Welcome to the AQUACROSS second newsletter!







The second AQUACROSS newsletter is here! AQUACROSS is a Horizon2020 project that aims to support EU efforts to protect aquatic biodiversity and ensure the provision of aquatic ecosystem services by furthering knowledge, assessment and implementation of ecosystem-based management. The project has a pan-European consortium of 16 partners and began in June 2015, running until the end of November 2018.

You can stay in touch with us via the <u>project website</u> and <u>Twitter</u>, and access our latest research publications on <u>Research Gate</u>.

Two years in and next steps

We have been very busy since our first newsletter and wanted to share with you some highlights from the last year and direct links to some of our recent reports for your easy access.

In this second year, AQUACROSS analysed key environmental policies that potentially increase or reduce aquatic biodiversity loss (<u>D2.1</u>). This policy review focused on understanding how the **ecosystem-based management** (EBM) concept could potentially be used to bring together different policy objectives, which can help form a foundation to better protect aquatic ecosystems and their biodiversity. This work also looked into how key data and information about these environments are gathered (<u>D2.2</u>). With better information and data, society can make knowledge-based decisions that promote the health and sustainable use of these environments. To this end, AQUACROSS established a beta version of an <u>Information Platform</u>, which provides public access to relevant information on aquatic ecosystem services.

The AQUACROSS **Innovative Concept** (<u>D3.1</u>) and its **Assessment Framework** (<u>D3.2</u>) were developed with the aim of understanding the complex interactions between natural and human systems in aquatic environments. This work translates relevant concepts to broad audiences from diverse disciplines and lays the foundation for an integrative framework that can be applied to diverse aquatic habitats and systems.

AQUACROSS also provides a solid cornerstone to combine scientific disciplines, such as socio-economics, ecology and stakeholder knowledge. Detailed guidance has been developed to identify relevant threats to aquatic biodiversity (<u>D4.1</u>) as well as to assess links between freshwater biodiversity and ecosystem services at different scales (<u>D5.1</u>). AQUACROSS has also performed a revision of suitable models and tools (<u>D7.1</u>) that can allow the integration of the ecosystem services concept into decision-making. Our most recent available work includes an exploration on the development of participatory scenarios (<u>D7.2</u>) relevant for the practical application of EBM under local conditions.

Through the work undertaken thus far, the project will continue its integrative work across aquatic realms and governance levels. Upcoming work will include a revision and guidance on indicators and methods to assess responses for EBM in relation to the various EU aquatic ecosystems. D8.1 is expected to be available around the Christmas break.

The AQUACROSS case studies

studies throughout Europe. The work in the case studies is embedded in all parts of the project to ensure information exchange, integration across ecosystems, as well as interaction between disciplines. The case studies are a major source of information and data and will allow the co-creation of concepts and products with policy and relevant stakeholders to ensure results are useful to managers and policy makers, thereby ensuring uptake and impact of project results. The case studies' storylines have been developed.



The work has progressed significantly since you heard from us last and many key research challenges are beginning to take form and are highlighted in the different case studies. Examples of these include:

- How can we improve the knowledge base for stakeholders about ecosystem services to allow a more informed decision-making (covered in <u>all CS</u>)?
- What are local level trade-offs between ecosystem services and beneficiaries/sectors which win or lose (covered in all CS)?
- What synergies and/or gaps between local policy goals exist and how does this effect biodiversity (covered in <u>all CS</u>)?
- What priority areas (spatial) for action can be identified (covered in CS2 Spain-Morocco; CS3 Danube)?
- How can integrated management of complex aquatic systems support biodiversity gains (<u>CS1 North Sea</u>;
 <u>CS2 Spain-Morocco</u>; <u>CS3 Danube</u>; <u>CS4 N. Ireland</u>; <u>CS5 Portugal</u>)?
- What opportunities for increased cooperation of stakeholders and improving governance are available through ecosystem-based management (<u>CS4 N. Ireland</u>; <u>CS6 Sweden</u>; <u>CS7 Switzerland</u>; <u>CS8 Azores</u>)?
- What communication methods and tools to support decision makers and stakeholders are available to integrate knowledge into management (CS1 N. Sea; CS5 Portugal; CS7 Switzerland; CS8 Azores)?

Shaping AQUACROSS Research and Impact - Event

On the 13th of September, 2017, AQUACROSS hosted a one day event in beautiful Vienna, <u>Shaping AQUACROSS Research and Strengthening Impact</u>. It brought together members of the AQUACROSS consortium with <u>Science Policy Business Think Tank</u> representatives, and five representatives from the eight AQUACROSS's <u>case studies</u>. The day provided an opportunity to collaborate and discuss key management challenges relevant to the case studies and identify critical points for action to ensure impact and legacy of the

project.

After reflecting on progress made by AQUACROSS to date, the morning session focused on the practical application of ecosystem-based management to protect aquatic biodiversity in the case studies. The afternoon session considered the potential legacy of the project – in terms of scientific and policy integration and impact, business development and long-term contribution to society – and how this impact can be maximised over the last year of the project and beyond. Presentations on achieving impact within the scientific, global, and business communities were made by <u>Daniel Hering</u> (University Duisburg-Essen, coordinator of the FP7 MARS project), <u>John Matthews</u> (Alliance for Global Water Adaptation, AGWA) and <u>Christine Valentin</u> (World Ocean Council), which fueled the discussion.

A <u>synthesis</u> summarising the event and key messages has been published. All presentations, agenda and participants list are also <u>available online</u>.

Consortium meeting in Vienna

Vienna also hosted the **AQUACROSS Second Consortium Meeting**, over the 12th, 14th, and 15th of September 2017. The meeting was attended by 40 consortium members, representing AQUACROSS' 16 <u>research partners</u>. As well as providing a welcome chance for the consortium to meet in person, the meeting provided a focused space for <u>work packages</u> and <u>case studies</u> to present results, provide feedback, and jointly discuss progress with the work. A focus was on applying the more theoretical work developed in the project on the ground in the AQUACROSS case studies in the project's final year.



Introducing our next briefs

... Next AQUACROSS policy brief:

Further to the previous Policy Brief on <u>Managing aquatic biodiversity: from local to global - an EU</u> perspective, which introduced AQUACROSS research to its target audience, the second

AQUACROSS project Policy Brief will address policy integration at different levels. In more concrete terms, policy integration concerns the complex management of cross-cutting issues that go beyond the boundaries of established policy fields or specific legal mandates of individual departments. The focus of this brief will be on horizontal rather than on vertical integration, i.e. integration between different departments or policy fields, as opposed to between different levels of government. This Policy Brief aims at presenting areas where we observe major potential for further integration to both policy-makers and a broader audience. Moreover, this Brief will acknowledge key areas that are ripe for discourse on potential integration as has already been identified by the European Commission and other policy-making institutions. These areas include current efforts to further integrate the Common Agricultural Policy (CAP) and freshwater policy; the joint management of drought and flood risks; maritime spatial planning; the design and implementation of nature-based solutions; climate change adaptation; cross-compliance of water and nature Directives, etc.

... Next AQUACROSS business brief:

The **Sustainable Development Goals** (SDGs) drive the global agenda for sustainable development, balancing the economy, society and the environment, until 2030. Responsibility for implementing them is shared amongst all actors, but according to the World Business Council for Sustainable Development, business has a key role to play in stimulating innovation, economic growth and financing. This engagement with the SDGs has significant benefits for business by helping to identify market opportunities and manage risk. AQUACROSS research facilitates business engagement with the SDGs relevant for aquatic environments – clean water and sanitation (SDG6), life below water (SDG14) and life on land (SDG15). These contributions will be explored in an upcoming business brief on AQUACROSS, **businesses and engagement with the SDGs**.

Save the date for the AQUACROSS final event

We are delighted to announce the dates for the AQUACROSS final event, which will take place in **Berlin**, **Germany from the 10th to the 12th of October 2018**. The aim of the AQUACROSS final event is to bring together scientific experts, policy makers, and members of the business community engaged in innovative sectors to discuss cross-cutting topics related to the protection of aquatic ecosystems and opportunities for ecosystem-based management. An interactive multi-stakeholder panel discussion will be held with key leaders and experts from science, policy and business who will share their views and provide feedback on experiences in assessing, managing, and utilising freshwater, coastal, and marine ecosystems. The final results of AQUACROSS will be shared and reviewed with participants in order to bring new knowledge and innovative ideas into ongoing research and policy agendas. Please block the dates. The agenda and list of speakers will be made available in the first quarter of 2018.

AQUACROSS publications

- Rouillard, J.J., Lago, M., Abhold, K., Roeschel, L., Kafyeke, T., Mattheiß, V., Klimmek, H. (2017).
 <u>Protecting aquatic biodiversity in Europe: How much do EU environmental policies support ecosystem-based management?</u>
 Ambio. Available online: https://link.springer.com/article/10.1007/s13280-017-0928-4.
- Rouillard, J.J., Lago, M., Abhold, K., Roeschel, L., Kafyeke, T., Klimmek, H., Mattheiß, V. (2017).
 Protecting and restoring biodiversity across the freshwater, coastal and marine realms: Is the existing EU policy framework fit for purpose? Environmental Policy and Governance, Accepted. Soon available online.
- O'Higgins, T (2017) You Can't Eat Biodiversity: Agency and irrational norms in European aquatic environmental law. Challenges in sustainability. Available online: http://www.librelloph.com/challengesinsustainability/article/view/cis-5.1.43

Upcoming events

- <u>Dr Manuel Lago</u> (Ecologic Institute and coordinator of AQUACROSS) will be participating in the upcoming Water innovation through ecosystem services, nature-based solutions and hybrid grey-green infrastructure Joint workshop of <u>DESSIN</u> & WssTP. A Side-event to WssTP Water Knowledge Europe 2017. Brussels, 28 November 2017.
- AQUACROSS will apply for the organisation of a session in the next <u>Ecosystem Services Partnership</u> (<u>ESP</u>) <u>European regional conference 2018</u> with the title: Ecosystem services in a changing world: moving from theory to practice. Location: San Sebastián, Spain. Date: 14-19 October 2018.

Past events

- <u>Dr Tim O'Higgins</u> (from the University College Cork) chaired a session on Ecosystem Based Management at the <u>Coastal and Estuarine Research Federation Conference</u> in Rhode Island the week of 6th to 10th of November 2017.
- AQUACROSS was present at the last European Innovation Partnership (EIP) in Water Conference that took place in Porto the 27th-28th September 2017. You can check the highlights of the conference <u>here</u>.
- AQUACROSS scientists from IGB and EAWAG chaired a session on freshwater models at the 10th Symposium for European Freshwater Sciences that took place in Olomouc (Czech Republic) 2-7 July 2017. Abstracts and presentations can be found here: http://www.sefs10.cz

What we're reading

... from other DG Research sponsored projects

We closely follow news and publications from other relevant projects. At the moment we are reading:

- The <u>Freshwater Blog</u> edited by the European Union funded <u>MARS project</u> features some very interesting
 articles, interviews and analyses on freshwater conservation, science and policy. The blog will feature
 interviews in the coming months and highlight work undertaken by <u>AQUACROSS researchers</u>.
- The new book Mapping Ecosystem Services provides a comprehensive collection of theories, methods
 and practical applications of ecosystem services mapping, for the first time bringing together valuable
 knowledge and techniques from leading international experts in the field. Published by <u>Pensoft</u> and
 undertaken under the auspices of the H2020 <u>Esmeralda project</u>, the book is both available in an <u>online</u>
 <u>open access version</u> via the publisher's <u>Advanced Books</u> platform, and can be ordered in <u>paperback and</u>
 <u>hardback</u> format.

... from other sources of inspiration

A list of recent publications from external sources that influence our research:

- MEAM paper (2017). Incorporating cultural values into ocean planning and management: New tools and trends. https://meam.openchannels.org/news/meam/incorporating-cultural-values-ocean-planning-and-management-new-tools-and-trends
- OneEcosystem (2017). Mapping and Assessment of Ecosystem Services Science in action: https://oneecosystem.pensoft.net/collection/48/

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