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EDITORIAL CO





he entire INBO team and I are particularly proud to share this new issue of our newsletter. As expected, 2024 has been a particularly busy year, marked by growing visibility and renewed impact for our network and our members.

At a time when water resource management is still progressing too slowly, we believe even more strongly than ever in the central role that basin organisations have to play in strengthening dialogue and cooperation between water users, in enhancing shared knowledge of resources and uses, and in planning the concrete measures that are needed.

INBO successfully organised the segment dedicated to basin authorities during the World Water Forum in Bali in May 2024 and its World General Assembly in Bordeaux, France, in October 2024. Both events mobilised many members and attracted high-level political participation.

The network adopted its new action plan for 2024 - 2027. It will be implemented under the leadership of the French Presidency, which was inaugurated at our General Assembly. In particular, the implementation of the "Twin Basin Initiative", our international inter-basin twinning programme, will be extended, following the operational launch of its first pillar, "Peer-to-Peer", thanks to the support of the European Union.

INBO conveys concrete messages that are increasingly well heard; INBO implements projects in the field. With the support of its members and partners, INBO will continue on its path of responsibility and impact in the years to come, marked by decisive international milestones, including the next World Water Forum in Riyadh in 2027 and the two United Nations conferences on water announced for 2026 and 2028.

> Dr Eric Tardieu, INBO Secretary General

© MAIN INTERNATIONAL EVENTS 2024



10th World Water Forum

The World Water Forum is the world's largest water event. In 2024, its theme was "Water for shared prosperity". INBO co-organized some thirty sessions in various processes, and in particular piloted the high-level political segment dedicated to basins. *Focus on this event on page 8.*

🛗 May 18 to 24, 2024

Bali (Indonesia)
 Bali
 Content
 Cont



12th INBO World General Assembly

INBO celebrated its 30th anniversary at the 12th INBO World General Assembly in Bordeaux, France. More than 350 participants from over 60 countries gathered to discuss the theme "Water resources and climate change: How can basin management be more resilient?" *Focus on this event on pages 6 and 7.*

Bordeaux (France)



One Water Summit

The One Water Summit was held in conjunction with COP16 of the United Nations Convention to Combat Desertification. The event was co-organized by France, Kazakhstan, the World Bank and Saudi Arabia.

The aim of the event was to elevate water issues to a global priority, addressing its essential role in climate adaptation, biodiversity and sustainable development, while encouraging innovative solutions and international cooperation.

On this occasion, the One Water Vision Coalition was launched, a partnership between INBO and the World Meteorological Organization (WMO), resulting from an international research consortium coordinated by the French National Institute for Research in Science and Technology for the Environment and Agriculture (INRAE). This initiative brings together over 20 research institutions, including space agencies and universities. It aims to harness innovative satellite technologies to provide concrete solutions for water resource management.

📩 December 3, 2024

Riyadh (Saudi Arabia)

www.inbo-news.org/events/one-water-summit-2024

MAIN INTERNATIONAL EVENTS 2024 @



10th Meeting of the Parties to the Water Convention (MOP10)

The meeting brought together the States Parties to the Convention on the Protection and Use of International Lakes and Rivers, adopted in Helsinki in 1992. This legal instrument promotes the cooperative management of transboundary river basins. Unlike the 1997 Convention, it has a Secretariat: the United Nations Economic Commission for Europe (UNECE). The UNECE proposes a program of work to the States Parties, which it implements by providing technical, legal and institutional support to States wishing to implement the Convention's provisions. Since 2016, the Convention has been open to all countries in the world, not just the member states of the United Nations Economic Commission for Europe.

Organized as part of a partnership between the Ministry of Natural Resources, Spatial Planning of the Republic of Slovenia and the UNECE, the event brought together 500 participants from 100 countries. Participants welcomed the accession, since the last meeting of the Parties in 2021, of nine new States from three continents, a sign of the Convention's growing global relevance as a multilateral reference framework for cooperation in the field of transboundary waters. The States Parties also adopted the new 2025 - 2027 work program.

ៅ October 23 to 25, 2024

www.inbo-news.org/events/mop10-meeting-of-the-parties-to-the-water-convention



29th United Nations Climate Change Conference & INBO Webinar

As in every year since COP21 in Paris in 2015, INBO was co-organizer of the official high-level water event (or "Water Action Event"), this year entitled "Water Sector Solutions for Climate Action".

INBO also contributed to the program of the Water and Climate Pavilion, with the co-organization of the hybrid events "Indicators on freshwater and sanitation for the global adaptation target "Practical case studies and action laboratory: transforming the global adaptation target to water pollution into concrete actions" at the COP29 Water and Climate Pavilion (November 15).

Finally, INBO organized an entirely online event as part of COP29's "Water Day" on the theme of "Financing adaptation at basin level: the potential of incubation to boost project development" 160 participants and 10 speakers from various geographical regions and organizations presented examples of climate change adaptation projects, as well as tools and advice from financial institutions to accelerate project development and financing.

📷 November 11 to 22, 2024

Baku (Azerbaijan) Baku (Azerbaijan) Azerbaijan) Azerbaijan)

🌐 www.inbo-news.org/inbo-webinar-under-the-framework-of-the-water-day-of-the-united-nations-climate-change-conferences-of-the-parties-cop29

FOCUS ON THE INBO WORLD GENERAL ASSEMBLY

INBO 12th World General Assembly Bordeaux, France - October 6 to 10, 2024



INBO's 12th World General Assembly, which also celebrated its 30th anniversary in Bordeaux, took place against the backdrop of the 60th anniversary of the Water Law in France, the origin of the Water Agencies in charge of basin management. The event was organized in partnership with the French Water Agencies, the Nouvelle-Aquitaine Region, the French Office for Biodiversity (OFB), and the French Ministry responsible for water management.

The meeting also saw the handover of INBO's world presidency from His Excellency Mr. Nizar Baraka (Morocco's Minister for Infrastructure and Water) to Her Excellency Mrs. Agnès Pannier-Runacher (Minister for Ecological Transition, Biodiversity, Forestry, Sea and Fisheries).

This event also provided an opportunity to present the Peer-to-Peer project ("Support for Basin Organisations and Peer-to-Peer Exchanges") funded by the Directorate-General for International Partnerships (DG INTPA) to basin organisations from all over the world (see p. 30).

Topics discussed at INBO's General Assembly:

- 1 Financing resource management at basin level.
- 2 Agriculture, water quality and water resource management at basin level.
- International and transboundary cooperation for basin management.
- 4 Water scarcity: planning and tools for quantitative management.
- **5** Tools and measures for adapting to climate change.
- 6 Meeting the challenge of adapting to climate change: the benefits of good basin governance.





TO FIND OUT MORE

WGA Report





"This World General Assembly is an important moment as it coincides with INBO's 30th anniversary. It marks three decades of hard work during which INBO has developed and implemented activities, projects and initiatives aimed at supporting river basins and promoting integrated water resource management at their level."

H.E. Mr Nizar BARAKA



"IWRM makes it possible to better coordinate uses, better optimise resources, and thus better preserve ecosystems. Thanks to INBO, we can create a network of basin management organisations, so that you can share your knowledge and expertise more effectively. All in the name of a single objective: sustainable management of our water resources, in the interests of our fellow citizens."

H.E. Mrs Agnès PANNIER-RUNACHER

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FOCUS ON THE INBO WORLD GENERAL © ASSEMBLY

INBO Action Plan

INBO's new action plan for the period 2024 - 2027 was adopted at the close of the General Assembly. This new action plan is structured around 3 main thematic priorities and 4 action levers for Integrated Water Resources Management (IWRM) at basin level.

INBO promotes basin management and basin organizations, disseminates operational knowledge on IWRM and shares experience and pilot projects. The international events it organizes (EURO-INBO Regional Network Conferences, General Assemblies, etc.), or to whose programs it contributes (World Water Forum, Climate COP, etc.), enable these exchanges, as well as the dissemination of best practices and initiatives such as the Water and Nature Declaration, project incubation and water information systems. They are also disseminated through publications (INBO's annual newsletter and handbooks), social networks and the network's website.

INBO currently has around 200 members from 96 countries. It is important to constantly renew and expand the network's audience and members' contributions, either through their membership fees, or through their active participation in network events and initiatives.



TO FIND OUT MORE





© FOCUS ON THE WORLD WATER FORUM

10th World Water Forum Bali, Indonesia - May 18 to 24, 2024





The 10th World Water Forum brought together over 20,000 participants from 160 countries to discuss the theme "Water for Shared Prosperity". The World Water Forum is the world's largest water conference for debating sustainable solutions to pressing water challenges.



The Permanent Secretariat and members of the International Network of Basin Organizations (INBO) contributed to the organization of the Forum and were involved in over 30 thematic sessions, notably on:

Integrated Water Resources Management:

IWRM emphasizes the importance of coordination and coherence across sectors, scales and boundaries in planning and operational approaches.

2 Water information systems:

We can only manage what we can measure. We need to promote shared, integrated data management.

3 Training in the water sector:

The availability of trained human resources is one of the most important factors in quality management.

👍 The "Basin Segment":

The Basin Segment Day is the World Water Forum's highlevel policy segment dedicated to promoting an operational approach to IWRM for and by basins in connection with accelerating the achievement of the Sustainable Development Goal 6. It was organized for the second time in the forum's history by INBO, in partnership with NARBO (Network of Asian River Basin Organizations).

This segment, launched by Mr. Basuki Hadimuljono (Vice-Chairman of the National Organizing Committee of the World Water Forum & Minister of Public Works and Public Housing, Republic of Indonesia) concluded with the adoption of the Bali Basin Champions Agenda. This includes :

- The launch of the **Twin Basin Initiative**, a global program of inter-basin twinning and its Peerto-Peer component, with financial support from the European Commission's Directorate General for International Partnerships. This program aims to strengthen the capacities of national and transboundary basin organizations through peer-to-peer exchanges of experience.
- The launch of an advocacy initiative: the Bali Coalition for the Training of Water Professionals. This promotes training as an essential tool for accelerating the implementation of the Sustainable Development Goals (SDGs), and in particular access to drinking water and sanitation.
- A cooperation agreement formalizing the attachment of the Asian Network of Basin Organizations (NARBO) as INBO's regional network.

Thanks to the young people of the World Youth Water Parliament (WYWP), who were mobilized throughout the day to animate, participate in and report on this important segment of the Forum.

"Cooperation is very important to ensure the adequacy of interconnected waters and encourage collaboration to avoid conflicts and increase benefits. Our water management uses the potential of collective approaches for mutual benefit."

> H.E. MR BASUKI HADIMULJONO, Minister of Public Works and Public Housing, Republic of Indonesia

Towards the 11th World Water Forum (Riyadh, 2027)



Saudi Arabia has been elected to host the 11th World Water Forum in 2027 under the theme "Action for a Better Future." The first stakeholders' meeting took place from April 14 to 16, 2025, in Riyadh.



TO FIND OUT MORE

INBO Report

ADAPTING TO CLIMATE CHANGE 🍳

t all latitudes, societies are primarily affected by climate change through the water cycle. These disruptions have cascading effects on the environment, ecosystems, people's access to water and many economic sectors dependent on this resource, such as agriculture, industry and energy. Adaptive water management is therefore a key factor in resilience in the face of climate disruption. Integrated Water Resources Management (IWRM) is emerging as a key approach to ensuring a coherent and effective response to the challenges posed by these changes. By integrating environmental sustainability, social equity and economic efficiency. IWRM encourages concerted planning of sectoral policies and prevents conflicts of use. This approach is based on participatory governance founded on knowledge and anticipation of risks, enabling water uses to be adapted in a harmonious and sustainable way.

New projections for 2100 on the Rhine serve as a basis for the new ICPR adaptation strategy



International experts from the states in the Rhine basin have used the latest climate data to analyse how the discharge of the Rhine and its major tributaries is likely to develop by 2100. The projections show a change towards more rain-fed flow regimes to the disadvantage of snow- and glacier-fed flow. From November to April, the risk of flooding tends to increase. From May to October, droughts and low water events are likely to occur more frequently, last longer and be more pronounced. Regionally, more frequent flash floods are also expected in summer, as seen most recently in July 2021 in parts of the Rhine basin.

To address the challenges associated with these events at the national or transboundary level, ongoing activities within the states and ambitious and interdisciplinary recommendations have been published by the International Commission for the Protection of the Rhine (ICPR). Besides discharge, water temperatures in the Rhine are also affected by climate change. A recent study shows that almost all stations along the Rhine analysed for trends show a progressive warming of the water temperature from 1987 to 2023 with the largest warming trends in the upstream sections. While the heat discharge into the Rhine has decreased due to the shutdown of several nuclear power plants in the catchment, the rise in air temperature and the low water periods of the recent past have contributed to the increased warming of the Rhine's water temperatures. The projections for future water temperatures in the Rhine and knowledge on the effects of climate change on the flora and fauna of the Rhine will also be available soon.

The new findings as well as an international workshop in March 2025 with user groups affected by climate change serve as an important basis for revising the ICPR's climate change adaptation strategy.





Join the XIX World Water Congress!

From December 1-5, 2025, Marrakech will host the XIX World Water Congress, organized by Morocco's Ministry of Equipment and Water and IWRA. Under the theme "Water in a Changing World: Innovation and Adaptation", this event will bring together experts, researchers, policymakers, and private sector actors to discuss water governance and sustainability. Institutions and organizations are invited to contribute through side events, partnerships, or sponsorships. Earlybird registration opens in early March!



TO FIND OUT MORE

Registration

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ADAPTING TO CLIMATE CHANGE

Water Governance: An Integrated Response to Climate Challenges



Water is a major strategic issue for climate change adaptation, particularly in Africa, where droughts and floods are becoming more frequent. The Sahara and Sahel Observatory (OSS) supports Integrated Water Resources Management (IWRM), particularly through Early Warning Systems (EWS), essential tools for anticipating water-related crises and mitigating their impacts on populations, ecosystems, and local economies.

OSS positions itself as a strategic partner in the coordinated management of water resources at the regional level. Through projects such as NB ITTAS in the Niger Basin, the Jullemeden-Taoudéni/Tanezrouft Aquifer System, and IREE-MONO in the Mono River Basin, the organization promotes sustainable and transboundary governance. Initiatives such as EURECCCA in Uganda and DRESSEA in the IGAD region strengthen community resilience to droughts, while ADSWAC and ADAPT-WAP propose innovative solutions to protect fragile ecosystems and secure livelihoods. Through these actions, OSS addresses climate challenges and supports sustainable water management in Africa.

Furthermore, OSS is developing several other projects and



Water Point – Livestock Drinking © OSS

Rainfall Measurement © OSS

initiatives focusing on oasis management—unique ecosystems in Egypt, Mauritania, and Chad-and the management of transboundary basins, such as the Mono River Basin, covering Benin and Togo, and the Senegal River Basin, spanning Guinea, Mali, Mauritania, and Senegal.

OSS supports African states in transitioning toward more inclusive and resilient water resource management by implementing IWRM and aligning with the objectives of the International Network of Basin Organizations (INBO). In doing so, it contributes to combating climate change and strengthening regional cooperation.

Conservation Project in Serra do Japi, São Paulo State, Brazil, enables water recharge of over 5.5 million m³





"Serra do Japi", a mountain range region located in the urban agglomeration of Jundiaí, is a significant remnant of the Atlantic Forest in the State of São Paulo, Brazil. It represents 7% of the original remnants of this biome. Since 2022, the Intermunicipal Consortium of the PCJ River Basins (Consórcio PCJ), alongside partners and sponsored by Coca-Cola Brasil and Coca-Cola FEMSA Brasil, has been implementing conservation initiatives in a 354 km² area, including the Serra do Japi Biological Reserve (Rebio) and the protected area encompassing four surrounding cities (Jundiaí, Cabreúva, Cajamar, and Pirapora do Bom Jesus).

The project, titled "Olhos da Serra" (Eyes of the Mountain), has already completed two phases, and the third phase began in January 2025. This phase covers six main areas: Governance; Forest Fire Prevention; Reforestation; Sanitation; Monitoring of Invasions in the Serra do Japi Biological Reserve; Communication & Environmental Education.

During these three years of the project, the conservation status of 833 springs and 111 watercourses in Serra do Japi has been mapped and diagnosed. These activities have facilitated the infiltration of 5,526,245 m³ of water per year into the soil.

According to Francisco Lahóz. Executive Secretary of the Consórcio PCJ, initiatives like the "Olhos da Serra" Project are essential in addressing extreme events and climate change, benefiting 450,000 residents.

Additionally, 3,090,970 tons of carbon retention have been recorded through forest and soil conservation in the region. During the project's second phase, satellite-based wildfire monitoring and control were implemented across 25.000 hectares through the Suindara System. This system sends georeferenced alerts to strategic users integrated into the platform.



TO FIND OUT MORE



ADAPTING TO CLIMATE CHANGE

Adapting to Flooding: when the Ebro river basin recovers its space





The objective of the LIFE Ebro Resilience P1 project in Northern Spain is to mitigate the impacts of floods while ensuring coexistence of local populations and economic activity with the achievement of the river's good ecological status.

Two types of complementary adaptation measures are applied.

Firstly, nature-based solutions of fluvial restoration are implemented

across an area of 500 hectares with the expansion of the fluvial space (47 ha), the restoration of meanders and the recovery of lost branches of the river (1 km) to reconnect the riverine woodlands with the active bed, maintaining ecological corridors.

Secondly, the creation of lateral flow buffer zones is planned, with flood expansion on an agricultural area of intensive cultivation of 350 ha. The pre-flooding, with an average depth of 0.5 metres, will function as a sponge for the water and is designed to minimise damage to properties and irrigation infrastructure.

20 ha of riverine woodland and 65 ha of fluvial habitats specific to the river Ebro will be recovered.

The project was selected as part of the LIFE call for proposals 2020. One of the strongest points of the project is that it brings together in a single strategy, the Ebro Resilience Strategy, the competent water, flood and territorial management authorities to apply similar measures along other sections of the middle course of the river Ebro suffering similar problems.

> Eduardo MURILLO PEÑACOBA, LIFE Ebro Resilience P1 Project Manager, Group TRAGSA

A platform for digital twins, already available and interoperable with two major estuaries: the Gironde and the St. Lawrence rivers



Fruit of the initiative of the Port of Bordeaux and a collaboration to with local water managers in Gironde, the digital twins of the river have been used by engineering offices to carry out environmental studies since 2023.

Based on Open Source (technological blocks and a digital model of Gironde), this initiative aims to develop digital commons of territories in order to facilitate the pooling of efforts and the sharing of results to develop territorial resilience in the face of climate change, cross-border cooperation and the preservation of biodiversity.

Indeed, it aims to develop hydro-diplomacy by allowing all stakeholders in a territory, but also between territories, to make the same observations with common and open tools; what future impacts of such climate or anthropogenic change on the river and the citizens?

These tools make it possible to take these hypotheses into account in a virtual (digital) reality in order to measure their impacts. Thus, the LISOS platform for digital twins mobilizes the necessary power on the European cloud to carry out an almost unlimited number of simultaneous simulations in a community and frugal spirit.

In particular, it allows users to have a collaborative environment

to facilitate the coordination of work between stakeholders on the same river. And can easily integrate other rivers to facilitate studies, offer new operating opportunities in real time to anticipate and facilitate crisis management; interoperability with IoT and open data is central to this, and to exploiting the results in other information systems.

TO FIND OUT MORE





PRESERVING BIODIVERSITY

ntegrated water resource management and the preservation of biodiversity are closely linked. They are solutions to the degradation of habitats and the disappearance of species, accentuated by the artificialization of natural environments, climate change and other demographic, economic and industrial pressures, and the alteration of the water cycle. To respond to this crisis, it is essential to harmonize water and biodiversity policies and implement Nature-based Solutions (NBS) at basin level. Natural Water Retention Measures (NWRMs) play a key role in regulating water flows, preventing floods and droughts, and preserving ecosystems.

These actions can be financed by basin management plans and innovative mechanisms such as payments for environmental services. By mobilizing a concerted approach and multiplying these initiatives, river basins are becoming key territories for the sustainable preservation of biodiversity.

Fighting invasive species in Valencia's river basin (Spain)

Since time immemorial, maritime trade has been the lifeblood of the Mediterranean coast. However, this path of prosperity also opened the way for an unexpected invader: the giant cane (Arundo donax).

This plant, which grows up to 10 cm per day, has invaded more than half of Valencia's river network, some 7,000 km of rivers and ravines.

It spreads rapidly, displacing native flora and drastically reducing biodiversity. Its dense structure prevents birds from nesting and other vertebrates to find shelter. Furthermore, it consumes between 5 and 20 times more water than native species, posing a threat in a region with scarce water resources. Its high combustibility also contributes to the spread of forest fires.

To combat this invasion, the Spanish authorities have implemented an innovative strategy:

- The above-ground part of the reed is cleared and shredded.
- The soil is covered with a material that impedes photosynthesis and blocks the growth of new shoots. After 18 months or two consecutive summers, the roots dehydrate and die from lack of nutrients.
- The cover is removed and reforestation is carried out with native vegetation, prioritizing aquatic plants on the banks, shrubs on the margins, and trees in more remote areas.

The first three years after reforestation are crucial, with maintenance work such as the removal of new shoots and summer irrigation. After this period, the native vegetation reaches a state of maturity that prevents the recolonization of the giant cane. This effort not only eliminates an invasive species but also restores ecosystems and returns biodiversity to the rivers. It is a commitment to a future in which nature flourishes at its best. Each restored river becomes a space for citizens to meet and enjoy, a true sanctuary for biodiversity.

> **Emilio REAL LLANDERAL,** Head Service Environmental Management, Júcar Hydrographic Confederation



PRESERVING BIODIVERSIT

Italy: enhancing Po River Basin Biodiversity in a context of climate change

Climate change is posing significant environmental challenges calling for urgent and decisive actions. Conserving and sustainably managing biodiversity is critical to addressing climate change. The Po River Basin is directly affected and it has been recognized by the Italian National Adaptation Strategy to climate change as a national special case and pilot area, particularly in the water management sector, given the availability of water and its uses and the production within the district of 40% of the Italian GDP. Furthermore, it maintains environments of high ecological value but strongly at risk.

To address these challenges, the Po River Basin District Authority (ADBPO) has developed an integrated approach to water management, which considers the recovery of river connectivity and the restoration of the natural functions of rivers a cross-cutting issue to reach the goals of WFD, FD and EU Nature Directives.

The Po River Restoration Plan, financed with Next Generation EU funds, is an example of this approach. The project is strongly challenging both for the number of interventions (56 sites) and for the difficulties due to conflicting objectives among the different stakeholders. In order to seek concerted solutions and to overcome the issue of after project management, ADBPO is encouraging private-public partnership for biodiversity conservation actions and stakeholder involvement through participation and negotiation processes. The UNESCO MAB Reserves are instruments to involve territories and for enhancing the relationship between people and their environments. The Nature Positive Network is a



ADBPO archive photo © Massimo Dall'Argine

dynamic network of companies committed to the implementation of effective actions in favor of the protection and enhancement of nature in the Po River Basin.

> Paola GALLANI, Po River Basin District Authority (ADBPO) TO FIND OUT MORE Adbpo

Transboundary governance of fisheries resources



The fish fauna that inhabit rivers do not recognize national borders. Their conservation and development in rivers shared between two or more countries requires a special methodology and a governance scheme that allows for the articulation of interests.

The fish fauna of the Paraná River, with more than 200 species of fish of high ecological and economic value, its conservation requires effective binational policies, which makes coordinated management between Argentina and Paraguay essential.

In 1996, both countries signed the Convention on the Conservation and Development of Fish Resources for the Shared Sections of the Paraná and Paraguay Rivers, an international treaty approved by their respective parliaments. Its implementation is in the hands of the Argentine-Paraguayan Mixed Commission of the Paraná River (COMIP), which coordinates scientific studies and their translation into fisheries management policies. Under the supervision of the Ministries of Foreign Affairs, COMIP works on the regulation of fishing bans, the protection of schools of fish, the control of fishing activity and the impact of climate change on aquatic ecosystems. In addition, it addresses the proliferation of invasive species, the protection of native species and fisheries management through unified binational regulations.

This approach to transboundary governance integrates science, policy and sustainable water management, ensuring the conservation of aquatic biodiversity and the development of riverside communities. It is a model of cooperation in the integrated management of water resources that strengthens the resilience of shared ecosystems.



PRESERVING BIODIVERSITY

Native fisheries resources of Lake Titicaca: an urgent management priority

Lake Titicaca faces an ecological and socioeconomic crisis due to the lack of binational fishing regulations between Peru and Bolivia, pollution, and climate change impacts. Overfishing, environmental degradation, and the absence of reproductive bans and minimum catch sizes have caused a drastic 90% decline in native fish catches over the past three decades. This situation threatens not only the lake's biodiversity but also the livelihoods of over 700,000 people dependent on its fisheries.

The most affected species include the Orestias and Trichomycterus genera, with at least 20 species already extinct and six endangered. Pollution from municipal wastewater, industrial/agricultural waste, and intensive trout farming has degraded water quality. Additionally, the lake's water level has dropped two meters below its historical average, destroying key habitats for native species' reproduction and rearing.

To address this crisis, the Binational Autonomous Authority of Lake Titicaca (ALT) has implemented various strategies since 2021 to mitigate uncontrolled fishing impacts. These include:

- · Community awareness programs with fishing communities.
- Training in artificial fish reproduction techniques.
- Production and release of over four million fry into the lake.

Short-term measures focus on promoting compliance with binational fishing bans while developing alternative livelihoods (like guinea pig and poultry farming) to ensure sustainable incomes during ban periods. These initiatives, supported by both Peruvian and Bolivian governments, require ongoing efforts to ensure resource conservation.

Juan José OCOLA SALAZAR, Binational Autonomous Authority of Lake Titicaca (ALT)

IWRM & Inland Fisheries

Inspired by the adoption of "Integrated Water Resources Management" as the 2024 - 2025 biennial theme of Food and Agriculture Organization (FAO) of the United Nations, the global initiative "IWRM & Inland Fisheries" has been launched in December 2023 as an interdivisional FAO effort (gathering "Fisheries and Aquaculture", "Forestry" & "Land and Water" divisions). INBO has the honour of chairing this global initiative which aims to improve coordination of basins and fisheries management.



Preservation of biodiversity in the Lake Atitlán basin through the protection and conservation of natural forests





In Guatemala, forests and natural environments have decreased by 15.68% in the last 17 years, equivalent to 1,707,415 hectares, while permanent crops and urban areas have increased significantly between 2003 and 2020 (MAGA 2021). This trend is also observed in the Lake Atitlán basin.

Aware of this problem, the Authority for the Sustainable Management of the Lake Atitlán Basin and its Surroundings (AMSCLAE), based on its Law of Creation and Strategic Planning, promotes sustainable agriculture, good agricultural practices, soil conservation and increased forest cover.

AMSCLAE uses tools such as the PROBOSQUE Law and the PINPEP Law, which offer financial incentives for the management

of natural forests, the establishment of forest plantations, the restoration of degraded land and the promotion of biodiversity. These incentives are paid by the Guatemalan Ministry of Public Finance, subject to approval by INAB.

From 2015 to 2024, 893,350 hectares have been entered into the forestry incentive programmes, in their different modalities according to the following table.

These programmes have contributed to the protection of biodiversity, the generation of ecosystem services, water retention and the conservation of scenic beauty. In addition, financing mechanisms such as payments for environmental services have been mobilised, with an estimated expenditure of USD 193,000.00 for landowners in the watershed.

AMSCLAE plans to include approximately 680 more hectares in these programmes between 2025 and 2033, together with annual reforestation activities of 400 hectares in conservation and restoration areas in the Lake Atitlán basin.

> Juan Carlos BOCEL CHIROY, Head of the Monitoring and Evaluation Unit, AMSCLAE Luis Armando RAMOS XOBIN, Head of the Agriculture and Forestry Department, AMSCLAE

TRANSBOUNDARY COOPERATION

alf of the world's population lives in 310 transboundary river basins spanning 151 riparian states. Yet around 60% of these basins have no structured cooperation arrangements, and most of the 610 transboundary aquifers also remain without a governance framework.

In a context where tensions on water resources are intensifying due to climate change, population growth and unsustainable practices, transboundary cooperation is becoming a strategic imperative. Concerted management makes it possible to optimize the use of water resources, prevent conflicts and improve the resilience of shared territories. Regional and international legal frameworks (including the 1992 Helsinki Convention), as well as the Sustainable Development Goals (SDGs), encourage the development of transboundary governance mechanisms. In particular, target 6.5 of the SDGs aims to ensure integrated management of water resources at all levels, including through transboundary cooperation. To meet these challenges, it is essential to strengthen the resources allocated to transboundary basin organizations and to increase coordination between states, in order to guarantee sustainable and equitable management of shared resources.

Shared governance of water on the Paraná River



The governance of the Paraná River, shared between Argentina and Paraguay, is a process that is now 50 years old.

With the initial objective of study and evaluation for joint use, it gradually incorporated competencies in the areas of hydroelectric evaluations, fish fauna, water quality and navigation. Today, it has become the natural space for all aspects related to bilateralism in the region.

The Corpus and Itatí - Itacorá hydroelectric studies, as well as the 25 years of the aquatic fauna conservation programme coordinated by the Argentine-Paraguayan Joint Commission on the Paraná River (COMIP), are examples of integrated management and collaboration between the states that share the basin.

Given the potential for development of river activity, the governments renewed this commitment to governance through the creation of the Grupo Encarnación.

With the specific aim of facilitating cooperation between Argentina and Paraguay for the improvement and promotion of the waterway, spaces for dialogue were created that not only include different levels of government - not only the central one - to ensure that decisions are taken in a contextualized manner and address the specific needs of each region within the basin, but also opened up the space to the private sector.

The Group includes the participation of producers, shipowners, port workers and multiple representatives of users and services.

In the six years of work of the Encarnación Group:

- Bi-national meetings were held to promote dialogue and coordination on issues of common interest related to the river.
- Coordination mechanisms were established for the management and development of projects.
- Issues related to navigation were addressed, seeking to guarantee the safety and efficiency of river transport.
- Emergency declarations were agreed and issued in critical situations affecting navigation or the environment.

The work of this team is validated every day in:

- More than fifty technical meetings held.
- Coordination of dredging works.
- Infrastructure projects submitted to governments.
- Agreements for water quality monitoring and management.
- Environmental observations to guarantee the sustainability of the resource.



TRANSBOUNDARY COOPERATION

Facilitating evidence-based river basin dialogues in Central Asia



The Scientific Information Center of the Interstate Commission for Water Coordination (SIC ICWC) in Central Asia works closely with the riparian countries and other partners to advance evidencebased transboundary water cooperation and climate-sensitive water resources management through regional cooperation initiatives.

Currently, as part of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)'s Green Central Asia Initiative, SIC ICWC conducts three thematic studies to feed river basin dialogues in the Amu Darya and Syr Darya basins and to provide decisionmakers with a state-of-the-art analysis and understanding of the basin challenges and opportunities. These studies will provide an evidence-base for three priority areas, namely ecosystem preservation in the Amu Darya Basin, economic mechanisms for cooperation, and infrastructure resilience in the Syr Darya Basin, identified during the first dialogue conducted in November 2023. During the second round of the river basin dialogues held in December 2024 and January 2025 conceptual approaches and practical steps to joint research on ecosystem preservation in the Amu Darya Basin, and climate resilient water infrastructure in the Syr Darya Basin have been agreed. Throughout the year, experts from all Central Asia countries will be working together to implement these ambitious tasks and produce new knowledge and research on the most challenging matters.

This activity is a part of SIC ICWC work on implementation of its commitment to the UN Water Conference 2023, namely advancing evidence-based transboundary water cooperation in Central Asia.

Usmanova O.K., Galustyan A.G., PhD, Scientific-Information Center of the Interstate Commission for Water Coordination (SIC ICWC)



RADA: a milestone in water governance in the Amazon Basin



The creation of the Amazon Network of Water Authorities (RADA by its acronym in Spanish) by the presidents of the Amazonian countries during the 2023 Amazon Summit represents a significant step forward in transboundary water governance. RADA was established within the framework of the Amazon Cooperation Treaty Organization (ACTO), an intergovernmental body formed by the eight Amazonian countries.

Officially installed in April 2024, RADA provides a permanent coordination platform for water authorities from Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela. Its 2024 - 2026 work plan includes:

- the approval of regional protocols for water quantity and quality monitoring and data exchange,
- training and capacity building,
- exchange of experiences in financing IWRM, and iv) strengthening the regional coordination mechanism.

One key priority is enhancing the Amazon Hydrological Network and the Water Quality Network, two regional monitoring networks that support the Integrated Water Resources Management (IWRM) in the basin.

RADA operates with the support of the Amazon Basin Project,



led by ACTO in partnership with the United Nations Environment Programme (UNEP) and funded by the Global Environment Facility (GEF). The project supports the implementation of the Strategic Action Program (SAP) for Integrated Water Resources Management in the Amazon Basin, reinforcing institutional capacities for IWRM, building community and ecosystems resilience to climate change, and ensuring regional data for decision making processes.

With the creation of RADA, the 8 Amazonian countries reaffirm their commitment to building transboundary water governance, protecting one of the planet's most vital ecosystems.

TRANSBOUNDARY COOPERATION

Strategic Action Programme for the Buzi, Pungwe, and Save (BUPUSA) Tri-basin to unlock transboundary investments





Mozambique and Zimbabwe are tackling social, economic, and environmental challenges in the Buzi, Pungwe, and Save Watercourses. In 2024, the two governments developed a Strategic Action

Programme (SAP), a basin-wide framework for implementing prioritized joint transboundary actions and investments to address environmental concerns in the tri-basin.

The BUPUSA SAP endorsed by ministers for water in the two countries, comprises seven transboundary priority interventions for the tri-basin, namely:

- Strengthening basin-wide source to sea management capacity
- Sustainable groundwater management
- Improving sustainable water supply
- Reducing water and environmental pollution
- Rehabilitation of land degradation hotspots
- Adopting and implementing a basin-wide environmental flow regime
- Strengthening climate resilience

A Transboundary Diagnostic Analysis (TDA), commissioned in the tri-basin, identified five environmental problems, namely: reduced availability of water, deterioration of water quality, land degradation, changes in flow regime, and increase in extreme climate events.

The SAP, TDA, and National Action Plans (NAPs) were developed under the Management of Competing Water Uses and Associated Ecosystems in Pungwe, Buzi, and Save Basins (GEF-BUPUSA) project implemented by International Union for Conservation of Nature (IUCN). The Global Water Partnership Southern Africa (GWPSA) supported the tri-basin's Member States in executing the project.

A transboundary Institution, the Buzi, Pungwe, and Save Watercourses Commission (BUPUSACOM) was established in May 2023 to provide a coordinated and integrated approach to Transboundary Water Resources Management and remedy challenges faced by riparian communities within the tri-basin. The BUPUSACOM Offices have now been established in Beira Mozambique. The Commission has embarked on a resource mobilisation drive to address the tri-basin's challenges through the SAP.



New reports on transboundary water cooperation now available

The Third Progress Report on Sustainable Development Goal (SDG) Indicator 6.5.2, published by the United Nations Economic Commission for Europe (UNECE), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and UN-Water, is now accessible in five languages. This report, titled **Progress on Transboundary Water Cooperation: Mid-term status of SDG Indicator 6.5.2, with a special focus on Climate Change – 2024**, presents the findings of the third SDG indicator 6.5.2 monitoring exercise, which took place in 2023, and places special emphasis on climate change. It provides insights into countries' efforts to tackle the impacts of climate change and disaster risk reduction at the transboundary level.

The Water Convention secretariat has recently released two significant publications:

 Third Implementation Report on the Water Convention: Progress on Transboundary Water Cooperation under the Water Convention: Third report on implementation of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (2020 - 2023). The report details the significant results achieved by the Parties to the Convention in implementing transboundary water cooperation, but also identifies challenges in implementation and provides strategic recommendations on possible actions to strengthen implementation of the Convention and transboundary water cooperation.

 Good Practices and Lessons Learned in Data-sharing in Transboundary Basins: It presents a global collection of case studies related to different aspects of data and information sharing, building on real-life experiences across all levels. The publication provides a wide array of examples showing how monitoring and data-sharing programmes can be implemented, and thus complements previously developed guidance materials on monitoring and assessment.

TO FIND OUT MORE



NEWS FROM THE BASINS | AMERICAS

IWRM in transboundary basins: the pioneering role of Peru's National Water Authority (ANA)

Integrated Water Resources Management (IWRM) in transboundary basins represents one of the most significant challenges for sustainable development, requiring systematic approaches to environmental, economic, political and social factors. In Peru, the National Water Authority (ANA) - as the technical-normative apex of the National Water Resources Management System - coordinates strategies and actions for 34 transboundary basins shared with five neighboring countries: Ecuador, Colombia, Brazil, Bolivia and Chile. Notable progress has been made in IWRM cooperation with Ecuador and Bolivia to address climate change impacts.

Regarding Ecuador, the 2019 IWRM Plan for the Zarumilla transboundary basin marked a milestone as the first bilateral plan of its kind. In 2017, both countries established the Peru-Ecuador Binational IWRM Commission for nine transboundary basins (effective April 2022), with its regulations signed in October 2024. As current Pro Tempore President (2024 - 2026), ANA is prioritizing implementation of the Binational Technical Secretariat to enhance water management cooperation.

With Bolivia, ANA has developed a hydrological model for the Maure-Mauri River basin for water planning, conducted binational water quality monitoring in the Suches basin, and prepared Terms of Reference to update the water balance for the Titicaca-Desaguadero-Salar de Coipasa-Poopó system.

Through multisectoral approaches and close coordination with Bolivian and Ecuadorian counterparts, ANA is establishing foundations for integrated transboundary water management to ensure water security for border populations.

Transboundary cooperation for the rivers of the Guiana Shield



Facing climate challenges, the BIO-PLATEAUX 2 project united Suriname, Brazil, and France in 2024 to strengthen management of the Maroni and Oyapock basins. Participatory workshops, shared data platforms, and a joint declaration signed in Paramaribo marked this EUsupported initiative (INTERREG Amazonia).



Integrated Water Resources Management through Basin Technical Committees in Guatemala



Ministerio de Ambiente y Recursos Naturales



Guatemala, a country with great ecological diversity and water resources fundamental to its development, faces the challenge of managing its basins sustainably. In this context, the Basin Directorate of the Water Vice Ministry leads the development and implementation of plans, policies, programs and projects for the comprehensive management of these ecosystems. It also promotes actions for their protection, conservation and improvement, contributing to compliance with Sustainable Development Goal (SDG) 6.5 on integrated water management. Through national governance, basin technical committees have been established as key elements to ensure sustainable management of water and natural resources. These platforms encourage participation of key stakeholders at local level, including civil society, government institutions and private sector.

Under current legislation (Government Agreement 19-2021), three processes are implemented:

- Basin Characterization: starting point to analyze natural resource issues through bio-physical and social dimensions.
- Basin Diagnosis: analysis and generation of information to determine basin status.
- Basin Protection and Conservation Plan: strategic mid- and long-term actions to address identified territorial challenges.

The technical committees facilitate problem identification, interinstitutional coordination and evidence-based decision making, promoting transparency, shared responsibility and equity for sustainable water resources management.

Mexico's water policy 2024 - 2030



The basis of Mexico's water policy is integrated water resources management (IWRM) by hydrological basin. By administering the 13 hydrological basins into which the country is divided, management is more effective and adapted to the characteristics of each region.

Major efforts are currently being made to improve water quality and ensure its availability, prioritising supply for human consumption, through comprehensive projects that include the rehabilitation, modernisation and technification of irrigation infrastructure, as well as the implementation of sustainable technologies and the promotion of conservation practices.

IWRM at the basin level is governed by the National Water Plan 2024 – 2030, presented in November 2024. The guiding principles of the plan are: water policy and national sovereignty; justice and access to water; mitigation of environmental impact and adaptation to climate change; and comprehensive and transparent management.

As part of its implementation, the National Agreement for the Human Right to Water and Sustainability was signed and 10 commitments for water were established, bringing together the federal, state and municipal governments, the agricultural and industrial sectors, academia and the general population.

Likewise, an Infrastructure Master Plan will be implemented with the aim of improving the existing infrastructure and planning for what is needed, as well as actions for the modernisation of 200,000 hectares of irrigation. 17 strategic projects have also been defined and the sanitation and ecological restoration of rivers will be promoted, especially the Lerma-Santiago, Atoyac and Tula rivers.

In addition, forums are underway for the construction of the National Water Programme 2025 - 2030, in which representatives of native peoples, young people, academics, specialists, legislators, the private sector and local, state and federal authorities contribute their knowledge and experience to the formulation of the guiding instrument of national water policy.



National Water Plan 2024 - 2030



Planning for climate resilience in the Delaware River Basin

In the Northeastern United States, the Delaware River flows undammed for 530 km, forming an interstate border for nearly its entire length. Its drainage area - the Delaware River Basin - encompasses over 35,000 km2 in four states: New York, Pennsylvania, New Jersey and Delaware.

In 1961, the Delaware River Basin Commission (DRBC) was formed to manage, protect and improve the shared water resources of the Delaware River Basin without regard to political boundaries. The five Commission members are the four Basin state governors and U.S. Army Corps of Engineers' North Atlantic Division Commander, who represents the federal government.

For 60+ years, the DRBC has successfully improved water quality and built a sustainable water supply upon which over 14 million people depend. In December 2024, Kristen Bowman Kavanagh was appointed as the fifth Executive Director of the Commission; she leads a staff of approximately 35 scientists, engineers, planners and professionals who implement Commission programs.

The DRBC is currently developing its first Climate Resilience Plan. This plan will include a list of prioritized actions for the DRBC to take for evaluating climate impacts - notably, increased temperatures, changes in precipitation patterns and sea level rise - and formulating management approaches.

The Climate Resilience Plan will be developed in three phases. Phase 1 runs through the end of 2025 and includes gathering robust public and partner input as the framework is developed. Members of our basin communities, our regulated entities, and partner NGOs are sharing their thoughts on how climate change is impacting the Basin's water resources via a virtual comment card, at webinars and at in-person public meetings.

TO FIND OUT MORE



NEWS FROM THE BASINS AMERICAS

Brazil: R\$240 million investment in São Paulo's basins





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From the 1950s onwards, the areas that would form the Metropolitan Region of São Paulo (RMSP) experienced rapid population growth, increasing the demand for water supply. In 1975 and 1976, the state government enacted legislation aimed at establishing a restrictive set of rules and criteria to control and regulate land use and occupation in strategic watersheds for the city's water production. However, 20 years later, despite the legal restrictions, these laws had to be revised to address the environmental liabilities accumulated over the preceding decades.

For this reason, State Law No. 9,866/1997 was enacted, establishing guidelines and regulations for the protection and recovery of watersheds in areas of regional interest within the State of São Paulo. The monitoring of watershed areas in the

RMSP, for example, serves as a tool to preserve biodiversity and ensure water quality, contributing to water sustainability and the conservation of the Atlantic Forest. Nonetheless, challenges persist in protecting these areas, mainly due to the lack of territorial planning.

In this context, the Alto Tietê Basin Committee (CBH-AT), with the support of its Basin Agency (FABHAT), funds water management programs using resources from the State Water Resources Fund (FEHIDRO). Over the past 10 years, CBH-AT has funded approximately R\$ 240 million, and approximately R\$ 41.5 million in projects and works to improve and restore watershed areas. Notable results include the acquisition of equipment for monitoring and combating illegal occupation, enhancements to the monitoring network, and the strengthening of environmental education initiatives.

Technical team of the Alto Tietê River Basin Agency Foundation (FABHAT)

TO FIND OUT MORE



Management of the Machángara River Basin, Ecuador

The Machángara River Basin Conservation Committee, founded in 1998, is an inter-organizational management space that unites the efforts of public and private institutions and local communities for the conservation of water resources. Although it does not have legal status, it enjoys wide social recognition and executes annual operational plans aligned with the sustainable development of the basin.

The actions are organized around four axes: environmental, social, economic and communicational.

In the environmental sphere, programs for the protection of water sources and ecosystem rehabilitation have been implemented, involving the community in the planting of 466,000 trees. Hydrometeorological monitoring has been strengthened, providing valuable information for decision-making, and the conservation of 19,000 hectares of the Machángara-Tomebamba Wildlife Refuge is being promoted. Forest fire prevention brigades have also been set up with the local communities.

In the economic sphere, sustainable agroecological production and training programs have been developed that benefit 200 families, preventing agricultural expansion into fragile ecosystems and achieving the conservation of 16,000 hectares of grassland and 2,081 hectares of chaparro scrubland.



The results reflect a successful model of community management, which includes the conservation of ecosystems, sustainable water supply and the empowerment of communities. These actions reinforce the resilience of the basin and its inhabitants, enabling them to adapt to climate change and guarantee ecosystem sustainability, facilitating compatibility between production and conservation for the well-being of the population.

Catalina DÍAZ GRANDA,

Director of the Technical Commission, Machángara River Basin Conservation Committee

NEWS FROM THE BASINS | EUROPE

ICPDR prepares to launch the 5th Joint Danube Survey: the world's largest river monitoring initiative



The Joint Danube Survey (JDS) is the largest river monitoring effort globally, conducted every six years by the International Commission for the Protection of the Danube River (ICPDR). Covering over 2,800 km of the Danube and its tributaries, JDS provides a comprehensive assessment of the river's health, focusing on water quality, biodiversity, and pollution trends.

JDS5 kicks off 1 July 2025 and will build on past findings while integrating advanced techniques. The survey gathers crucial data to support evidence-based policies for sustainable river management.

Key Objectives of JDS5:

- Assess Water Quality: Monitor pollutants, chemical contaminants and nutrient loads.
- Track Biodiversity: Use eDNA to identify species and assess ecosystem health.
- Identify Emerging Threats: Detect microplastics and new pollutants affecting the Danube.
- Support Policy & Conservation: Provide data for improved water governance.
- Engaging Communities Through Citizen Science.

JDS5 focuses on the link between science and society:

- Citizen Science: Hands-on water monitoring activities engaging schools and local communities in cooperation with the EC's Joint Research Centre.
- Educational Programs: Workshops, interactive tools, and collaborations with the Danube Youth.
- Danube Day Events: Public activities take place locally in countries across the basin, fostering a strong connection between communities and the river.
- Social Media: Increasing visibility through storytelling and digital campaigns.

Scientific reports for the general public will be published to make the results accessible. Thanks to its innovative and collaborative approach, JDS5 will provide crucial knowledge for protecting the Danube and securing its future.



In Ukraine, pursuing basin management efforts, despite the war

The Basin Department of Water Resources of Zakhidnyi Buh and Sian Rivers is a budgetary non-profit organization under the management of the central executive body, the State Agency of Water Resources of Ukraine, which implements state policy on water management, use, and reproduction of surface water resources.

Since 2019, the Basin Department has actively participated in developing the first Vistula River Basin Management Plan 2025 - 2030, approved by the Ukrainian government on November 1, 2024. The Plan includes 82 measures, 66% of which focus on the construction or reconstruction of wastewater treatment plants, as these have the largest anthropogenic impact on water bodies. The total cost of these measures is 517.96 M€. Due to the war, most state funding is directed to the military sector, making international technical assistance, including grants and co-financing, a priority for the Plan's implementation.

To implement the Plan, the Basin Department, with partners from Ukraine, Poland (PGW Wody Polskie), and Sweden (Svensk Vatten), successfully completed the "Clean Baltic Source - Wastewater Treatment in Lviv and Volyn Oblasts" project in 2023



- 2024, funded by the Swedish Institute. The project involved training seminars for local communities and utilities, a roadmap for wastewater treatment plant reconstruction and construction, and study visits to treatment plants in Lviv, Warsaw, and Stockholm.

As the project continues, the Basin Department is collaborating with international partners and local communities to attract funding from international funds. These steps mark Ukraine's first efforts to finance the reconstruction and construction of wastewater treatment facilities.



NEWS FROM THE BASINS | EUROPE

Restoring one of Estonia's main salmon rivers back to its former glory



The Purtse river in northeastern Estonia, once one of the main spawning grounds for salmon in Estonia, has long suffered from industrial pollution and hydromorphological changes, including the Püssi dam.

In the framework of LIFE IP CleanEST project, an important step has been taken to restore the river's flow by removing the outdated dam and replacing it with a rapid-type fish pass. This enhances fish migration, promotes biodiversity and strengthens resilience against climate change.

Construction of the Püssi fish pass is indeed a step in the process of restoring degraded ecosystems. Opening the last insurmountable migration barrier of Purtse river, amplifies previous efforts to improve the river system, whether through salmon restocking, the creation of spawning areas or pollution removal. Removing residual pollution caused by oil shale plants from Purtse river and its tributaries has been the largest legacy pollution remediation project in Estonia to date. In total 18 km of riverbed and 130 000 m³ of pollution was removed with the support from the European Union (EU) Cohesion Fund. This laid the foundation and created favourable conditions to restore the river's ecosystem as a whole. To restore the decreasing fish population, over 180 000 salmon have been restocked into the river by the project partner RMK Põlula fish farm. Additionally, a fish counter at the Sillaoru fish pass, guided by a fence, ensures precise data collecting on migrating fish and the pass' effectiveness.

By prioritizing nature-based solutions, Estonia sets an example for sustainable river management. Restoration of Purtse river demonstrates how environmental conservation and societal benefits can go hand in hand, ensuring a healthier ecosystem for future generations.

LIFE IP CleanEST is an integrated water management project that is focused on improving the status of water bodies in Ida-Viru and Lääne-Viru counties of Estonia.

> Henry LINNARD, LIFE IP CleanEST Communication Manager, Estonian Ministry of Climate



TO FIND OUT MORE

Presentation of the project





Riparian vegetation gives many benefits. It contributes to climate adaptation by erosion control of banks and slowing flood waters. It combats pollution by reducing runoff from land. It provides shade and shelter for aquatic organisms, and is a habitat for insects, birds and animals. Unfortunately, riparian vegetation has historically been reduced or removed in many agricultural areas.

A pilot project to re-establish riparian vegetation was carried out 2001-2006 in the Morsa catchment, with positive results . Together with 3 neighbouring catchments the project was then scaled up with more than 3,500 trees planted 2019-2020. Black Alder and Birch were planted to protect the banks, and Willow was planted to promote biodiversity. The four catchments set an ambitious target of planting 15.000 trees, and this has now been exceeded reaching a total of over 20.000.

One project element is inviting municipal agricultural advisors on field walks to see the visible results of trees planted15 years ago. Direct counselling to landowners has also resulted in more interest. Grants for environmental measures in agriculture have been used to make the project cost free for landowners, enabling restoration of complete river stretches.

Project funds have been spent mainly on the purchase of trees and counselling. The project also uses a drone to take aerial overview images and document results from a bird's eye view.

Information about how the Norwegian catchments are organized was presented in the previous INBO Newsletter No 31 - 2024, page 13.

Contacts in the four catchments: Morsa: carina.isdahl@valer.kommune.no Halden: lars.selbekk@marker.kommune.no Glomma Sud: maria.bislingen@rakkestad.kommune.no Öyeren: Kristian.Moseby@nes.kommune.no

NEWS FROM THE BASINS | EUROPE

Italy - River Contract "Enza Valley": a model for integrated water governance

Launched in June 2023, the Enza Valley River Contract is a multistakeholder governance initiative addressing the environmental, social and economic challenges of the Enza River Basin (890 km²) in the region Emilia-Romagna.

Extending from the Apennine to the Po River, the Enza River is a strategic water resource that supports ecosystems, agriculture, local communities. However, the Enza River basin faces increasing pressures from water scarcity, flood risks, diffuse pollution, and hydro-morphological alterations, all exacerbated by climate change.

Bringing together 52 public and private partners, the initiative follows a structured governance framework:

- 1. Stakeholder Engagement: ensuring participation and transparency.
- **2.** Knowledge Development: assessing water quality, ecosystem services, and climate risks.
- **3.** Strategic Vision: defining medium/long-term sustainability goals integrating regional and local policies.
- **4.** Programme: implementing a 3–5 year program of actions, monitored and updated.

The Contract prioritizes:

- Climate Resilience, through nature-based solutions.
- Sustainable water management, with feasibility studies for alternative water storage solutions.
- Biodiversity conservation, improving water quality and restoring riparian habitats.
- Sustainable agriculture, promoting efficient irrigation practices.

A major innovation is the open framework for sharing hydrological and socio-environmental data, encouraging knowledge-based governance.

This river contract embodies a replicable model of integrated river basin management in Europe.

Francesca LUPPI, Patrizia MARANI, Po River Basin District Authority (ADBPO)





InnWater: for innovative governance of european river basins





With the growing pressures of climate change, water scarcity and multiple demands, the sustainable management of river basins is becoming a major challenge. Priorities include better allocation of resources, sustainable financing, digital integration and greater stakeholder participation.

The InnWater project, funded by the European Commission under Horizon Europe and coordinated by the International Office for Water (OiEau), addresses these challenges by developing innovative governance solutions for water basin management.

Five pilot sites in Europe are testing economic, digital and participatory tools to develop more integrated, effective and resilient governance frameworks.

Two years after its start, the project has launched a water governance assessment questionnaire to support stakeholders.

Economic models under construction will provide a better understanding of the interactions between governance decisions and local economic activities. Participatory approaches have also been implemented to engage local stakeholders, ensuring their perspectives are incorporated into governance solutions. The InnWater Governance Platform, a digital decision-support system, will centralize these tools to enhance integrated basin management.

In its final phase, the focus will shift toward capacity building and knowledge transfer. InnWater will launch a training program, the Summer School, dedicated to economic tools in water governance. Additionally, the Learning Environment will provide digital contents for continuous training, allowing stakeholders to access methodologies and governance tools developed throughout the project.

By 2026, InnWater will deliver a comprehensive set of tools, policy recommendations and practical solutions to strengthen basin-scale water governance.



NEWS FROM THE BASINS ASIA-PACIFIC

Integrated Water Resources Management in Cambodia: IWRM guide



The experience of the Stung Sen Basin marks a significant milestone in the implementation of Integrated Water Resources Management (IWRM) in Cambodia. Since 2012, this pilot project has helped establish a local governance structure, including a Basin Committee supported by a technical secretariat and thematic working groups, a coordinated action plan, and concrete measures based on the priorities set by the committee for effective and sustainable basin development.

The publication "Integrated Water Resources Management in Cambodia – The Stung Sen Pilot Case", the result of 10 years of cooperation between Cambodia and France, summarizes this experience and now serves as a practical guide for implementing

IWRM in other river basins across the country. It highlights key lessons: the importance of a structured institutional framework, the need for reliable hydrological data, and the necessity of coordination between local and national initiatives.

Today, IWRM is expanding to other river basins in Cambodia. The Ministry of Water Resources and Meteorology (MoWRAM) is building on the achievements of the Stung Sen project to develop a comprehensive approach by strengthening governance and improving coordination at different levels of water management. The creation of a National Basin Committee and the development of national methodological guidelines aim to ensure a more harmonized and effective management of water resources throughout the country.

The objective is to coordinate the management of Cambodia's river basins by defining a clear and coherent strategy, leveraging the successes and challenges encountered in the Stung Sen Basin. This guide thus becomes an essential tool for effective, sustainable, and well-coordinated IWRM implementation.

Agathe GUITTARD, Project Manager, OiEau Valérian GUILHEN, Project Officer, OiEau

China promotes river biodiversity conservation with GEF project



From 2016 to 2024, the International Economic & Technical Cooperation and Exchange Center (INTCE) of the Ministry of Water Resources (MWR) of China, partnered with the Food and Agriculture Organization (FAO) to implement the Global Environment Facility (GEF) project, "A New Green Line: Mainstreaming Biodiversity Conservancy Objectives into China's Water Resources Management Policy and Planning".

Activities were carried out at provincial, prefectural and county levels through the River and Lake Chief System:

- Policy Mainstreaming: Biodiversity objectives integration into water resource management policies and legal frameworks, development and test of a River and Lake Health Assessment methodology in five pilot rivers in Chongqing and Yunnan.
- On-the-Ground Activities: ecological flow application, dam modifications, wetland restoration, habitat improvements for fish species, restoration of over 700 ha of river habitat across benefiting 1 million people.
- Capacity Building: Established biodiversity monitoring systems in pilot counties, and provided multilevel training for over 2500 officials and stakeholders.

The project improved river health, its integrated approach boosted fish and bird populations, enhanced water quality and contributed to convince officials and communities of the interest of biodiversity conservation.

> Hao Zhao, Director-General, INTCE



Decades ago, the aquatic ecosystem of the Wubu River basin (Chongqing province) suffered significant damage due to hydropower development and pollution. The project restoration efforts (comprehensive riverbank environmental restoration, dam removal and the construction of fishways) have successfully revitalized the river's scenic beauty and improved its ecological health. © INTCE

NEWS FROM THE BASINS | ASIA-PACIFIC

Turkey: basin-scale risk management plan<mark>s to</mark> increase capacity to adapt climate change

As a result of climate change, the frequency and impact of both floods and droughts are increasing in Türkiye. To mitigate these risks and enhance resilience, integrated management plans have been developed for all river basins.

Steps and content of the Flood Management Plans is as follows:

Preliminary Flood Risk Assessment: Identifying areas carrying flood risk through a preliminary assessment of flood risk

- Preparation of Flood Hazard and Flood Risk Maps: Flood Hazard Maps showing the inundation area and depth of water in identified high-risk areas will be prepared. Risk classification will be carried out in flood-prone areas, and Flood Risk Maps will be prepared.
- Preparation of Flood Management Plan: By using the aforementioned maps, a Flood Management Plan is developed, encompassing planning and guidance for pre-flood, duringflood, and post-flood activities, including improvement and intervention.

The safety of life and property of the public is ensured by using flood management plans, and these plans form the basis for spatial planning of Türkiye. In order to be prepared for droughts, which are one of the most significant negative impacts of climate change, and to minimize the adverse effects of drought risks, Drought Management Plans have been prepared for twenty five river basins.

As part of the plan, the measures outlined for the efficient use of our water resources and preparedness for droughts include:

- Rehabilitation of Irrigation Areas and Transition to Modern Irrigation Systems.
- Reducing Losses and Leakages in Drinking and Utility Water Networks.
- Determination of Alternative Water Sources.
- Ensuring the Reuse of Wastewater.
- Increasing the Production of Drought-Resistant Crops.

For effective drought management, The project of "Establishing a Drought Forecasting and Early Warning System" started in 2024 and is aimed to be completed by 2027. With this system aiming to minimize the impacts of drought, early warnings will also be issued to water-using sectors such as agriculture, drinking water, tourism, and industry before drought occurs.

Integrated River Basin Management of the Welang River





The Welang River in East Java, Indonesia, is a crucial lifeline for nearby communities. As cities expand and populations grow, however, the river has faced increasing challenges such as flooding, erosion and pollution. The governments of Indonesia and the Netherlands, through its Partners for Water programme are investing in the Welang River Basin Transformation Project to protect both the river and the people who depend on it. It started with a co-design process with active participation from local communities, landowners and government stakeholders, fostering inclusivity and ensuring that the final outcomes are tailored to the specific needs and contexts of those involved. This led to an Integrated River Basin Management (IRBM) approach, which included also training of east Java province staff on IRBM.

One of the outcomes is that in the upstream area of Welang Watershed, a Nature-based Solutions (NbS) approach is applied through co-construction with the local community by employing a 3R methodology (retention, recharge, and reuse of water) through creation of simple gully plugs.

These structures made from locally available materials like bamboo, stones and branches, serve to:

- Collect and temporarily store water during high rainfall flows.
- Retain sediments and materials washed into the channel.
- Slow down small, concentrated flows.

The team also organised waste management workshops for two public elementary schools (Sekolah Dasar Negeri - SDN) in the Welang Catchment Areas.



NEWS FROM THE BASINS ASIA-PACIFIC

Zarafshon Basin Organization: water resource management and climate change adaptation





The Zarafshon Basin Organization (ZBO) in Tajikistan is responsible for planning, monitoring, and the rational use of water resources in the Zarafshon River Basin. The organization operates within the framework of the national strategy for sustainable water supply and sanitation, supporting the principles of Integrated Water Resources Management (IWRM). ZBO also participates in international water management initiatives.

Climate change has a significant impact on the basin's water resources. Over the past 20 years, the Zarafshon glaciers have shrunk by 2.5 km, which is 2.1 times the predicted rate. This leads to a reduction in long-term water reserves, the formation

of hazardous water bodies, and an increased frequency of mudflows. Changes in the hydrological regime threaten hydraulic infrastructure and agriculture in the region while also increasing the risk of floods and droughts.

To adapt to climate change, ZBO has activities such as:

- Monitoring glaciers and water resources using satellite data and unmanned aerial vehicles.
- Developing an early warning system for floods and mudflows to minimize damage to the population and infrastructure.
- Introducing water-saving technologies, including drip irrigation and modern irrigation methods.
- Strengthening hydraulic structures, creating anti-mudflow dams, and reinforcing riverbanks.
- Supporting farmers in adapting agricultural practices to changing climatic conditions, including selecting drought-resistant crop varieties and new agricultural technologies.

ZBO actively cooperates with government bodies, local communities, and international partners to ensure sustainable water use, minimize climate risks, and preserve the region's biodiversity. The organization aims for a comprehensive approach that includes scientific research, technological innovations, and expanded public participation in water resource management.

Balancing Rice and Resilience: A Smarter Way to Farm in the Lower Mekong

Rice farming is the backbone of the Lower Mekong Basin, feeding millions and driving economies but comes with high water use and methane emissions. Once seen as sustainable, traditional practices now face mounting climate and socio-economic pressures.

To tackle this, the Mekong River Commission (MRC) has introduced Intermittent Irrigation – a game-changing technique that reduces water use and methane emissions by alternating between irrigation and drainage. Detailed guidance on this method, published in December 2024 outlines a practical path to farmers toward a more sustainable future.

A new wave of change: How Mekong countries are joining forces to tackle floods and droughts

Aligned with the MRC Basin Development Strategy (BDS), the Member Countries have prioritized joint projects in their National Indicative Plans (NIPs) to foster transboundary cooperation. These projects bring together two or more countries to tackle shared challenges – ones that no single nation could effectively address alone.

Two key joint projects have been prioritized:

- 9C-9T Joint Project (Cambodia–Thailand) focuses on shared flood and drought risks. Key outcomes include a risk mitigation strategy, master plan, gender and vulnerability assessment, and introduction of Nature-based Solutions (NbS). A transboundary early warning system and upscaling strategy are underway, with next steps involving climate risk assessments and a GCF funding proposal.
- 3S Joint Project (Cambodia, Lao PDR, Viet Nam) targets sustainable water use in the Sekong, Sesan, and Srepok basins. Achievements include a basin diagnostic, shared priorities, and atlas. Work now focuses on a master plan, governance structure, and a joint GCF concept note.

These efforts aim to enhance water security, ecosystem resilience, and regional cooperation amid intensifying climate impacts.

Satellite observation and geo-services: for CICOS the development of water resources and the improvement of river transport in the Congo Basin





Plateforme GERNAC

Réseau de stations virtuelles

For several years, the International Commission of the Congo-Oubangui-Sangha Basin (CICOS), an active member of the African Network of Basin Organizations (ANBO), has been supporting its member states (Republic of Angola, Republic of Cameroon, Gabonese Republic, Central African Republic, Republic of the Congo, and Democratic Republic of the Congo) with services and tools necessary for the sustainable management of water resources and the improvement of river navigation safety. These instruments are powerful drivers of economic exchange, fostering the blue economy and physical integration in the Central African sub-region.

Following the production and dissemination of services and products such as water level forecast bulletins for navigation and flood management, as well as hydrological balance bulletins, CICOS, through the GMES & Africa II project, has chosen to distribute these products and services in the form of Geo-Services via its platform, Water and Natural Resources Management in Central Africa (GERNAC). This initiative aims to reach a larger number of water resource users.

To improve hydrological monitoring in the Congo Basin, where the in-situ station network has significantly declined. CICOS, supported by technical partners – the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), and the World Meteorological Organization (WMO) - and financial partners - the World Bank, the European Union (EU), the African Development Bank (AfDB), and the African Union (AU) – is working to strengthen the human capacities of National Hydrological Services by incorporating the benefits of satellite observation technologies into continental hydrology. Today, satellite altimetry, through missions such as Sentinel and SWOT, is considered a valuable complement to empirical hydrological monitoring in the Congo Basin, where the in-situ hydrometric network requires substantial human, material, and financial resources.

> Dr. Marie-Thérèse ITONGO. Secretary-General of CICOS



Strengthening hydrological knowledge in Congo: a key challenge for flood resilience

Central Africa, and particularly the Republic of Congo (Brazzaville), faces growing challenges related to flooding, exacerbated by rapid urbanization and climate change. In response, an ambitious project (2024-2029), financed to the tune of €40m by the French Development Agency (AFD), aims to strengthen the National Hydrological Service (SHN) as part of a comprehensive flood management and sanitation programme.

One of the key components of the project is support for the SHN by a private operator (BRLi - Ceneau - JDMK), with the aim of making it fully operational and autonomous, including financially.

As part of this initiative, the International Office for Water (OiEau) acts as an Assistant to the Project Owner (AMO) alongside the consulting firm Artelia, to support the Ministry of Spatial Planning, Infrastructure, and Road Equipment (MATIER) and relevant Congolese institutions, such as the Institute for Research in Exact and Natural Sciences (IRSEN) and the Directorate General of Hydraulics. OiEau provides technical and methodological expertise to structure the project's implementation, ensuring the coherence of actions and the capacity building of local stakeholders.

Concrete actions to strengthen the SHN

The project is based on several complementary actions:

- Modernizing measurement infrastructure: Installing new hydrometric equipment, upgrading existing stations, and developing spatial hydrology.
- Enhancing technical skills: Training SHN staff in data collection, analysis, and hydrological modeling techniques.
- Implementing early warning systems: Improving flood forecasting tools to enhance local authorities' responsiveness to flood risks.
- Data dissemination and valorization: Strengthening the capacity to share information with decision-makers and local stakeholders.

A sustainable approach for effective risk management

Beyond the technical aspects, the project lays the foundations for integrated and sustainable flood management, taking into account the effects of climate change. Thanks to this support, the Congo is strengthening its capacity to manage its water resources proactively, in the interests of its security and development.

> Blaise DHONT, Project Manager, OiEau

Cooperation project between the Ministry of Water and Forests of Côte d'Ivoire and the Loire-Brittany Water Agency

In Côte d'Ivoire, the legal framework for water resource management is defined by Law No. 2023-902 of November 23, 2023.

Population growth, agriculture, climate change, agro-industrial activities, mining, and gold panning are increasing pressure on water resources.

In this context, the Ministry of Water and Forests (MINEF) and the Loire-Brittany Water Agency have initiated an Integrated Water Resources Management (IWRM) process in the Haut Bandama region, with support from the International Office for Water (OiEau). This basin was selected for an experimental IWRM development due to its unique status as the country's only major hydrographic basin and the significant water management challenges it faces.

The cooperation project, launched in February 2021, is now in its third phase.

Phases 1 & 2: awareness and experimentation of IWRM in Haut Bandama

The first phase (2021 – mid-2022) focused on raising awareness among stakeholders and sharing information at both the national and watershed levels. Key efforts included establishing Côte d'Ivoire's first Local Water Committee (CLE) in Haut Bandama—a platform for dialogue involving public authorities, local communities, and water users to support decision-making.

The second phase (mid-2022 – mid-2024) led to the organization

of a preparatory meeting for the CLE's creation and the definition of its first activities. In parallel, OiEau facilitated coordination between various water data managers and MINEF. Additionally, MINEF representatives participated in a study tour in the Loire-Brittany basin in February 2024.

Ongoing activities: from centralized IWRM to Local Water and Sanitation Committees (CLEA)

For the second experimental phase, MINEF aims to test a pilot Local Water and Sanitation Committee (CLEA) in a sub-basin facing existing or emerging water resource threats. As defined in Article 81 of the Water Code, this entity would bring together water users at a smaller scale than the initially planned CLE in Haut Bandama.

In parallel, OiEau will support the creation of a National Water Resources Agency.

Recent Developments

- MINEF's participation in the INBO World General Assembly in October 2024 in Bordeaux.
- MINEF's membership in INBO in February 2025.
- Interest in the Peer-to-Peer project (see p. 30).

Mélanie FAYET, Project Manager, OiEau Auguste Kouamé KOUASSI, Director of Water Resource Protection and Development

OiEau and the Artois-Picardie Water Agency (France) launch a new water management and biodiversity initiative in Madagascar



In 2025, OiEau, with the support of the Artois-Picardie Water Agency (AEAP), is launching a new collaboration in Madagascar with the Regional Development Directorate (DDR) of the DIANA Region. Through this partnership, activities will focus on strengthening Integrated Water Resources Management (IWRM) in the DIANA Region, particularly in the Sambirano watershed located in the southern part of the region. A significant portion of this 3,300 km² watershed is covered by agricultural land, including cacao—accounting for over 80% of the national production—coffee, vanilla, and pepper. The lessons learned from this pilot experience will be shared at both regional and national levels to enhance the implementation of IWRM across these scales.

The project also includes a component dedicated to climate change adaptation and biodiversity conservation. Given that 35% of the DIANA Region is already classified as protected natural areas, the project team aims to support Madagascar National Parks (MNP)—under the Ministry of Environment—in defining an action plan. This plan seeks to "preserve protected areas" with local community consent, "reduce degradation", and improve local well-being, particularly through income-generating activities.

Agathe GUITTARD, Project Manager, OiEau

NEWS FROM THE BASINS | AFRICA

A Regional Fund in the Niger Basin for an urgent response to climate change

In a context of climate crisis and the continuous decline in financial resources allocated to the sustainable management of natural resources in the Niger Basin, the Heads of State and Government of the member countries of the Niger Basin Authority (NBA) have decided to create a Regional Climate Change Adaptation Fund in the Niger Basin (FRACC/BN). This autonomous financial instrument is designed to ensure integrated and sustainable management of the resources in this strategic region.

The fund is inspired by the fourth principle of Integrated Water Resources Management (IWRM), which values water in all its uses, including competing ones. This principle is based on two key pillars: the "polluter pays" and "user pays" principles, both of which are enshrined in the NBA Water Charter.

The FRACC/BN has two main strategic objectives: first, to increase the funding portfolio to support sustainable activities within the NBA, and second, to ensure stable and sufficient financial resources for the preservation of ecosystems and natural resources in the basin. The legal status and regulatory framework of the FRACC/BN have been adopted by the NBA Council of Ministers after a participatory and inclusive process.

This fund takes the form of an international

trust fund dedicated to climate change adaptation. It has legal personality at both national and international levels and enjoys administrative and financial management autonomy. Attached to the Niger Basin Authority, it will be funded by various sources identified during the feasibility study.

To implement this initiative, the operationalization process of the FRACC/BN will include several stages, such as determining the initial endowment and designating a regional institution responsible for its management. The NBA receives support from the African Development Bank through the Integrated Development and Climate Change Adaptation Program in the Niger Basin (PIDACC/BN).

This initiative represents a significant step towards sustainable natural resource management in the Niger Basin, responding to the growing challenges of climate change. The establishment of the FRACC/BN embodies hope for riparian countries and marks a firm commitment to addressing contemporary environmental challenges.

Climate change adaptation and flood and drought management project in the Volta Basin

The Volta Basin, shared by Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, and Togo, is suffering the effects of climate change, with an intensification of floods and droughts, with serious consequences for ecosystems and communities.

In this context, the project titled "Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin" or Volta Flood and Drought Management (VFDM) Project, funded by the Adaptation Fund, was developed and implemented by the World Meteorological Organization (WMO), the Volta Basin Authority (VBA), and the Global Water Partnership – West Africa (GWP/WA) from June 2019 to June 2024. The project aimed to:

- Develop capacities and decision-making frameworks for climate risk management at local, national, and regional levels.
- Implement concrete, environmentally-friendly adaptation actions, including Nature-Based Solutions (NbS), using an integrated approach.

• Strengthen political and institutional capacities for integrated flood and drought management at local, national, and transboundary levels.

The project has improved knowledge of the risks associated with floods and droughts in the Volta basin. It has set up local and national risk management committees and made them operational, while improving the hydrometeorological data collection network.

Multidimensional maps of vulnerable areas have been drawn up, and the capacity of local players has been strengthened in terms of disseminating warnings and providing appropriate responses at ten pilot sites.





PERSPECTIVES AND CHALLENGES

Twin Basin Initiative

INBO has launched a global inter-basin twinning program on the occasion of the 10th World Water Forum (Bali, Indonesia, May 2024). In line with the Dakar Action Plan for Basins, adopted at the previous Forum, it aims to accelerate the achievement of sustainable development goals, by basins and for basins.

The initiative aims to develop institutional twinning between organizations in charge of water resource management at basin level, and thus strengthen their operational capacities for Integrated Water Resource Management (IWRM). Basin organizations (national and transboundary) as well as national, regional and local administrations in charge of basin management are the targets of these twinnings.

INBO mobilizes international financial institutions, bi- and multilateral donors, to implement these twinnings. The European Commission and Agence Française de Développement (AFD) are already contributing as main partners. Financed by AFD, the DYNOBA project promotes the sharing of experience between six African transboundary basin organisations to strengthen the sustainable management of water resources in the face of the effects of climate change.

With a budget of 3 million euros over three years, it is being implemented by OiEau in partnership with the African Network of Basin Organisations (ANBO).

Several other partners have already confirmed their interest in joining the Twin Basin Initiative project, including the Inter-American Development Bank, the Global Environment Facility (GEF) IW:LEARN Project and the World Meteorological Organization.



Launched in September 2024, the Peer-to-Peer (P2P) project is the first component of INBO's Twin Basin Initiative. This international programme will address key issues in basin water management, such as participatory governance frameworks, climate change adaptation plans, data sharing, water information systems and sustainable financing mechanisms.



International cooperation: European Union support for strengthening basin organizations' capacities

The European Union (EU) places water management at the core of its sustainable development efforts. With a financial commitment of \notin 1.4 billion for the 2021 - 2023 period, the EU goes beyond funding: it also fosters partnerships that empower and drive innovation in watersheds worldwide.

Europe, with 60% of its territory covered by transboundary river basins, serves as a model for integrated water resource management. The experience gained through the EU Water Framework Directive (WFD) has helped establish an effective governance structure, facilitating stakeholder cooperation for sustainable water resource management.

The Peer-to-Peer (P2P) project for Basin Organizations exemplifies this ambition by promoting exchanges between practitioners responsible for managing watersheds, lakes, rivers, and aquifers. The EU aims to encourage these organizations to collaborate on implementing their strategies, best practices, and tools. P2P builds upon the EU Water Initiative Plus project, which has notably supported Ukraine and Armenia in developing watershed management tools, identifying investment needs, and involving civil society.

INBO and the International Office for Water (OiEau) have been selected to lead this project due to their expertise. It is part of the broader Team Europe Initiative for transboundary water management in Africa and Central Asia.

The exchange of best practices, the sharing of tools, and the development of tailored governance frameworks are key to addressing the growing water-related challenges. Through P2P, basin organizations can learn from their peers and develop a community of practice.

Interview with Marjeta Jager, Deputy Director-General of the Directorate-General for International Partnerships (DG INTPA)



Keeping an Eye on the Future of Water: Water Management as the Foundation

The year 2025 marks a pivotal moment - a milestone five years before the conclusion of the 2030 Sustainable Development Goals (SDGs). It is

a year for critical assessment, evaluate progress and identify persistent challenges to fulfill the global commitments made in 2015. In particular is SDG 6 - ensure water and sanitation for all.

Equally important, 2025 also serves as a launchpad for preparations toward the upcoming United Nations Water Conference in 2026. Only the third of its kind since the inaugural event in 1977, the 2026 Conference presents another historic opportunity to re-emphasize water's firm position high at global political agenda. More importantly, it offers an opportunity to transform today's water reality. It calls for solutions for the 2.2 billion people worldwide, who are still lacking the access to safe drinking water, and for the 3.5 billion people who continue to live without safely managed sanitation services.

To seize this momentum, 2025 must be used for strategic preparation and accelerated action. Beneath of all these efforts must lie a consistent commitment to water governance and management as the foundation. There is a clear and urgent need to position water management as the foundation of all future global water initiatives.

Water is life and there is no life without it. As highlighted throughout this Newsletter, progress in climate mitigation and adaptation, food security, public health, and the energy transition can only be achieved through quality and sustainable water management. Therefore, effective, inclusive, and integrated water resource management (IWRM) must remain at the core of every initiative in the water space.

From 2023 to 2026: Keeping the Focus on IWRM

Following the landmark UN Water Conference in 2023, which brought renewed political momentum and gathered hundreds of voluntary commitments, the global community has agreed to convene again the UN Water Conference in 2026. This next conference must build on this momentum—aiming for stronger commitments to action, more tangible outcomes, and more robust frameworks for water financing, governance, and capacity-building.

To succeed, however, the Conference in 2026 must also

preserve the core principles that made 2023 a success, particularly the focus on water resource management and governance. Advocacy for IRWM, and its cross-sectoral alignment with development priorities, should be retained and be elevated. A people-centered, science-based, and accelerated implementation of IWRM is not only vital for resilience and sustainability—it also opens the door to broader cooperation and action in the water sector.

Basin-Level Water Management: The Right Starting Point

Water basin management is where IWRM begins. Water at the basin level is the most logical and practical entry point for implementing IWRM. We all agree that focusing on water at the basin level allows for coordinated, locally grounded, and actionable solutions to cross-cutting water challenges — especially those driven by climate change and ecosystem degradation.

This is where the International Network of Basin Organizations (INBO) plays a vital role. As this Newsletter demonstrates, INBO continues to lead global advocacy and action for sustainable, inclusive water governance at basin-level. Through technical support, knowledge exchange, and strategic partnerships, INBO continues to support governments and stakeholders in building and implementing effective and resilient water systems.

As we move toward the UN Water Conference 2026, the end of 2030 SDGs, and beyond, I am confident that INBO will continue to lead, inspire, and deliver. Continued supports to governments and other water actors, including through nature-based solutions, early warning systems, and watersmart infrastructure will be essential to achieve lasting impact in water and basin management.

I welcome the publication of this Newsletter, and look forward to seeing even more tangible outcomes and inspiring actions in its next editions to come.

Water cannot wait. The time for Triple A is now: Advocacy, Alignment, and Acceleration. Our rivers, lakes, aquifers, and the communities that depend on them are calling for a bold actions and response.

By H.E. Retno L.P. Marsudi of the Republic of Indonesia, UN Secretary-General's Special Envoy on Water

INBO's key figures



1994 Year of creation

Status

Non-profit association under French law.

Main objective

Support all initiatives in favour of the organisation of Integrated Water Resources Management (IWRM) at the level of national or transboundary river basins, lakes or aquifers, in order to reconcile economic growth, social justice, environment and water resources protection, and participation of civil society.

Organisation

This platform for the exchange of knowledge and experience is managed by its President and the Liaison Office, which organises the Permanent Technical Secretariat provided by the International Office for Water (OiEau). Its World General Assembly takes place every 3 years. INBO Presidency is held by Morocco, since the GA of 2019, until 2024.

Actions

Exchanges of experience, twinning, events and partnerships (with OECD on water governance, with UNECE on transboundary cooperation and adaptation to climate change). Provision of the expertise of the Permanent Technical Secretariat provided by OiEau: technical and institutional support, training, data and information systems.



Network

192 Member-Organisations (basin organisations, governmental administrations in charge of water, bi or multilateral cooperation organisations) and Permanent Observers in 88 countries.

Implantation

7 regional networks, to strengthen the links between Member-Organizations from neighboring countries, to develop INBO's collective activities in the region, to organize joint activities of general interest.



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