

Annual Report 2024

In 2024, EMWIS activities focused on the implementation of a set of projects cofinanced by the European Union, particularly within the framework of the Research and Innovation programs (H2020 and Horizon Europe), COST and PRIMA around innovation in the environmental and agricultural sectors, for which EMWIS ensures the dissemination and exploitation of results and supports transfer processes in the Mediterranean. On the other hand, the Technical Unit continued its institutional cooperation actions in the Euromed area with the management of websites and networking within the water, environment and agriculture communities. These actions are summarized in this document.

Strengthening of national water information systems in the Mediterranean

The Mediterranean Water Knowledge Platform, who was accredited in April 2014 by the 43 member countries of the Union for the Mediterranean. This project is composed of two sub-projects, one on the strengthening and harmonization of National Water Information Systems (NWIS) in the southern Mediterranean countries and the second on the preparation of a White Paper on Water. Following activities carried out in 2018 a trilingual web portal (English, Arab and French) has been launched (http://mwkp.semide.net). It includes the product guides: implementation of National Water Information Systems - NWIS - in the Mediterranean under the patronage of UNESCO, ii) development of white papers and iii) legislative and regulatory recommendations), the state of progress of the actions at the regional level and in the pilot countries (Morocco, Tunisia, Jordan, and Lebanon), plus a geo-catalogue of publicly available data and information in the region, compatible with the recommendations of the INSPIRE directive. The EMWIS continues technical and regulatory monitoring as well as occasional exchanges with countries and contributes to the development of digitalization activities in the water sector of the Union for the Mediterranean (meeting of the Regional Water Platform of the Union for the Mediterranean, June 2024, Lisbon).

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Ongoing projects in 2024

successfully completed in March 2024.



EdiCitNet (https://www.edicitnet.com/) is a project bringing together 35 partners and co-financed by the H2020 program, which started in September 2018 (extended until February 2024). It aims to implement NBS for agriculture and urban regeneration. The project integrates 11 cities, grouped into pilot cities -Front runner- (Rotterdam, Oslo, Andernach, Berlin, Sant Feliu de Llobregat) and cities that will

develop implementation plans (Carthage, Havana, Lomé, Montevideo, Šempeter-Vrtojba). EMWIS contributes by identifying and collecting monitoring and impact indicators with pilot cities, as well as analyzing tools enabling stakeholders to implement these solutions (catalogues, databases, toolboxes). tools, decision support).

In 2022 and 2023, EMWIS carried out a case study on shared gardens in the city of Nice, encompassing a socio-economic and environmental analysis. This collaboration allowed to establish contacts with the urban agriculture department of the city of Nice, with which EMWIS signed an agreement for future collaborations. The work was presented at the EdiCitNet conference in Berlin in September.

SAFERS (Valorization of Copernicus satellite data for forest fire risk management, https://safers-project.eu/), selected as part of a H2020-Copernicus call for projects. It aims to implement a platform integrating satellite, in situ and social network data to support all phases of crisis management, assess the impacts of fires on the environment and monitor the restoration of forest ecosystems. EMWIS is in charge of stakeholder engagement, communication and dissemination. The project duration was

Innovative Aquifers Governance for Resilient Water Management and Sustainable Ecosystems in Stressed Mediterranean Agricultural Areas. The project co-funded by PRIMA member countries (ANR for France) started on June 1, 2022.

The main objective of the AGREEMed project is "to improve the capacities of water stakeholders to develop integrated aquifer management plans and demonstrate their development in strategic pilot areas (watersheds) in the Mediterranean region: Souss-Med Massa in Morocco, Hammamet in Tunisia and the Jordan Valley". Targeted aquifer management plans will contribute to safeguarding groundwater resources, supporting socio-economic growth and preserving ecosystems in the context of global changes. The transfer of scientific knowledge, the exchange of successful institutional and technological innovations between partners as well as the development of

solutions specific to the pilot area are the key pillars of the AGREEMed project. EMWIS is responsible for communication and operation.

Capture and Reuse Of biogenic gases for Negative-emission - sustainable biofUelS - Duration 45months (December 2022- August 2026)

CRONUS is funded by the Horizon Europe program. It aims to accelerate the development of a sustainable bioenergy sector and to play an important and constructive role in achieving the UN Sustainable Development Goals, CRONUS seeks to integrate carbon capture, use and storage (CUS) techniques into the biofuels value chain, thus promoting the decarbonisation of the economy in accordance with European standards, in line with the objectives of the Green Deal. EMWIS is responsible for operating activities and financial modelling.



OurMED, funded under the PRIMA program, started on June 1, 2023. In line with the challenge and scope of the PRIMA programme, the OurMED project was designed

to highlight the urgent need for more comprehensive management of water storage and distribution in the Mediterranean region compared to existing plans, taking into account natural resources and technical infrastructure over short- and long-term horizons. OurMED represents a new vision of fair, balanced, and eco-designed management of water storage and distribution in the Mediterranean region, incorporating stakeholder perceptions and benefiting from technologically advanced monitoring techniques, intelligent forecasting models, optimization, and digitization capabilities. OurMED aims to develop integrated and holistic water management at different scales, ensuring multisectoral requirements and avoiding conflicts between domestic/industrial water use, food production, and ecosystem needs. The EMWIS is the leader of the activity group (impact, engagement, and sustainability) and is responsible for all communication, dissemination, exploitation, and networking activities. SEMIDE is also in charge of exploring innovative financing to implement Nature-Based Solutions (NBS).



The CARDIMED project, funded by the EU and CARDIMED starting on September 1, 2023, aims to establish a framework and network to enhance climate

resilience in the Mediterranean region, particularly through Nature-Based Solutions (NBS). The project includes nine full-scale demonstrators, a digital infrastructure to improve data collection, valorization, and access for monitoring and impact assessment, modeling and evaluation tools for benefits and the ecosystems-waterenergy-food nexus, and decision support for integrating NBS into regional climate adaptation policies. SEMIDE is responsible for coordinating the French demonstration site (university campuses, Marseille), networking, policy analysis, exploring innovative financing, as well as replication and transferability in the southern Mediterranean.

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The <u>NIAGARA</u> project, which began in November 2023, aims to develop solutions for assessing and mitigating chemical and microbiological contamination of drinking

water and to integrate them into a pilot demonstrator. This demonstrator will enable drinking water treatment plants (DWTPs) to monitor and eliminate chemical and biological contaminations present in drinking water supply chains, as well as manage and minimize associated risks. SEMIDE is responsible for stakeholder mapping and engagement, and for preparing policy and regulatory recommendations for new risk assessment procedures. It also participates in communication and exploitation actions.



<u>Future Lakes</u> is a HORIZON EUROPE project that started in October 2024, whose main objective is to demonstrate innovative solutions to transform the restoration and integrated

management of lakes. The specific objectives are to significantly improve the ecological and chemical status of European lakes, restore biodiversity, recover valuable resources (polluting issues), improve lake services, and make society more resilient to climate change. The integration of these solutions into operational lake management will be demonstrated in six large European lakes (demonstration basins).



The <u>NEXUSNET</u> project is funded by the European Commission's COST Action. NEXUSNET is an international network of researchers collaborating with universities, research institutions, policymakers, and the private sector. Its objective is to better understand how the water-energy-food

Nexus promotes policy coherence and biophysical interactions in the domains of water, energy, and food, facilitating the transition to a circular and low-carbon economy in Europe. The network emphasizes job creation, improved well-being, broad synergies, and environmental sustainability. NEXUSNET tests the Nexus concept at different scales (local, regional, national, European) and explores the international dimension through the participation of international partners. The network aims to promote Nexus-compliant practices through a knowledge/research sharing hub at the European level and beyond. Public-private initiatives play a crucial role in promoting Nexus-compliant

practices, relying on the advice of network members. SEMIDE is the French member of the coordination committee.

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Preparation of New Projects

In 2024, the EMWIS participated in 11 proposals for the PRIMA, Horizon Europe, INTERREG-Next Med and INTERREG EuroMed programmes.

Information Dissemination and Knowledge Exchange Activities

Animation of the EMWIS online platform with the National Focal Points, mainly websites and the electronic bulletin. The redesign of the SEMIDE website initiated at the end of 2023 is completed, now. The new site has been operational since the beginning of 2024: https://www.emwis.org/ (but also www.semide.net). The website is continuously updated (electronic flash distributed every two months to nearly 20,000 subscribers and transmitted to other international networks).

In 2024, SEMIDE contributed to the following initiatives:

- Organization of a study visit on January 23-24 in Camargue with Tour du Valat for delegations from Tunisia and Morocco, in collaboration with the Sahara and Sahel Observatory (OSS) and WWF North Africa
- o Mediterranean Water Forum, 5th to 7th of February in Tunis
- Naturance Festival in Brussels from the 22nd to 24th may
- Meeting of the Regional Platform on Water of the Union for the Mediterranean, June 4-5 in Lisbon, with a presentation of the twinning initiative between basin organizations of the International Network of Basin Organizations (INBO) – Twin Basin Initiative TBI – in the Mediterranean and a contribution to the discussions on the digitalization of the water sector
- Stand and presentations at the International Urban Agriculture Festival in Nice on September 7, 2024, highlighting the CARDIMED and CRONUS projects
- o South Biodiv Day, October 15, Marseille
- o Presentation of EMWIS and its projects at the Mediterranean Regional Conference organized by the international "4 per 1000" initiative on soil health, October 21-23, Rabat, Morocco

Perspectives for 2025

In order to fulfill these missions and thanks to the work carried out in 2024, the following actions are planned:

- Organization of ad hoc meetings with EMWIS countries based on the Mediterranean agenda and priorities
- Continuation of actions on the Mediterranean Water Knowledge Platform in conjunction with the Secretariat of the Union for the Mediterranean and integration of digitalization
- Continuation of ongoing European projects: Cronus, AgreeMed, OurMed, CARDIMED, NIAGARA, FUTURE LAKES
- Ad hoc support missions for the Euromed Cities Network (NCA Metropolis)
- Launch of the new EMWIS website, which will be the showcase for the world of water in the Mediterranean.
- Activities to disseminate information on water in the Mediterranean, promoting EMWIS in regional initiatives, particularly with the Union for the Mediterranean
- Participation in Union for the Mediterranean meetings related to the water sector, particularly for the preparation of the EuroMed Water Forum (Rome, September 2026) and the Ministerial Conference on Water (March 2026)
- Partnership development and response to calls for projects (PRIMA, LIFE, Horizon Europe, Interreg, WE4F, DIMFE)