agriculture to preserve soil and water resources	Portugal	Portugal, Spain, Italy, Turkey
WaterFARMING	Improvement of water and nutrient retention and use efficiency in arable farming systems from field to catchment scale in Europe and North Africa	Denmark	Denmark, Germany, Egypt, Italy, The Netherlands, Portugal, Tunisia



FUNDED PROJECT OF WATERWORKS2014

EFFICIENT ON-FARM WATER MANAGEMENT: THE MISSING LINK FOR OPTIMIZING SOURCE-DEMAND AGRICULTURE WATER MANAGEMENT

- IRIDA CONSORTIUM -

There is an enormous variation in environmental conditions within Europe, which makes it difficult to tackle water challenges at a continental level. For instance, the countries participating in the [IRIDA](#) project represent different climatic conditions, with Romania located in south eastern Europe, Spain and Italy in southern Europe and Norway in the north. The average yearly temperature and precipitation in Romania are, respectively, 10.6 oC and 595 mm (Bucharest), in Italy 15.9 oC and 799 mm (Rome), in Spain 14.6 oC and 436 mm (Madrid) and Norway 5.7 oC and 736 mm (Oslo). The evaporative demand of agricultural crops is higher in countries located in southern Europe compared to countries in the north. In cases when precipitation is limited during the growing season, water through irrigation has to be applied. Therefore, a considerable part of the water footprint of agricultural products produced in southern Europe can consist of a so-called blue water component, representing the irrigation water application. On the other hand, irrigation is hardly practiced in Norway. For the grain producing area in south eastern Norway the growing season is from April until August. Precipitation during the growing season is sufficient to compensate for

the water consumed through evapotranspiration. In this case the water footprint of grain production consists only of green water.

The challenge in southern Europe is to properly manage the available water resources under climate change conditions. Southern Europe and the Mediterranean basin are vulnerable to climate change due to increases in heatwaves and droughts. This requires careful management and planning of irrigation water application, which is one of the objectives of the IRIDA project. For Norway, the predicted rise in temperatures might increase the crop transpiration and hence the green water footprint of grain. However, currently the main challenge for northern Europe is to cope with the increase in precipitation, which can affect the trafficability and planning of tillage operations. Accurate knowledge about soil moisture content is needed to give advice to farmers, which is also one of the objectives of the IRIDA project, as soil moisture content is a determinant factor affecting evapotranspiration and, at the same time, a variable to be measured when scheduling irrigation.

Water uses among economic activity sectors is also extremely variable across countries. While in Europe,

24% of water abstraction is used by agriculture, there are huge variations depending on the climatic conditions and the relevance of irrigation in agriculture. In southern european member states, which are often characterised by a chronic water scarcity, agriculture is the major user of available resources, accounting for 74% of the total water use. Considering that increasing the availability of new water sources is difficult and involves environmental externalities; apart from increasing the use of non-conventional water, the only option is increasing Water Use Efficiency (WUE), the yield obtained per m3 of water used in the whole supply chain.

In this sense, it is striking that despite much effort having been done to improve the efficiency of water distribution along the whole chain, less attention has been paid to irrigation efficiency at the farm level. This is probably caused by the technical difficulty involved but also because WUE includes environmental, biological, engineering, management, social, and economic facets. On the other hand, it is not easy to quantify WUE because, even within the farm level, WUE can be measured at different scales, ranging from instantaneous

measurements on the leaf to more integrative ones at the plant and crop levels. The decision on the most appropriate way for determining WUE depends on the capacity, facilities, and scale of the specific study. Most research was performed on the basis of instantaneous measurements of leaf photosynthesis and transpiration, on the assumption that they are representative of whole-plant WUE. A comparison between instantaneous and whole-plant values sometimes reveals a clear relationship, but often it does not. This lack of correspondence is an important limitation to the applicability of the research conducted in this field. Its causes need to be clarified in order to scale up from single to whole-plant estimates of WUE and this will be a topic of research within the IRIDA project, as several tools will be considered for determining water use from the single leaf to the entire orchard, thanks to diverse skills brought by the IRIDA consortium.

The IRIDA proposal will indeed contribute to improving on-farm irrigation efficiency by means of a combination of tools, currently under development, to be transferred to end-users through a Decision Support System (DSS). This involves processing of large amount of data (in the order of terabytes and even petabytes), which has been an area of great interest during the last few years and some remarkable breakthroughs have been achieved to the point of giving birth to the so called Big Data. The foundational key concept in which Big Data is based is

the functional programming inspired MapReduce algorithm. Having this processing model at its center, the highly influential Hadoop framework was developed and served as a basis to give birth to this new data based industry used nowadays for processing the vast majority of high-volume data in many real life applications. Within this area, the IRIDA proposal will use new applications required for real-time processing of information, in the framework of IoT (Internet of Things), where data will be continuously generated by certain sensors and autonomous devices. At the same time, the available computing facilities will allow the processing of results from different time-series needed in order to deliver predictions and recommendations for irrigation management. Within IRIDA, this will be achieved through a multi-step approach and a modular DSS based on different level of complexities depending on the type of inputs available and the degree of precision required.

From a simple recommendation based on past weather data and standard crop coefficients, there will be the possibility of incorporating weather forecasts using the COSMO model for an irrigation application based on 3 to 5 day weather forecasts. However, the most advanced development within the IRIDA proposal will be based on incorporating ground and remote sensing tools to the DSS. In terms of ground sensors, a simplified sap flow device is under construction. The system proposed will use only a single measurement of instant convective velocity (on user demand) and in a single

point at a fixed depth under the cambium. The purpose is to obtain a water stress index by relative comparison of instant heat pulse velocities, using a well irrigated tree as a reference, or the output of a model. The target is to obtain a lightweight device, battery powered, rugged and relatively cheap. On the other hand, remote sensing data, and particularly Sentinel and Landsat images, will be used to calculate vegetation indexes able to adjust the standard (tabulated) crop coefficients. However, in order to consider the high degree of coupling of trees to the variable air humidity compared to the reference grass, a specific tree transpiration model will be incorporated into the DSS.

Based on preliminary results obtained during the 2016 campaign using some of the IRIDA protocols, WUE can be increased from 8 to 25% (depending on the crop type and the actual starting point). In addition, other indirect savings can be expected from an improved irrigation management. This includes a reduction in fertilizer application due to more efficient nutrient use and reduced nutrient leaching and easier and faster field practices operations. The obtained knowledge on flow pathways for water and nutrients will be used for implementing mitigation/adaptation measures.

WATER JPI PRESENT AT THE NORDIC-BALTIC NETWORK FOR WATER AND HEALTH

The 5th [Nordic-Baltic network](#) for Water and Health meeting was held in Helsinki, Finland on 27-28th October 2016. The meeting was organised by the [Ministry of Agriculture and Forestry](#) in Finland in the cooperation with the Norwegian [Ministry of Health and Care Services](#) and the [National Food Agency of Sweden](#). The Nordic Council of Ministers granted funds for the meeting. The Nordic-Baltic network expert meetings have been organised once a year since 2012 to facilitate the preventive actions against waterborne diseases. The theme of this fifth meeting was the implementation of water safety plans to improve preparedness for risks of drinking water quality and quantity. Most of the Nordic and Baltic countries were presented in the meeting and delegates represented the governmental and research sectors of their countries.

Dr. Enkhtsetseg Shinee from Water and Sanitation (WSN), European Centre for Environment and Health, World Health Organization Regional Office for Europe gave an opening presentation



on Protocol on Water and Health: core provisions, progress of implementation and future priorities. During the two day meeting, discussion centred in on the current risks that are threatening our drinking water quality, like pathogens or degradation of the water pipe systems, and how these risks can be controlled via legislation and national water safety plan protocols and tools. Probability of the waterborne illness cases may also be associated with extreme weather events as their frequency is increasing due to climate change (by Jens Erik Pettersen, Norwegian Institute of Public Health). One example of the extreme weather events was presented by Per-Erik Nyström from the National Food Agency (Sweden) who gave a very comprehensive overview of serious drought in southern Sweden this summer and how this was handled.

Kata-Riina Valosaari, the Finnish representative of the European Union Joint Programming Initiative for Water (Water JPI) from the Academy of Finland, discussed about the water research funding situation in Finland and gave information on future research funding and networking possibilities on European level through [Water JPI](#). Most of the participating countries are members of the Water JPI community and thus could benefit from its activities. Water and health issues as well as risks of extreme events caused by climate change are at the core of the Water JPI Strategic Research and Innovation Agenda ([SRIA](#)).

WORKSHOP FOR THE PARTICIPATION OF NON-EU BLACK SEA COUNTRIES IN THEMATIC COFUND ERA-NETS & JPIS

In The Horizon 2020 project “[Black Sea Horizon \(BSH\) – Enhanced bi-regional STI cooperation between the EU and the Black Sea Region](#)” organised a “[Workshop for the participation of non-EU Black Sea countries in Thematic COFUND ERA-NETs & JPIS](#)” on 13 & 14 October 2016, in Baku, Azerbaijan.

The workshop had the following objectives and expected outcomes:

- to bring local funding agencies in contact with ERA-NETs/JPIs coordinators;
- to raise awareness on how to participate in thematic ERA-NETs/JPIs;
- to learn from best examples of non-EU BS countries’ participation in ERA-NETs/JPIs so far (e.g. BS-ERANET, ERANET-RUS and thematic ERA-NETs);
- to transform initial interest for participating in ERA-NETs/JPIs into practice.

Igor Serotila, Academy of Sciences of Moldova – Centre of International Projects and Governing Board member, represented the [Water JPI](#).

The main outcomes were:

The following issues are the most pressing,

when talking about international P2P experience (including participation in ERANETs and JPIS) so far:

- it is not always easy to identify suitable cooperation partners;
- trust building is demanding but also necessary to establish effective collaboration;
- different expectations & levels of commitment;
- difficulties in aligning strategies, priorities and funding programmes;
- the EU programmes may seem complex for third countries and partners;
- there are already a number of P2P networks with some experience in international participation which can serve as practical examples;
- it is important to engage industry and policy makers in P2Ps;
- a-la-carte participation open to any funding organisations should be followed;
- mutual learning activities across different initiatives should be promoted.

More information at: [Baku Workshop Conclusions](#)



DROPLETS

BETTER UNDERSTANDING THE WORLD'S SURFACE WATER: A NEW INTERACTIVE TOOL TO GUIDE EUROPEAN AND GLOBAL POLICIES

The [Global Surface Water Explorer](#) is a new online interactive mapping tool that will be accessible to everyone and serve to improve European and global policies for example on climate change and water management.

The [maps](#), developed by the Commission's [Joint Research Centre](#) and [Google Earth Engine](#), highlight changes in the Earth's surface water over the past 32 years. They show that, although the overall amount of surface water has increased globally, important losses have occurred in specific regions of Asia.

The maps reveal that many of these changes are linked to human activities such as the construction of dams, river diversion and unregulated water use. Other changes can be attributed to climate change impacts, including droughts and accelerated snow and glacier melt caused by higher temperatures and increased rainfall.

The information contained in the maps will help policy makers to better design and monitor measures to prevent and mitigate the amount of flooding, water scarcity and droughts that has been increasing in some parts of the EU. The data can also be used as part of the EU's contribution to multilateral environmental agreements, such as the United Nations Framework Convention on Climate Change, or help reach the Sustainable Development Goals.

Source: [Europa](#)

THE SUSTAINABLE DRAINAGE SYSTEMS

The use of Sustainable Drainage Systems (SuDS) could be improved 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 cost-effective, quick and reliable, and could help designers plan and retrofit SuDS that are wildlife-friendly 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 United Kingdom, where this study was conducted, the Construction Industry Research and Information Association ([CIRIA](#)) has recently updated its influential [SuDS manual](#), which provides guidance on the planning, design, construction, operation and maintenance of SuDS. This latest version promotes the design of SuDS that provide a range of ecosystem services. The evaluation methods presented by this study are intended to support this ecosystems-services approach. 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 method³ 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 indicate its potential for providing habitat and carbon ecosystem services. In general, points are given for every layer of vegetation (including aquatic plant species, if present). However, the method considers ecosystem disservices as well as services, and the scoring system deducts points for some layers; for example, cropped grass, which is unbeneficial for carbon sequestration. 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 indicate its potential for providing habitat and carbon ecosystem services. In general, points are given for every layer of vegetation (including aquatic plant species, if present). However, the method considers ecosystem disservices as well as services, and the scoring system deducts points for some layers; for example, cropped grass, which is unbeneficial for carbon sequestration.

The presence of any built and impermeable layers at a site (e.g. concrete surface) also leads to points being 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 to 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) with permanent aquatic features such as ponds tended to be more capable of providing habitat and carbon sequestration services. Scores for habitat and scores for recreation were positively linked to each other. The researchers acknowledge that there is some subjectivity to the evaluation methods, but say that they provide the right balance of reliability, speed and cost-effectiveness.

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.

EEA REPORT ON EUROPEAN WATER POLICIES AND HUMAN HEALTH

The European Environmental Agency ([EEA](#)) published a new [report](#) on European water policies and human health. It examines the so-called 'Water Industry Directives' and their influence in the context of the Water Framework Directive ([WFD](#)). [EurEau](#) sent comments on the draft during the summer and most of them have been included. It is an interesting document in the context of the revision of the WFD in 2019.



OPPORTUNITIES



FUNDS 19 NEW RESEARCH PROJECTS

JPIAMR just awarded 28.3 M EUR to 19 research projects to bridge the knowledge gap on AMR transmission mechanisms. 19 project consortia with a total of 96 research groups from 16 countries were awarded 28.3 M EUR for 3 years of research from JPIAMR member countries and the European Commission under the ERA-NET Co-fund scheme. The JPIAMR joint co-funded call “To unravel the dynamics of transmission and selection of antimicrobial resistance (AMR) at genetic, bacterial, animal, human, societal, and environmental levels, in order to design and evaluate preventive and intervening measures for controlling resistance” closed in July 2016 and received 83 applications. For information on the JPIAMR joint call on “[Transmission Dynamics](#)”.

CALL FOR CONTRIBUTIONS AFRIALLIANCE LAUNCH CONFERENCE

The first AfriAlliance Conference will be held from 22-24th March 2017 in the Birchwood Hotel & OR Tambo Conference Centre in Ekurhuleni, South-Africa, and serves as the inaugural meeting of the AfriAlliance innovation alliance. [AfriAlliance](#) is a 5-year project funded by the European Commission aiming to facilitate the collaboration of African and European stakeholders in the areas of water and climate innovation, research, policy and capacity development.

The first AfriAlliance Conference will be hosted by the Local Climate Solutions for Africa (LoCS4Africa) 2017 Congress on Water and Climate, organised by ICLEI Local Governments for Sustainability, Africa Secretariat, in partnership with Ekurhuleni Metropolitan

Municipality. The Congress connects Africa’s urban water & climate development challenges with solutions and opportunities for access to finance & technology, inclusivity through design and building more resilient urban communities.

SIWI WORLD WATER WEEK



It’s possible to become involved in 2017 World Water Week through event hosting and abstract. Submissions are being accepted until January 22nd [World Water Week website](#).

EVENTS

WssTP BROKERAGE & WGs EVENT 2016

WssTP Brokerage & WG event concluded with great success on 24th November 2016 at the Diamant Conference Centre in Brussels. This year’s edition welcomed more than 130 participants from all around Europe during the two days of the event.

The first session of the event ‘Introduction to calls’ featured an interesting line-up of speakers from the European Commission who gave their insights on how participants can get successfully involved in the 2017 Horizon 2020 calls. A project ideas’ session followed, whose first part was dedicated to problem owners who talked about their strategic needs, calls of interest and challenges, while during the second part, solution providers and Small & Medium Enterprises had the floor to present their project ideas, corresponding to the calls selected for the current work programme.

MEP WATER GROUP PUBLIC SESSION ON “THE ROLE OF WATER IN ADAPTATION TO CLIMATE CHANGE”

Under the theme ‘[The role of water in Adaptation to Climate Change](#)’, the [MEP Water Group](#) organised a well attended public session on the 6th of December at the European Parliament in Brussels. The session was chaired by Esther de Lange, President of the MEP Water Group and featured four high-level panellists who stressed the importance of water, while addressing the topic of adaptation to climate change.

‘Climate change is not a product of our fantasy but it is a real fact, which brings along as many challenges as opportunities’ said Esther de Lange in her opening remarks, after welcoming the participants of the session. Esther continued, noting that ‘The 2013 Strategy on Adaptation to climate change is now being evaluated and we need to make sure that water is well anchored to the planned review of this strategy.’

Yvon Slingenberg, Director in the Directorate General for Climate Action of the European Commission (EC) underlined that the connection between the EC and the European Parliament is extremely important on taking climate actions forward to the member states. Additionally, Yvon stated that ‘Mitigation and adaptation actions have the same importance and the member states will be requested to actively contribute to the relevant actions and implement the national adaptation strategies aligned with existing water policies and directives.’ Cities and regions are crucial actors to implement adaptation measures and to raise the awareness of member states on the effects of climate change.

Gian Luca Gurrieri, Head of Unit - Air Quality and Climate policy in Lombardy Region spoke about the vulnerability of Lombardy region to climate changes because of its geological and infrastructural characteristics and highlighted that climate change policy developed at regional and local level is very complex. Gurrieri, also, stressed the need for a systemic organisation of water resources for the management of floods and draughts.

Jacob Møller Nielsen, Director for Urban Development from the City of Copenhagen added that water management should be directly and inherently linked to city development, as well as included in the urban and business plans. The Business alliance for Water and Climate (BAFWAC) was, also, represented by Jean-Pierre Maugendre, Deputy Director for Sustainable Development, SUEZ, who indicated water resource management as one of the main priorities of the alliance in the united effort to decrease the dramatic effects of climate change.

Before the closure of the session, all speakers agreed that the EU needs to send out strong messages when it comes to climate change and that we all need to preserve the value of water for the future. The panel discussion was followed by Q&A from the audience and concluded with a cocktail reception.

Source: [MEP Water Group](#) | [communication@wsstp.eu](#) | [WssTP](#)

BLUESCITIES PROJECT FINAL CONFERENCE IN BRUSSELS, DECEMBER 13-14TH, 2016

Smart cities can provide local solutions to global issues when cities develop a coherent long-term integrated strategy and implementation plan on transport, energy, ICT, solid waste, climate adaptation (heat islands, urban flooding and water scarcity), water supply and waste water treatment. People in urban environments need green and blue space and healthy, attractive and liveable cities should become the long-term goal for municipal stakeholders in Europe.

The project [Blueprints for Smart Cities](#) aimed to develop the methodology for a coordinated approach to the integration of the water and waste sectors within the 'Smart Cities and Communities' EIP, the identification of synergies in accordance with Smart City ideology and compliment other priority areas such as energy, transport and ICT for contributing to the achievement of the [H2020](#) objectives.

With the creation of the [Dubrovnik Declaration of Intent](#) and the publication of the Urban Water Atlas For Europe, the [BlueSCities](#) consortium has opened up numerous opportunities for future work, not only regarding the efficient future planning of urban areas, but also in fields as diverse as citizen engagement and Science-Art Diplomacy.

Source: [EIP Water](#) - newsletter@eip-water.eu

APE SEMINAR | WATER AFFORDABILITY IN EUROPE *PUBLIC OPERATORS' VIEWS AND APPROACHES IN TACKLING WATER POVERTY*

On the 20th of October 2016, Aqua Publica Europea ([APE](#)) organised a [seminar](#) on Water Affordability, which was attended by a wide-ranging audience of institutional representatives, experts, NGOs and other stakeholders.

The main outcomes of the [APE Report on Affordability](#) were then presented, followed by two panels, the first exploring the concept of “affordability” – towards a common understanding?” and the second on “Reconciling cost recovery, sustainability and affordability”.

