### **PROGRESS ON WATER JPI**



#### HAVE YOUR SAY ON WATER FOR THE FUTURE! PUBLIC CONSULTATION NOW OPEN

The Water JPI is currently updating the Vision 2030 and Strategic Research and Innovation Agenda 3.0. As part of the public consultation process, your feedback is important to us because it will help to inform our new Vision 2030 and SRIA 3.0. By completing the online survey, you will ensure both of the revised documents are relevant and robust. The results of this

public consultation will inform a series of national and international consultative workshops in 2019.

The <u>Water JPI Vision document</u> is the overarching road map that is reviewed every 10 years. It provides the context (trends, drivers and challenges) and outlines the JPI objectives and research questions responding to the issues and challenges facing the European water sector up to 2030 and beyond.

The Strategic Research and Innovation Agenda sets out the guiding principles and identifies policy-relevant research priorities for the future, while making them openly accessible to the various stakeholders, including policy makers, regulatory agencies, researchers, end-users and the public. It charts the future water-related research, development and innovation in Europe and is reviewed every 5 years to ensure it remains relevant. The current <u>SRIA 2.0</u> presents the strategic objectives and research priorities under five key themes. However, the next revision, must respond to both current and emerging global water challenges for the next 10 years and beyond.

Please fill-out the online survey available <u>here</u> by 1<sup>st</sup> February 2019.

## WATER JPI NATIONAL WORKSHOPS - THE WATER JPI VISION 2030 AND STRATEGIC RESEARCH AND INNOVATION AGENDA

The Environmental Protection Agency (EPA) Ireland is currently preparing the new Vision of the Water JPI up to 2030 and preparing the next update of the Water JPI SRIA (3.0). Following on from a number of workshops during 2018, the process and timeline to complete this has now been agreed. As part of the consultative and collaborative process it has been recommended that each partner organise a national workshop(s) on the SRIA and Vision Updates, in order to:

- to promote input and feedback on the Vision and SRIA at national level;
- to ensure geographical representation;
- to capture national priorities, where relevant.

All of these workshops will be finalized by the end of March 2019, for timely input to the Vision and SRIA updates. To date over 13 partner countries have confirmed they will have a national workshop. So watch out for local updates from your own national contact point, as to where and when you can take part on a national basis.



### WELCOME TO A NEW WATER JPI MEMBER: CZECH REPUBLIC

The Ministry of Education, Youth and Sports of the Czech Republic (<u>MEYS</u>), with the support of the Technology Agency of the Czech Republic (<u>TACR</u>) have joined the Water JPI. The candidature was approved unanimously by the Water JPI Governing Board. Czech Republic will join the upcoming joint transnational call on "Risks posed to human health and the environment by pollutants and pathogens present in water resources", planned in cooperation with the JPI's Anti-Microbial Resistance (<u>AMR</u>) and <u>OCEANS</u>.

# New Projects being funded under the Water JPI 2018 Joint Call on "Closing the Water Cycle Gap - Sustainable Management of Water Resources"

Following the meeting with the Independent Evaluation Panel of experts and WW2017 the Call Steering Committee – composed by the WaterWorks2017 ERA-NET partners participating in the Water JPI 2018 Joint Call; 18 transnational research projects worth a total grant amount of over 15.2 million euros (including 4.9 million euros cofounded by EC) been has shortlisted for funding. The <u>eighteen shortlisted projects</u> are scientifically excellent projects, covering a wide range of disciplines (from social and economic sciences to nature sciences), and addressing all challenges presented in the call announcement. The kick-off meeting for these projects is planned for April 2019.

## WATER JPI GOVERNING BOARD: LATEST DEVELOPMENTS

The most recent Water JPI Governing Board was held in Paris on November 15<sup>th</sup> 2018. Many aspects were addressed during the meeting and decisions were taken for the future developments and impacts of the Initiative. ANR Chair, Maurice Héral (ANR, FR) was re-elected as the interim Chair until a replacement can be approved. The Water JPI now has a new Vice Chair, Miguel-Angel Gilarranz (AEI, ES) was elected. The Water JPI Coordinator was approved for an additional 3-year mandate. The leadership of the Task Force on H2020 – Horizon Europe moves from Ireland to Italy. A number of new proposed Advisory Board members from the Scientific and Technological Board were approved for 2018 and will be soon contacted for their full integration onto the JPI Advisory Boards. The Governing Board also approved new Water JPI Term of References; the first Policy Brief on emerging contaminants and the Water JPI contribution on water challenges under Horizon Europe. The Governing Board meeting also facilitated the updating to all JPI members on the progress made over the last months' ; consideration on the role of Joint Programming Initiatives within the context of the next European Framework Programme (Horizon Europe), was discussed in detail. This discussion on Horizon Europe was held with contributions from European Commission and GPC representatives. Padraic Larkin stepped down as the Water JPi Co-Chair after co-steering the ship for four years and was thanked by all for his huge contribution over the years.

### TASK FORCE ON RESEARCH INFRASTRUCTURE INITIATED AND ENVRIPLUS 3RD OPEN COMMUNITY MEETING, RIGA, LATVIA

The Water JPI has established a Task Force on Research Infrastructures (RIs) at the Governing Board in May 2018. A 'definition document' has been developed to strengthen the establishment and need of such a Task Force with its first web conference being held on 29th of November 2018. Under the frame of the Task Force, the Task Force Lead Germany visited the <u>3rd Open ENVRI Community Meeting</u>, which was organized by the <u>ENVRIPLUS</u> H2020-project. The project brings 26 RIs from four environmental domains together. The project holds biannually a 'ENVRI week' to increase integration and cooperation, targeting different groups of stakeholders. The Task Force lead used this meeting to gain an insight to the 'State of The Art' gaining knowledge and experiences of the project; presented on the need for water-related Research Infrastructures and established linkages with potential relevant Research Infrastructures and the ENVRIPUs-project.

# **MEPROWARE:** Novel methodology for the promotion of treated wastewater reuse for Mediterranean crops improvement

Over the last number of decades, the decreasing availability of fresh water for the agricultural sector due to climate change and overexploitation of natural resources has raised the popularity of treated wastewater reuse. Wastewater treatment processes have reached high levels of technological advancement, providing treated reclaimed resources for multipurpose, ranging from safe restoration of natural water bodies to drinking standards. However, reuse still encounters resistance as users at different levels are not well informed about the potential use of these waters, the benefits when it comes to nutrient recovery for agriculture, and the range of suitable methodologies for treated wastewater applications. To address this issue and promote treated wastewater reuse, an integrated innovative methodology has been developed, published and applied in three demonstration sites cultivated with olives and grapevines

<u>MEPROWARE</u> introduces an innovative methodology towards treated wastewater reuse specifically addressing well-defined types of crops, agronomic practices, and water constraints that are typical to Mediterranean countries. The idea is to highlight the positive relationships between treated wastewater reuse, plant growth and crop productivity with specific relevance to the Mediterranean area. Acceptance amongst stakeholders has grown through their direct participation and implementation of the proposed methodology. Making nutrient use efficient and treated wastewater reuse practices more acceptable.

### **DROPLETS**



#### SPECIAL ISSUE "ECOHYDROLOGICAL REMOTE SENSING"

The water cycle is under major pressure due to the impacts of climate change, higher frequency and more intense extreme hydrological events, e.g., droughts. All water managers and governments need to put in place practical and real mitigation and adaptation measures to try and negate such impacts. In many cases the precise impact on ecosystems remains largely unknown, partly due to knowledge gaps on the joint regulation of water management, carbon fluxes as well as different temporal scales between the various processes at play.

Advancing the use of remote sensing to assess the factors controlling ecosystem responses to hydro-climatic conditions at different spatial and temporal scales is essential. The development of real-time monitoring systems of ecohydrological variables like evapotranspiration, gross primary productivity, net ecosystem exchange, or crop yields can help to inform policy decisions and conduct national and international action, especially in regions with scarce ground observations.

The aim of this <u>Special Issue</u> is to investigate functional relationships between hydrology and ecology at multiple spatial and temporal scales using data from land and atmosphere remote-sensing missions to advance the ecohydrological monitoring of terrestrial ecosystems.

Papers should be submitted online at <u>www.mdpi.com</u> by <u>registering</u> and <u>logging in to this website</u>. Once you are registered, <u>click here to go to the submission form</u>. The deadline for submissions is 31st December 2019. All papers will be peerreviewed. Accepted papers will be published continuously in the journal (as soon as accepted) and will be listed together on the special issue website. Research articles, review articles as well as short communications are invited. For planned papers, a title and short abstract (about 100 words) can be sent to the Editorial Office for release on <u>www.mdpi.com</u>

## **SPECIAL ISSUE ON CHALLENGES RELATED TO ANTIMICROBIAL RESISTANCE IN THE FRAMEWORK OF URBAN WASTEWATER REUSE** The <u>special issue</u> focuses on antimicrobial resistance and state-of-the-art research in relation to urban wastewater. This special issue is also part of the international conference <u>XENOWAC2018</u> that was held last October in Limassol, Cyprus with the title: "Challenges and solutions related to xenobiotics and antimicrobial resistance in the framework of wastewater reuse: Towards a blue circle society".

Contributions/Papers are accepted up to 31st January 2019 in the following thematic areas:

- Thematic area 1: fate of antimicrobial resistance in urban wastewater treatment plants;
- Thematic area 2: antimicrobial resistance: From urban wastewater treatment plants to the environment;
- Thematic area 3: emerging processes and technologies to meet urban treated wastewater reuse requirements in relation to antimicrobial resistance;
- Thematic area 4: risk assessment and policy development to tackle antimicrobial resistance in the urban water cycle.

## SPECIAL ISSUE IN CHEMOSPHERE ON "URBAN WASTEWATER REUSE AND CHEMICAL CONTAMINANTS OF EMERGING CONCERN"

This special issue addresses the topic of organic contaminants of environmental concern (CECs) in relation to the reuse of treated municipal wastewater and linking its impacts to environmental and human health. <u>Contributions</u> are accepted up to 30th April 2019 in the following thematic areas:

- Thematic area 1: fate of chemical contaminants of emerging concern (CECs) in urban wastewater treatment plants;
- thematic area 2: chemical CECs: from urban wastewater treatment plants to the environment;
- Thematic area 3: emerging processes and technologies to meet urban treated wastewater reuse requirements in relation to chemical CECs;
- Thematic area 4: bioassays/tests to support urban treated wastewater quality management;
- Thematic area 5: risk assessment and policy development to tackle chemical CECs in the urban water cycle.



## EUROPEAN ENVIRONMENT AGENCY BRIEFING 'WHY SHOULD WE CARE ABOUT FLOODPLAINS?

This recent <u>publication</u> analyses the potential benefits of restoring natural areas next to rivers that are covered by water during floods. According to the analysis, these areas can deliver valuable cultural and ecosystem services, including a costeffective alternative to structural flood protection. Climate change is expected to increase the number of both floods and droughts in different parts of Europe. During heavy rainfall, floodplains allow more space for the water to spread, preventing high flood waves that travel fast down the river. During dry seasons, floodplains slowly release the water they have stored, mitigating the worst impacts of droughts. Besides flood and drought protection, natural floodplains can prevent erosion, improve soil formation, purify water replenishing groundwater reservoirs and support the conservation of habitats and species, including many birds. However, the vast majority of European floodplain habitats are in either inadequate or at bad conservation status, the EEA briefing states.

## **OPPORTUNITIES**





## JPI OCEANS - MARTERA CALL

<u>The second MarTERA</u> call for for transnational research and innovation projects on maritime and marine technologies is open from 30th November 2018 to 29th March 2019. The call is initiated by ministries/funding organisations from Belarus, Belgium, France, Germany, Ireland, Malta, Norway, Poland, Romania, Spain and Turkey. The call has a budget of about 15 million EUR for collaborative research and innovation projects in the following areas:

- priority Area 1: Environmentally friendly maritime technologies
- priority Area 2: Development of novel materials and structures
- priority Area 3: Sensors, automation, monitoring and observations
- priority Area 4: Advanced manufacturing and production
- priority Area 5: Safety and security

The call document is available at the following link



## JPI AMR PRE-ANNOUNCEMENT CALL

JPIAMR pre-announced <u>a joint transnational research call for proposals</u> for innovative research projects on new or improved diagnostic and surveillance strategies, tools, technologies and methods. The call will support research projects that also have the potential for impact in areas where the risk and burden of <u>AntiMicrobial Resistance (AMR)</u> is greatest, such as in LMIC settings in Asia and Africa. AMR has become one of the major global health and development challenges of the 21st century.

The threat of AMR is particularly high in resource-limited and high-risk settings. This is linked to issues such as weak human and animal health systems; diverse means of food production, processing and consumption; food safety and food security; water, hygiene and sanitation challenges; and the global movement of people and goods. The projected call budget is approximately 20 million Euro.

#### **EVENTS**



## 5-6 FEBRUARY 2019, SMAGUA 2019 BROKERAGE EVENT, ZARAGOZA, SPAIN

Companies attending the <u>Smagua</u> International Water and Irrigation exhibition have an excellent opportunity to meet interesting professionals from all over the world at this brokerage event organised by the Confederación de Empresarios de Aragón/Enterprise Europe Network. In these B2B sessions you will have 30 minute bilateral meetings with a variety of participants of your choice. On 5-6<sup>th</sup> February 2019, the Smagua International water and irrigation exhibition will celebrate 45 years of existence. The event has become the essential meeting point for the sector thanks to its clearly innovative position, the quality of its technical conferences and the numerous presentations of products, equipment and technological solutions. Click <u>here</u> to register.

## EGU 2019, Vienna, Austria, 7-12 April 2019

It is possible to <u>submit abstract</u> up to 10<sup>th</sup> January 2019 in the <u>session</u> "Hydroclimatic change and unchange: exploring the mysteries of variability, nature and human impact" of <u>EGU 2019</u>.

#### 1-5 JULY 2019, NOVATECH, LYON, FRANCE

<u>NOVATECH</u> promotes strategies and solutions for integrated and sustainable water management in the city, with a focus on stormwater management. Within the context of an uncertain future due to increasing urban development, along with a changing climate, stormwater management is a major concern, requiring innovative answers, fuelled by the latest research and proof of concept in the field. To create and implement strategies at the catchment scale, to better characterise runoff and wet weather flow, to design and manage alternative solutions to traditional sewer systems and to better plan and integrate them within the urban landscape, to promote stormwater management as a key component of the sustainable city.

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