



2016 Water JPI Exploratory Workshop
Monday 14th November 2016
Radisson Blu Royal Hotel, Dublin 2

Prepared by Alice Wemaere & Áine Murphy



Programme in Brief

When?	What?	Where?
9am – 9.30am	<i>Tea / Coffee Break</i>	<i>First Floor Break Out Area</i>
9.30am – 11.15am	Plenary Session - 1	Swift Suite 1 & 2
11.15am – 11.45am	<i>Tea / Coffee Break</i>	<i>First Floor Break Out Area</i>
11.45am – 1.15pm	Break Out Sessions	
	<i>Session-1: Enabling Sustainable Management of Water Resources</i>	Swift Suite 1 & 2
	<i>Session-2: Regional Perspectives</i>	Field Suite 1
	<i>Session-3: Strengthening Socio-Economic Approaches to Water Management</i>	Field Suite 2
1.15pm – 2.15pm	<i>Lunch & Tea / Coffee</i>	<i>Ground Floor Restaurant</i>
2.15pm – 3.15pm	Break Out Sessions (contd.)	<i>As above</i>
3.15pm – 3.45pm	<i>Tea / Coffee Break</i>	<i>First Floor Break Out Area</i>
3.45pm – 4.30pm	Review of the Fiches Prepared	Swift Suite 1 & 2
4.30pm – 5.30pm	Plenary Session - 2 Round Table Discussion	Swift Suite 1 & 2



Short Biographies of Speakers

Dominique Darmendrail

On obtaining her Doctorate (Hydrogeology/Hydrogeochemistry), Dominique Darmendrail began her professional career as a consulting engineer in water and environmental studies, specializing in identification, pollution diagnosis, risk assessment and remediation, the impact of subsurface activities on the environment (waste dumps, operating and abandoned industrial sites), and the inventory of water resources.

In July 1998, Dr. Darmendrail was appointed Head of BRGM's Environment and Process Division. She is also a member of the Steering Group for the European research project CLARINET (Contaminated Land Risk Network) where she is particularly concerned with water protection work. She was also scientific advisor in several national, European and international working groups (e.g. Metaleurop commission, Tchernobyl Commission, ADEME funding commission, evaluation of research proposals for DG Research...).

From May 2010 to July 2014 she was European Affairs representative within BRGM. She is also vice-chair of the Environment committee of the CEEP Europe (European Committee of Public enterprises). Since July 2014, she became programme manager on Environmental technologies at the French Research Agency.

Since September 2008, she is also the secretary general of the Common Forum on Contaminated Land in Europe (www.commonforum.eu) and of the International Committee on Contaminated Land (www.iccl.ch), networks of contaminated land policy experts and advisors created in 1994.

Since November 2014, she is the coordinator of the EU Joint Programming Initiative (www.waterjpi.eu) which aims at coordinating water related research, development and innovation (RDI) programmes, and address issues such as end-user participation, progress in the integration of RDI agendas and programmes.

Alice Wemaere

Dr Alice Wemaere has a BSc. and MSc. in Chemical Engineering and a MSc in Environmental Sciences. She holds a PhD looking at Lake eutrophication and GIS modelling of nutrient loadings from a catchment into surface waters. Alice has been working with the EPA Research programme since 2004. She is currently managing the EPA Water & Soils research programmes and has in the past managed the EPA Research Publications and website. She is the national contact point for the Water JPI and Horizon 2020 Societal Challenge 5 (Climate Action, Environment, Resource Efficiency & Raw Materials).

Jaap Kwadijk

Prof. Dr. Jaap Kwadijk is director of science at Deltares, the Netherlands research institute for applied research in the field of water, subsurface and infrastructure. He is also part time Professor modeling water management and climate at the Twente University. Jaap Kwadijk received his PhD at the University Utrecht in 1993 on the impact of climate change on the River Rhine. Since 1997 he has been employed at WL|Delfthydraulics/Deltares where he has been involved in hydrological, water resources and climate change impact assessment studies. He joined in many international projects on flood forecasting, and water resources management. He lived for two years in Egypt where he was team leader of an international group of scientists and consultants that aimed at developing long term strategies for the water management of lake Nasser.



Dagmar Behrendt Kaljarikova

Dagmar Behrendt Kaljarikova works as an official in the 'Clean Water Unit' of the Directorate General for the Environment of the European Commission since September 2012. She is responsible in particular for the European Innovation Partnership on Water (EIP Water), facilitation of the Urban Water Agenda 2030, Natural Water Retention Measures (NWRM), as well as the development of a potential EU-level instrument on water reuse. She was also in charge of the coordination of opportunities offered under various EU funds for the implementation of EU water policies in the Cohesion Policy 2014-2020.

From 2010 until 2012, Dagmar Behrendt Kaljarikova worked at the EU Delegation to the Republic of Moldova, where she was responsible for a number of EU-funded projects in the area of environment, energy, transport and regional development, as well as development partners' coordination in the field of environment (in particular water management) and energy. Before this assignment, Dagmar Behrendt Kaljarikova has been working in international relations, namely representing the European Commission in accession/EU membership negotiations of Hungary, Turkey and Montenegro, from 2003 until 2010. Before joining the European Commission, Dagmar Behrendt Kaljarikova has been representing the Czech Ministry of Environment in the EU accession negotiations for Chapter Environment, from 1998 until 2003.

Dagmar Behrendt Kaljarikova is an environmental engineer with postgraduate studies in environmental law.

Antonio Lo Porto

Antonio Lo Porto (1956) is the Chair of Euraqua (the network of the public reference Research Institutes on water in 25 EU Member States), Chair of the St. Advisory Board of the Water JPI, member of the Advisory Board of the FACCE JPI (Food, Agriculture and Climate Change), of several EIP-Water and WssTP (EU Technological Platform on Water) Action Groups. He is member of the Strategic Coordination Group of the Common Implementation Strategy (SCG CIS) of the EU Water Framework Directive. He is research scientist at IRSA, active in the field of Integrated Water Resources Management, diffuse water pollution, EU WFD implementation, River Basin Planning and irrigation management. His main interests are devoted to the Mediterranean, to semi-arid areas, to intermittent rivers and to drought-stressed environments. He has been involved in several EU funded R&D projects (FP4 to H2020), as well as in several COST actions as Management Committee member. Associated Editor of the J. of Hydrology and member of the Editorial Boards and reviewer for several scientific journals in the field of water resources management. Chairman and/or Scientific Committee member in several international conferences including EU, India, USA, China, Chile, and Brazil. Experience in working at river basins in Italy, Europe, Tunisia, India, and Vietnam. He is author of more than 80 scientific papers.

Eleanor Jennings

Dr Eleanor Jennings is director of the Centre for Freshwater and Environmental Studies, Dundalk Institute of Technology. She has extensive research experience in freshwater systems in Ireland and globally. Her main areas of interest are nutrient cycling and modelling of catchment and in-lake processes, including climate change impacts. Her current research topics include dissolved organic carbon in humic systems, assessment of faecal indicator bacteria in sediments, effects of cattle exclusion from streams on water quality, and use of high frequency data to inform near real-time modelling of lake state. She is a member of GLEON (Global Lake Ecological Observatory Network), chair of EU COST ACTION NETLAKE (Networking Lake Observatories in Europe), and coordinator of the upcoming MANTEL (Management of Climatic Extreme Events in Lakes & Reservoirs for the Protection of Ecosystem Services) Innovative Training Network.



Steffen Zacharias

STEFFEN ZACHARIAS studied Land Management and Environmental Protection at the University of Rostock, Germany, earning a PhD in Soil Physics in 1999. Since 2007 he is a senior scientist at the UFZ Helmholtz Centre for Environmental Research in Germany and coordinator of the TERENO observatory Harz/Central German Lowland. He has many years of experience in international science affairs with a specific focus on the soil-water nexus and contributed to large EU FP7 and Horizon 2020 projects dedicated to integrated environmental research, monitoring and exploration (e.g. EXPEER, eLTER-H2020). Furthermore, he was actively involved in the establishment of several European research infrastructure networks like ICOS, CZO-Europe, COSMOS-Germany, eLTER-Europe.

Anne-Marie van Wezel

Dr. Annemarie van Wezel (MSc Biology, PhD environmental chemistry and toxicology) has over 25 years of experience as scientific researcher in risk assessment, toxicology and chemistry, and environmental policy evaluation. She published over 45 papers in peer-reviewed scientific journals, and numerous reports in the context of (environmental) policy. She is experienced in working close to the political process and in interaction with press. She has many years experience in managing complex interdisciplinary research projects, and in management of research groups. She is well-experienced in successfully managing and building research groups up to ca. 60 people. She is serving as a programme director on environmental risks of nanochemicals (7,5 Meuro) in the FES funded NanonextNL, and leads the consortium 'Shalegas and Water' funded by NWO/ALW and water utilities. She is a member of the Technical Soil Committee and the Dutch Board on authorization of plant protection products and biocides. She is a member of the Health Council of the Netherlands, signalling committee Environment and Health. She is serving as a chair (by picket) for the Crisis Expert Team for environmental and drinking water incidents. She currently serves as a principal scientist and professor on water quality and health at KWR Watercycle Research Institute and Utrecht University.

Ap van Dongeren

Ap van Dongeren is a waves and morphology expert with experience on wave dynamics and coastal impact. He has been project leader on a number of national and international projects for the Dutch government, Dutch water boards, the Office of Naval Research, the Asian Development Bank and the European Union.

He has been Work Package Leader for the FP7-MICORE project, which has developed online dune erosion models for the European Union. He has led the Deltares effort to develop an open-source dune erosion model, called XBeach. Using this model, he has lead projects to assess the long wave transformation and dissipation on (Australian) coral reef coasts.

He has led a number of projects for the Office of Naval Research (U.S. Navy) concerning the development of Delft3D as an open-source model for the Navy, the assessment of this model on the San Diego Bight, the development of a tool to quickly set up models and the development of a method to derive near shore bathymetries from video data.

He served on the U.S. National Academies' Committee on Coastal Risk Reduction for the U.S. Corps of Engineers.

He is the program manager on the strategic roadmap on "Hydro- and Morphodynamics during Extreme Events", and is a member of the Deltares Scientific Board. He is currently Coordinator on an EU-FP7 project called RISC-KIT on coastal resilience and extreme coastal events.



Terje Tvedt

Terje Tvedt, Professor in Global History (University of Oslo) and in Geography (University of Bergen). He has published very extensively on water-society issues, and has been the Series Editor of the nine-volume series "A History of Water", and recently published "Water and Society - New Perceptions on History and Social Development". He has also made a number of award-winning TV-documentaries on water, one of which was bought by NETFLIX (2016) for world-wide distribution ("The Future of Water"). In 2015 he won International Water History Associations prize for "excellent research".

Carlos Dionisio Pérez-Blanco

Carlos Dionisio is an AXA Postdoctoral Fellow at Centro Euro-Mediterraneo sui Cambiamenti Climatici (CMCC) and research associate at Fondazione Eni Enrico Mattei (FEEM). Over the past eight years he has been working on topics related to water and agricultural economics in the context of national and EU research projects at FEEM, CMCC, Alcalá University (UAH), IMDEA Water, Salamanca University and Spanish Research Council. He has also worked as a lecturer at UAH and Ca' Foscari University of Venice, and has been a visiting fellow at Middlesex University, University of Queensland and UAH.

Carlos Dionisio holds a PhD in Economics from UAH and Complutense University of Madrid. He also holds a MSc in Applied Economic Analysis from UAH and Complutense University of Madrid and a MSc in Development Economics and International Co-operation from the University of Rome, Tor Vergata. He received his degree in economics from the University of Salamanca. Carlos Dionisio joined FEEM and CMCC in November 2013. In 2015 he was awarded a Marie Skłodowska-Curie Fellowship at FEEM. In 2016 he was awarded an AXA Fellowship at CMCC. The objective of his research is advancing in the design and development of water markets and insurance arrangements in the agricultural sector that contribute to the implementation of an effective and efficient water policy mix in the EU.



Short Biographies of Panellists

Panos Balabanis

Since 1990, Panagiotis Balabanis is working at the European Commission, DG Research and Innovation and he is actually Deputy Head of the of the Eco-Innovation unit, dealing with issues related to water, systemic eco-innovation, resource efficiency and circular economy. During those years Panagiotis Balabanis has been involved in the definition and implementation of successive research programmes in the field of environment and sustainable development. Panagiotis Balabanis holds a Diploma from the Agricultural University of Athens, Greece, a D.E.A (Diplome de d'Etudes Approfondies) and a Doctorate in "Mechanic of mass and energy exchanges", from the University J.Fourrier, Grenoble I, France. Before joining the European Commission he worked as research associate at the Agricultural University of Athens.

Richard Howell

Richard Howell is the Head of the Research & Codex Division within the Irish Department of Agriculture, Food & the Marine (DAFM). As such he has overall responsibility for the operation of DAFM's 3 competitive research funding programmes – FIRM (food), Stimulus (agriculture), and CoFoRD (forestry). He was deeply involved in Ireland's National Research Prioritisation Exercise (NRPE) and led the cross-funder group that developed the 'SHARP' strategic research and innovation agenda for the 2 food related priority areas. He was also DAFM's representative on the Inter-Departmental Committee that developed the Innovation 2020 Report and now sits on its Implementation Committee.

Richard is the lead Irish delegate to the Programme Committee for Societal Challenge 2 of the EU Horizon 2020 RTD Programme having served in a similar capacity in its predecessor, FP7; is the alternate Irish delegate to the Standing Committee on Agricultural Research (SCAR); and was a member of the EU Commission's Bioeconomy Panel from 2013 to 2015. He is the lead Irish member of the Governing Board of FACCE, the Joint Programming Initiative on "Agriculture, Food Security and Climate Change", and is the Irish representative on the Governing Council of the Global Research Alliance on Agricultural Greenhouse Gases. He also heads up the Irish delegation to annual sessions of the Codex Alimentarius Commission.

Richard has spent most of his career with DAFM in Dublin although he spent most of the 1990's abroad on secondment, first to DG Agri of the EU Commission and then as Agricultural Attaché in the Irish Embassy, London.

Richard has a primary degree in agricultural science from University College Dublin and a Masters in Food Regulatory Affairs from the University of Ulster, Northern Ireland.

Torill Engen Skaugen

Torill Engen Skaugen is the Norwegian program coordinator of JPI Climate, working as a Special Adviser at the Research Council of Norway (RCN). She was trained as a hydrologist from the University of Oslo. She is involved in national and international climate change related research at the RCN and has a special responsibility regarding climate services. She also serves as a national contact person (NCP) for Horizon 2020 Social Challenge 5. Torill Engen Skaugen has a carrier as a researcher at the Norwegian Meteorological institute (MET) for 12 years, working on climate services related challenges and hydrological issues. She was also head of Division for model and climate analyses in the Research and development department at MET for some years.



2016 Water JPI Exploratory Workshop

Theme 5 - Closing the Water Cycle Gap

Improving sustainable water resource management

Venue: Radisson Blu Royal Hotel – 8 Golden Lane, Dublin 2 and view location [link](#) - Dublin, Ireland
Date: Monday 14th November 2016 - 9.30am – 5.30pm

Aims & Objectives

The objectives of the 2016 Exploratory Workshop are to:

- ⇒ Gather relevant experts in the topic, which will present and discuss their findings to other experts and stakeholders (end-users, policy makers and industry).
- ⇒ Identify Knowledge Gaps and RDI Needs in that area (Emerging needs / Flexible Fiches)
- ⇒ Further elaborate the SRIA RDI Needs

Video Link:

[Join WebEx meeting](#)

Meeting number: 848 207 441

Meeting password: 2016WaterJPI

Expected Contribution from the Attendees

- **Water JPI MB & GB members, Water JPI ABs members, WaterWorks2014 partners:**
 - ⇒ Expected contribution to the workshop: Participate in the discussions – Chair/Moderate for ABs and/or WaterWorks2014 partners
- **Guest Speakers from relevant FP7/H2020/other EU-funded projects**
 - ⇒ Expected contribution to the workshop: 20-minute presentation during breakout sessions & participate in the discussions
 - ⇒ To be covered in the presentation: *Overview of research project -Assessment of gaps – How does this fit/complimentary to the Water JPI SRIA*
- **Invited Speakers – Plenary Session:**
 - ⇒ Expected contribution to the workshop : Participate in the discussions & 20-minute presentations on:
 - *Scientific Perspective on the Water JPI SRIA RDI needs within Theme 5*
 - *Policy Perspective on the Water JPI SRIA RDI needs within Theme 5*
 - *End-Users/Economic Perspective on the Water JPI SRIA RDI needs within Theme 5*
- **Invited Round Table Panellists:**
 - ⇒ Expected contribution to the workshop : Each panellist gets 5 to 10 minutes (depending on final number of panellists) to present their perspective¹ on the following key questions:
 - *Q1: How can you make calls more attractive to industry and bringing the research outputs to market?*

¹ No slides



- *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?*
- **Nominated national experts** (academics, economic sector, policy implementation / managers,):
 - ⇒ Expected contribution to the workshop: Participate in the discussions
- **Others:** if places are still available towards the end of October – online registration will be advertised
 - ⇒ Expected contribution to the workshop: Participate in the discussions



Programme

9am – 9.30am: Registration & Tea / Coffee – First Floor Break Out Area

9.30am: Welcome

Matt Crowe (Environmental Protection Agency (EPA))

Plenary Session

Chaired by: Brian Donlon (EPA, Ireland) – Swift Suite 1 & 2

9.40am: General Introduction on the Water JPI & Strategic Research & Innovation Agenda

Dominique Darmendrail (Agence Nationale de la Recherche (ANR), France)

9.55am: Funding Instruments from the JPI

Alice Wemaere (EPA, Ireland)

10am: Water JPI Scientific & Technological Board - Scientific Perspective on the Water JPI SRIA RDI needs within Theme 5

Jaap Kwadijk (Deltares, The Netherlands)

10.20am: Policy Perspective on the Water JPI SRIA RDI needs within Theme 5

Dagmar Behrendt Kaljarikova (European Commission - DG ENV) [via Video Link](#)

10.40am: Water JPI Stakeholders Advisory Group End-Users/Economic Perspective on the Water JPI SRIA RDI needs within Theme 5

Antonio LoPorto (IRSA-CNR - Water Research Institute, Italy)

11am: Questions & Answers

11.15am – 11.45am: Tea / Coffee Break - First Floor Break Out Area



Breakout Sessions

Session 1			Session 2			Session 3		
Water Subthemes 5.1.4	JPI 5.1.1 to	SRIA	Water Subthemes 5.1.6 & 5.1.7	JPI	SRIA 5.1.5, 5.1.6 & 5.1.7	Water Subthemes 5.2.2 & 5.2.3	JPI	SRIA 5.2.1, 5.2.2 & 5.2.3
5.1.1. Promoting water RDI infrastructures for a better understanding of the water hydrological processes on different scales			5.1.5. Mitigating water stress in coastal zones			5.2.1. Integrating economic and social analyses into decision-making processes		
5.1.2. Promoting adaptive water management for global change			5.1.6. Securing freshwater in the Mediterranean and Baltic basins			5.2.2. Connecting socio-economic and ecological issues		
5.1.3. Implementing managed aquifer recharge and other natural water retention measures			5.1.7. Securing freshwater in the Danube			5.2.3. Promoting new governance and knowledge management approaches		

Session Format:

- 20-minute presentation of a relevant EU-Project – Overview of research project - Assessment of gaps – How does this fit/complimentary to the Water JPI SRIA
- 20-minute presentation of a relevant EU-Project – Overview of research project - Assessment of gaps – How does this fit/complimentary to the Water JPI SRIA
- 10-minute Questions & Answers
- 40-minute group discussion moderated by the chair on key knowledge gaps in the area



Breakout Session-1: Enabling Sustainable Management of Water Resources²

Chaired by: Kristina Laurell (FORMAS, Sweden)

Rapporteurs: Miguel Ángel Gilarranz (MINECO, Spain) & Alice Wemaere (EPA, Ireland)

Swift Suite 1 & 2

- 11.45am: NETLAKE COST Action: Networking Lake Observatories in Europe**
Eleanor Jennings (Dundalk Institute of Technology, Ireland)
- 12.05pm: Terrestrial Environmental Observatories (TERENO)**
Steffen Zacharias (Helmholtz Centre for Environmental Research GmbH – UFZ, Germany)
- 12.25pm: Questions & Answers**
- 12.35pm: Group discussions moderated by the chair on key knowledge gaps in the area**

Breakout Session-2: Regional Perspectives³

Chaired by: Diego Intrigliolo (CSIC-CEBAS, Spain)

Rapporteurs: Graham Leeks (NERC, UK) & Brian Donlon (EPA, Ireland)

Field Suite 1

- 11.45am: SOLUTIONS for present and future emerging pollutants in land and water resources management**
Annemarie van Wezel (KWR Water B.V., The Netherlands)
- 12.05pm: RISC-KIT: Resilience-Increasing Strategies for Coasts - toolKIT**
Ap van Dongeren (Deltares, The Netherlands)
- 12.25pm: Questions & Answers**
- 12.35pm: Group discussions moderated by the chair on key knowledge gaps in the area**

Breakout Session-3: Strengthening Socio-economic Approaches to Water Management⁴

Chaired by: Daniel Hellstrom (The Swedish Water & Wastewater Association, Sweden)

Rapporteurs: Prisca Haemers (IenM, The Netherlands) & Aine Murphy (EPA, Ireland)

Field Suite 2

- 11.45am: History of water-society relations: A Presentation of lessons learned**
Terje Tvedt (University of Bergen, Norway)
- 12.05pm: EPI-WATER: Evaluating Economic Policy Instruments for Sustainable Water Management in Europe & ENHANCE project: Enhancing risk management partnerships for catastrophic natural disasters in Europe**
Carlos Dionisio Pérez-Blanco (Fondazione Eni Enrico Mattei, IT)
- 12.25pm: Questions & Answers**
- 12.35pm: Group discussions moderated by the chair on key knowledge gaps in the area**

1.15pm – 2.15pm: Lunch and Tea / Coffee Break - Ground Floor Restaurant

² Water JPI SRIA Subthemes 5.1.1 to 5.1.3

³ Water JPI SRIA Subthemes 5.1.5 to 5.1.7

⁴ Water JPI SRIA Subthemes 5.2.1 to 5.2.3



2.15pm – 3.15pm: Breakout Sessions (ctd.)

- 60-minute group discussion moderated by the chair on key knowledge gaps in the area, preparing Overall Summary Fiche on the top 3 knowledge gaps identified, including: Impacts – Challenge – Scope – Relevance to Policy – How to facilitate Knowledge Transfer

3.15pm – 3.45pm: Tea / Coffee Break - First Floor Break Out Area

Plenary Session

Chaired by: Padraic Larkin, Water JPI Co-chair
Swift Suite 1 & 2

3.45pm – 4.30pm: Review of the Fiches Prepared

- 5-minute summary by the chairs of the breakout session
- 30-minute Group discussion

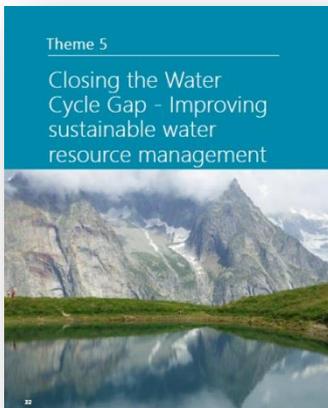
4.30pm – 5.30pm: Round Table Discussion

- Panellists include:
 - European Commission, DG Research & Belmont Forum: Panos Balabanis - [via Video Link](#)
 - Water JPI: Dominique Darmendrail (ANR, FR)
 - FACCE JPI: Richard Howell (DAFM, IE)
 - JPI Ocean: Invited (awaiting nomination)
 - Climate JPI: Torill Engen Skaugen (RCN, Norway)

5.30pm: Close of the Workshop



Additional Information



In many regions of Europe, it may be difficult to reconcile water supply and demand both in terms of quantity and quality. The aim of the RDI actions under this theme is, therefore, to bridge the gap in “supply–demand” by enabling the sustainable management of water resources. Innovative strategies and approaches will be developed where appropriate.

Europe is not an arid continent but water scarcity has become a concern for millions of people. In quantitative terms, the availability of water for different uses is threatened by more frequent droughts. However, leakages in water supply infrastructures, greater demand on freshwater for agriculture and the lack of appropriate water-saving technologies will collectively increase pressure on limited water resources in many regions. At the same time, water consumption for public, industry and agricultural use is expected to increase by 16% by 2030. In qualitative terms, water pollution from nutrients, organic matter, heavy metals and other chemical by-products pose a serious threat to water availability. Research needs to bring together our knowledge in ecology, social sciences, economics, geography, environmental sciences, geosciences and technology. Research is also required to better integrate water policy with other public policies (agricultural, industrial, domestic, urban, regional planning, transport, energy, biodiversity). In a context of rising tensions on water, tools for monitoring, forecasting, information and decisions are needed to anticipate and manage such tensions and avoid conflict. Required water RDI infrastructures include, for example: experimental catchments and field labs, test basis for new integrated hydrological models or for new sensors, remote observation systems, and also the related database and big data processing applications, etc.

Theme 5 is composed of:

- **Subtheme 5.1.** Enabling Sustainable Management of Water Resources;
- **Subtheme 5.2.** Strengthening Socio-economic Approaches to Water Management

To view the full description of Theme 2, please consult the [Water JPI SRIA 2.0](#)



Theme 5 - Expected Impacts

Impact Level	Description
<p>Social</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> Increased public awareness and acceptance of sustainable water resources management; Protecting humans against health risks if additional water sources, such as reuse, are made available; Greater awareness of water-reuse opportunities, and of the cost (including energy) of treatment and supply; New governance in close collaboration with all stakeholders, leading to shared water resources uses and a more effective implementation of water policy; Improved water management leading to alleviation of societal tensions, as the impacts of water crises are not equally distributed in society, and they can be a source of conflict between different water users.
<p>Economic</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> Supporting the better allocation of water resources between competing user demands, via using economic instruments such as taxes and subsidies can act as incentives for prudent water management; Mitigation measures and short-term solutions to overcome water scarcity (e.g. water transfers) being included in the assessment of costs related to scarcity or droughts and the assessment of economic vulnerability of users and assets.
<p>Technological</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> Improvement of the techniques for managing of water resources (aquifer recharge, Decision Support Systems [DSS], inter alia) with interoperability of databases, sensors and combined socioeconomic and physical water models; Development of new instruments, e.g. sensors and geo-information systems; Development of practical, low-cost technologies treating wastewater to produce resources safe for reuse.
<p>Environmental</p>	<p>Contribute to:</p> <ul style="list-style-type: none"> Maintaining water quantity and quality; Improving the balance between water availability & demand; Ensuring a healthy ecosystem by maintaining environmental flows; Preventing the loss of biodiversity and the degradation of landscape quality.
<p>Policy</p>	<p>Relevant to:</p> <ul style="list-style-type: none"> EU Regulations & Policies, in particular: 7th Environment Action Programme; Water Blueprints; Water Framework Directive; Groundwater Directive; Marine Strategy Framework Directive, Floods Directive; Water Scarcity & Drought Strategy; "Towards a Circular Economy" Communication; Roadmap to a Resource Efficient Europe; "Maximisation of water reuse in the EU (a new EU instrument)" Roadmap; Common Agricultural Policy (CAP); UN Sustainable Development Goals (SDGs), especially: SDG 6 "Ensure availability and sustainable management of water and sanitation for all"; SDG 11 "Make cities inclusive, safe, resilient and sustainable"; and SDG 13 "Take urgent action to combat climate change and its impacts".



Registration List

as of 09/11/2016

First Name	Surname	Organisation	Country
Stephane	Aymard	French Embassy in Ireland	France
Carlos	Ayora	Spanish National Research Council	Spain
Per	Backe-Hansen	The Research Council of Norway	Norway
Panos	Balabanis	European Commission	EC
Berit	Balfors	KTH Royal Institute of Technology	Sweden
Dagmar	Behrendt Kaljarikova	European Commission	EC
Jos	Brils	INSPIRATION Project (Deltares)	Netherlands
Michael	Bruen	University College Dublin	Ireland
Gökçe	Ceylan	Ministry of Forestry and Water Affairs	Turkey
Pierluigi	Claps	Politecnico di Torino	Italy
Matt	Crowe	Environmental Protection Agency	Ireland
Dominique	Darmendrail	Water JPI Coordinator	France
Esther	Diez Cebollero	IRSTEA	France
Brian	Donlon	Environmental Protection Agency	Ireland
Nathalie	Dörfliger	BRGM	France
Mustafa Berk	Duygu	Ministry of Forestry and Water Affairs	Turkey
Staffan	Filipsson	IVL Swedish Environmental Research Institute	Sweden
Patrice	Garin	IRSTEA	France
Jeremy	Gault	DANUBIUS Project (University College Cork)	Ireland
Miguel Ángel	Gilarranz	MINECO	Spain
Laurence	Gill	Trinity College Dublin	Ireland
Prisca	Haemers	IenM	Netherlands
Michael	Hartnett	National University of Ireland, Galway	Ireland
Harri	Hautala	Academy of Finland	Finland
Daniel	Hellström	Svenskt Vatten - the Swedish Water & Wastewater Association	Sweden
Richard	Howell	FACCE JPI (Department of Agriculture, Food and the Marine)	Ireland
Diego	Intrigliolo	Spanish National Research Council	Spain
Eleanor	Jennings	Dundalk Institute of Technology	Ireland
Bjørn	Kaare Jensen	GEUS	Denmark
Øyvind	Kaste	Norwegian Institute for Water Research	Norway
Maria	Kennedy	UNESCO	Netherlands
Jussi	Kukkonen	University of Jyväskylä	Finland
Jaap	Kwadijk	Deltares	Netherlands
Padraic	Larkin	Water JPI Co-Chair	Ireland
Kristina	Laurell	FORMAS	Sweden



First Name	Surname	Organisation	Country
Graham	Leeks	NERC CEH	United Kingdom
Antonio	Lo Porto	Water Research Institute IRSA-CNR	Italy
Elve	Lode	Talinn University	Estonia
Ion	Marin	Center of International Projects	Moldova
Hans-Martin Friis	Moller	Kalkundborg Utility	Denmark
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