



IAWD

DANUBE WATER PROGRAM

2022 ANNUAL REPORT

© 2023 The World Bank
Praterstrasse 31, 1020 Vienna
Internet: www.worldbank.org

DISCLAIMER

This work is a product of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the World Bank, its Board of Executive Directors or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work.

PHOTO INFORMATION

Unless otherwise noted, all photos are © Danube Water Program.
Cover page, page 7, page 13, page 14 and page 28: Pixabay.com;
Page 1: iStock.com/unclepodger; Page 22: iStock.com/RgSTudio

Vienna, Austria
May 2023

Read more
here:



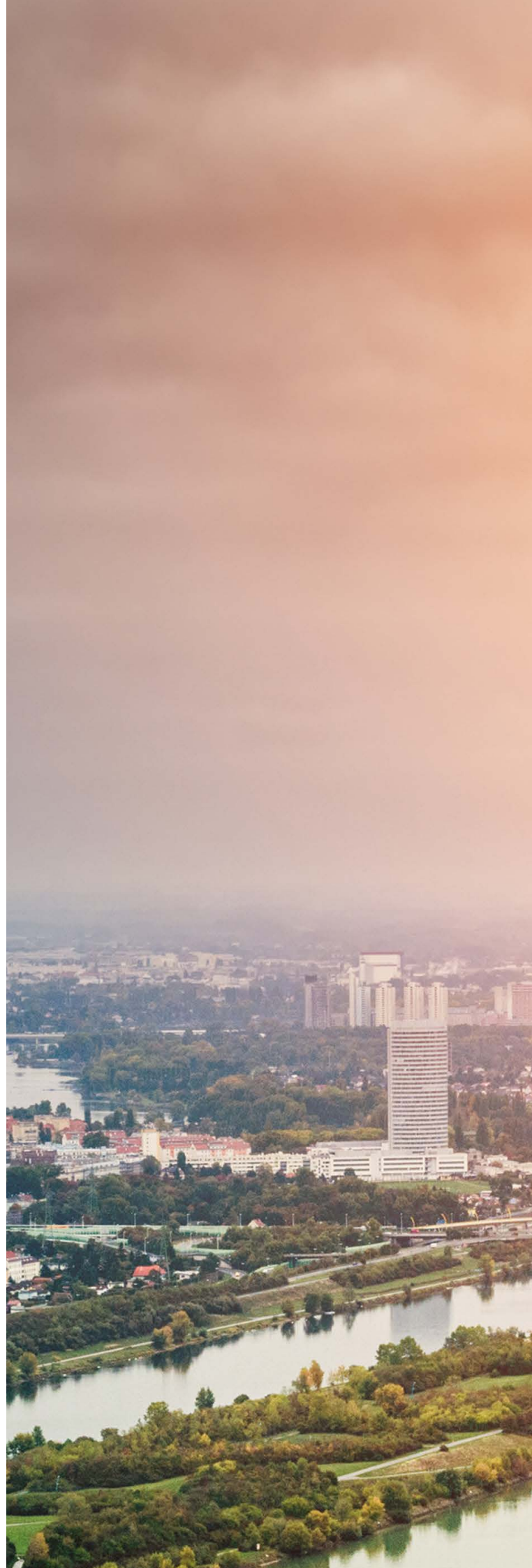


DANUBE
WATER
PROGRAM

2022 **ANNUAL** **REPORT**

CONTENTS

Danube Water Program	1
Why This Program?	2
Highlights of 2022	4
Executive Summary	5
Analytical and Advisory Activities	7
Water Security	8
Water Supply and Sanitation	9
INSIGHT: Water Security Diagnostics for the Danube Region	10
Capacity Building Activities	13
Regional Workshops	14
Water utility performance indicator, data collection and benchmarking	15
The Danube Learning Partnership (D-LeaP)	17
INSIGHT: Utility Management Training	19
Knowledge sharing	23
Conference and events	24
Communication and Outreach	25
INSIGHT: Danube Water Forum	27
Looking Ahead	29
Annexes	31



DANUBE WATER PROGRAM



WHY THIS PROGRAM?

Governments and water professionals in the Danube region face a double challenge of meeting their citizens' demand for universal, good quality, efficient, and financially sound or - in one word - sustainable water services, while catching up to the environmental requirements of the European Union *acquis communautaire*.

In order to support the countries of the Danube region in addressing their water-related challenges, the World Bank and the International Association of Water Service Companies in the Danube River Catchment Area (IAWD) joined forces in 2013 to launch the **Danube Water Program**. Funded by the Austrian Ministry of Finance, the Program was set up with the objective to support institutional capacity building and the development of regulatory and policy instruments in the water supply and wastewater (WSS) sector of participating countries in the Danube region. The first phase of the Program was formally launched in **2013** in partnership with WSS line ministries, regulators, national water utility associations, and local government representatives of countries from South-East Europe. Given the strong

demand for the Program's activities, three follow-up phases were approved, in **2015 Phase II** put a focus on scaling up activities, in **2019 Phase III** expanded the scope of the program towards the broader Water Security agenda, and in **2022 Phase IV** set out to foster water security and resilient recovery, and to ensure the sustainability of Program activities.

The DWP **supports smart policies, strong utilities, and sustainable water and sanitation services**.

The Program is a policy and technical assistance program for water sector institutions and other sector stakeholders. The DWP **promotes informed policy dialogue** around the water sector challenges in the region and offers solutions; delivers **comprehensive research and analytical work** to fill the knowledge gaps; and aims to **strengthen the technical and managerial capacity** of sector national institutions and utilities. Program activities fall under three broad categories: analytical and advisory services; capacity development, and regional knowledge sharing.

The **Program covers overall 16 countries**, including eleven target countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Moldova, Montenegro, North Macedonia, Romania, Serbia, Ukraine) and five participating countries (Austria, Czech Republic, Hungary, Slovakia, Slovenia). Target countries directly benefit from Program funding, while



participating countries can participate in Program activities but not directly benefit from funding.

The Program is run jointly by the World Bank and the International Association of Water Service Companies in the Danube River Catchment Area (IAWD).

The World Bank is a long-standing financial and technical partner of the water and wastewater services sector with several active projects and programs in the Danube region. The World Bank engages in an active dialogue with national and international institutions on challenges such as European integration, utility benchmarking, institutional reforms, and regulation.

IAWD is an association of water and wastewater utilities in the Danube River catchment area.

Established in 1993, IAWD works with its members to secure the water quality of the Danube and its tributaries, promoting sustainable utility services, representing the water sector's interests, and providing donors with an established, attractive platform that covers the entire region.

The Danube Water Program celebrates its 10-year anniversary in 2023. The past decade has been marked by efforts to support the strengthening of water sector policies, institutional capacities, and efficiency of water sector delivery, with a refined and updated focus throughout every phase of the program:

Phase I

(2013-2015)

€ 4.5 Million

- First Danube Water Conference bringing together more than 130 participants from 19 countries
- Launch of competitive grants with 71 applications
- Creation of the DANUBIS.org utility database
- Design and roll-out of capacity building programs on Energy Efficiency, Commercial Efficiency, and Asset Management
- A holistic State of the Sector assessment conducted and completed in 2015

Phase II

(2016-2018)

€ 5 Million

- Second round of competitive grants, resulting in a total cumulative investment of €1 million
- Launch of the biggest capacity building initiative in the region: the Danube Learning Partnership (D-LeaP)
- Study on Water Supply and Sanitation Utility Aggregation
- Review of rural water and sanitation services in seven countries of the Danube region

Phase III

(2019-2022)

€ 3.5 Million

- Broadened scope to encompass the greater water security agenda
- The State of the Sector Update was released
- Launch of the Voice of the Danube website and knowledge sharing community
- KnowNow Webinar series initiated
- Launch of the Utility Management Program

Phase IV

(2022-2025)

€ 4 Million

- First Danube Water Forum hosted physically in the region
- Water Security analytical work and stakeholder engagement
- Addressing demands via continuation of activities under a broadened scope of the Program.

HIGHLIGHTS OF 2022



February

Capacity Building Workshop

Financial sustainability of wastewater management in the Danube region



March

KnowNow Webinar

The Rising Cost of Inaction: How the energy crisis impacts the water services sector in the Danube Region



WSP

April

D-LeaP WSP Launch in Kosovo

Understanding Water Safety Planning and Crisis Management: SHUKOS trains the trainers and launches the Program



May

Launch of Water Security Workshops

Pilot stakeholder workshops to identify priority actions to improve water security in Croatia and Serbia



June

Danube Water Forum

First in person event since 2019 in Tirana, Albania, with over 150 participants



July

First Danube Water Program internship

Launch of the World Bank Vienna Office Internship Program and first intern to join the Danube Water Program



August

Utility Benchmarking Study Tour

25 participants from the Bulgarian Hub come together to focus on best practices in water utility operation, including presentations and field trips



October

KnowNow Webinar

Drought of Sight, Drought of Mind: A webinar on drought risks for the water service sector in the Danube Region



November

Utility Management Training Graduation

The first class of UMT participants complete the two-year program aimed at equipping current and future water-sector managers with tools and techniques to support decision-making



December

Expansion of Water Security Work

Water Security Stakeholder Consultation Workshops in Albania, Bosnia and Herzegovina, and Montenegro



EXECUTIVE SUMMARY

The year 2022 was characterized as a transitional period for the Danube Water Program (DWP). Safety measures under the Covid-19 pandemic continued to impact working conditions during the first months of the year. However, program activities continued by hosting meetings, workshops, and events in the virtual space, including e.g. a regional capacity building workshop on “Financial sustainability of wastewater management in Danube region.” With Covid-19 restrictions slowly easing, the Program celebrated its first face-to-face gathering after more than two years by bringing together water sector professionals from across the region to the Danube Water Forum in Tirana, Albania.

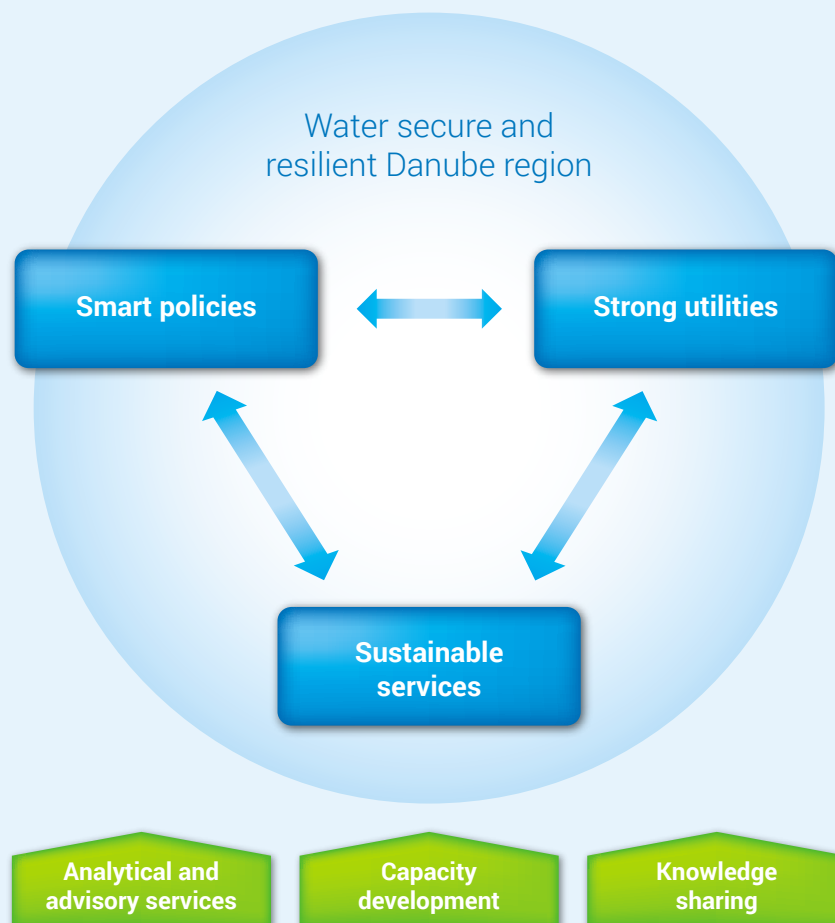
The year 2022 also successfully concluded the 3rd Phase of the Program and transitioned to the new 4th Phase with a continuation of activities until 2025, under the broadened scope of water

security and resilient recovery of the Danube region. Information on the achievements under the completed 3rd Phase, and the revised targets for the new 4th Phase, can be obtained from the Results Indicators Frameworks in the Annex.

The activities during the year were carried out within the following three main fields of action:

- Analytical and Advisory activities
- Capacity Building
- Knowledge Sharing

Analytical and advisory services on water security and water supply and sanitation have been completed in several countries in 2022, including Albania, Bosnia and Herzegovina, Croatia, Montenegro, North Macedonia, Serbia and Ukraine. Work on water security included support for: a policy review on water and agriculture in Bulgaria, an assessment of the resilience of water supply in Croatia’s coastal area under the impacts of climate change, and the elaboration of water components of inter-sectoral green growth assessments in Serbia and North Macedonia.



At the regional level, a detailed methodology for a Water Security Diagnostics of the Danube Region was developed with support from a consortium around the International Institute of Applied System Analysis (IIASA). The methodology was first rolled-out in Serbia and Croatia, with assessments and consultation workshops organized with key stakeholders in each country. Further rollouts were launched for additional target countries in the region, including Albania, Bosnia and Herzegovina, and Montenegro, together with the elaboration of a broader Water Security narrative for the whole Danube region. This analytical work is an important cornerstone for identifying targeted support under the new 4th Phase of the Program and its broadened scope.

Capacity development activities are primarily delivered under the Danube Learning Partnership (D-LeaP). Despite the difficult circumstances due to Covid, five D-LeaP programs were successfully delivered by eleven Hubs.

Knowledge sharing, communication, and outreach activities included the Voice of the Danube weekly digest and a growing community of users on Voice of the Danube website and related Social Media channels. The Danube Water Forum was organized as physical event hosted in Tirana, Albania on June 28-29, addressing the effects of the emerging energy crisis on the water sector. Leading up to the Forum, two KnowNow webinars were organized in the first half of 2022, centered around the topic of water and energy, and a third one in autumn dealing with droughts.



ANALYTICAL AND ADVISORY ACTIVITIES

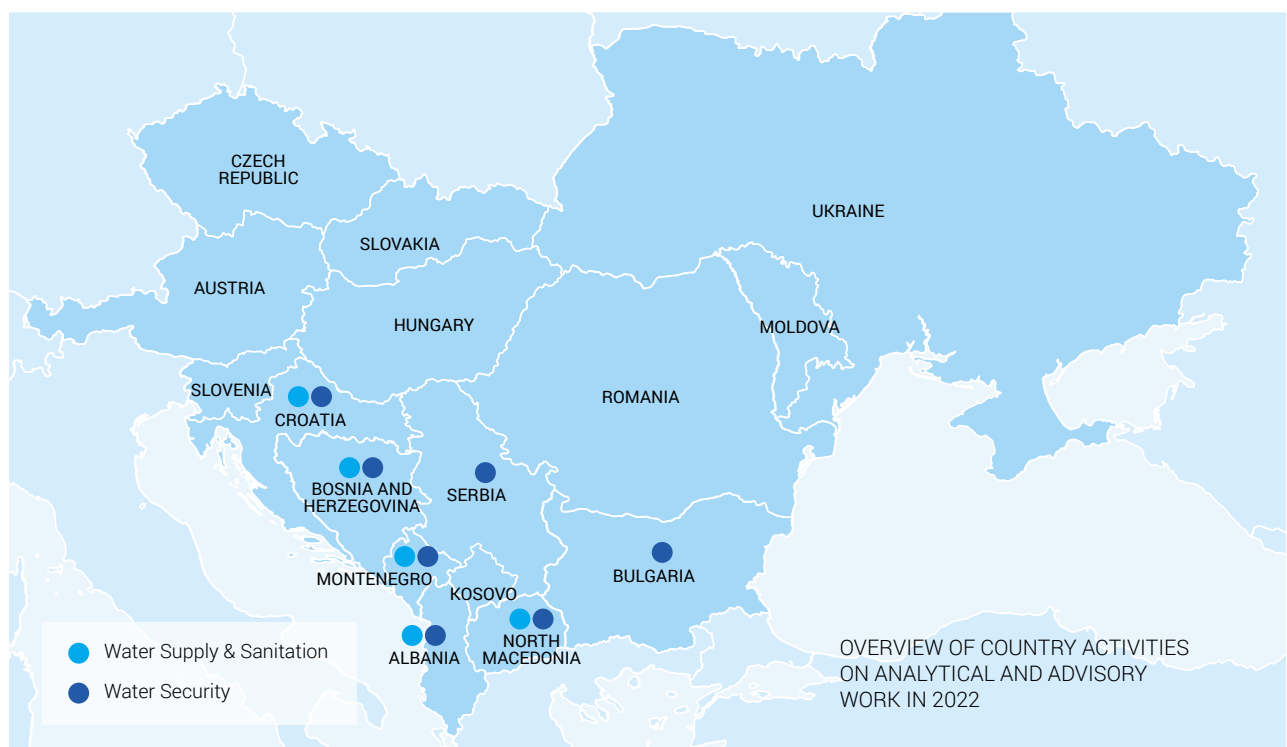
Analytical and Advisory services under the Danube Water Program aim to develop and/or consolidate existing knowledge to improve understanding of challenges and emerging opportunities for the water sector in the Danube region. These activities aim to engage in an informed policy dialogue and to provide advice on reform agendas to water sector stakeholders and decision makers in the countries of the region. The analytical and advisory services provided in the frame of the Danube Water Program in the year 2022 were focused on two main topical areas: i) the broader Water Security agenda, and ii) Water Supply and Sanitation.

WATER SECURITY

As defined by Grey and Sadoff (2007), water security is “the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies.” The objective of the Water Security activities in the frame of the Danube Water Program is to support countries in their development efforts for reform of sector policies, regulations, and governance in relation to the broader water sector towards building a water secure and climate resilient Danube region.

Regional analytical and advisory services under the Program focused on the development of a **Water Security Diagnostics for the Danube region**. The objective of this activity is to develop a regional overview, identify key challenges, promote focused policy dialogue, and develop actions and recommendations to build a water secure region for the people, economy, and the environment. The activity is jointly implemented with the Regional Water Security Initiative for Europe and Central Asia and co-funded from the Global Water Security and Sanitation Partnership (GWSP). The approach follows different levels and depths of assessments. Six countries of the Danube region were selected for in-depth assessments including Croatia, Serbia, Albania, Montenegro, Bosnia and Herzegovina, as well as Ukraine. However, due to political developments and armed conflict, the roll-out in Ukraine had to be temporarily put on hold.

In 2022, consultation workshops with water sector stakeholders were organized and piloted in Croatia and Serbia. The methodology was fine-tuned and further rolled-out in Albania, Montenegro, and Bosnia and Herzegovina. Read more about the analytical and advisory work on Water Security in the in-depth insight on page 10.



In parallel, discussions have been held with water sector stakeholders on **national level** support needs. The following work has been conducted at the national level in support of water security topics.



In **Bulgaria**, the program supported a policy review on water and agriculture. The output is a spatial distribution of nutrient surpluses and resulting pollution of surface and groundwater bodies, as well as policy implications and potential solutions which were elaborated for the country. The work feeds into the preparation of River Basin Management Plans in Bulgaria.



In **Croatia**, an assessment has been conducted under the Danube Water Program on the resilience of water supply in the coastal area under the impacts of climate change. In order to address this issue, a new EU-financed project was launched in April 2022, supporting the development of a National Action Plan to reduce water losses in the Croatian Water Supply network in order to increase efficiency and resilience. The lessons learned will be relevant for other countries in the region facing similar challenges.



In **North Macedonia**, the Program supported a water sector strategic assessment as part of the World Bank Green Growth assessment. Two rounds of government consultations (ministries and international donors) on water sector challenges and opportunities have been completed, feeding into the finalization of the Green Growth assessment.



In **Serbia**, the Program supported the elaboration of the water component of a Green Growth assessment. The assessment identifies policy and institutional reforms needed for greener and more resilient growth in Serbia that fills an important knowledge gap in the policy dialogue in the country. The report was finalized in 2022 and served as a tool for engaging in consultations with the Government on greener growth opportunities.

WATER SUPPLY AND SANITATION

Water supply and sanitation sector regulations and policies in the Danube region have come a long way since the start of the DWP and are significantly better established and an integral part of sector management in most countries of the region. However, the Covid-19 pandemic, recent energy crisis, and associated economic difficulties have impacted the water sector in the Danube region, causing financial, technical, and operational challenges. These challenges have imposed requirements for short-term adaptation and rethinking of service provision with the objective to maintain and achieve service sustainability. The prolonged crisis has further exposed existing weaknesses in water utility sector operations but has also increased awareness for the need to improve resilience to maintain an efficiently operated and well-funded water service provision sector via proper crisis management arrangements and preparatory planning.

Several analytical and advisory activities at the national level for the water supply and sanitation sector have been completed in 2022.



In **Albania** the Program supported building capacity on the new Tariff Setting Methodology (TSM) for the water services sector in the country. Upon request, and in close coordination with the Water Regulatory Authority, four regional workshops on the new TSM were organized in 2022 by the Water Supply and Sewerage Association of Albania (SHUKALB) to train utilities on the new methodology, where the development was previously supported under the program.



In **Bosnia and Herzegovina**, the Program supported water sector reform efforts with advisory services on the development of a country-led sustainable approach for performance indicator data collection and benchmarking. Several stakeholder meetings with institutions in Bosnia and Herzegovina and international stakeholders were organized and an action plan was elaborated. The support was closely coordinated and aligned

with the World Bank Water and Sanitation Services Modernization Project in BiH.



Croatia has initiated a water sector service provision reform with the aim to create self-sustainable providers that will finance their regular business operations from water tariffs. The Program provided support to the Ministry of Economy and Sustainable Development (MESD) for the ongoing aggregation process, integrating the largest service providers within a service area. The support has specifically targeted: (i) Affordability of water price in integrated service areas, and (ii) Development of the business plan of water services providers. The tasks have been successfully completed, and findings integrated in the Croatia water sector reform framework, that is currently being implemented.



Montenegro has established a new regulatory framework for water supply and wastewater services, based on the Law on Utility Services from 2016. The support provided under the

Program was focused on the review of the tariff methodology and to propose methods of inclusion of a water pollution tax in the wastewater tariff, in accordance with national and EU legislation. The assistance also included support in the preparation of draft amendments on the regulation governing issues related to the water tax and solutions for charging this tax based on international best practices.



In **North Macedonia**, the Program supported the association of water utilities (ADKOM) in establishing a national benchmarking system for water services with Danubis-DCM as a tool to facilitate data collection, compilation, and analysis of utility performance data for water services, and by using data and indicators established from the country's Energy and Water Services Regulatory Commission (EWSRC). This effort aimed to improve the quality and ease management of utility data and to help establish a national utility benchmarking program.

INSIGHT: WATER SECURITY DIAGNOSTICS FOR THE DANUBE REGION

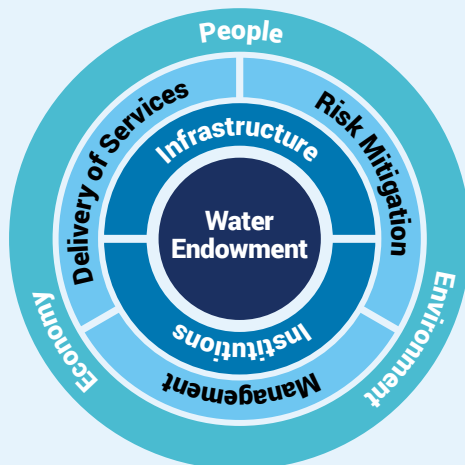
Water Security refers to the “availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies.”

Grey and Sadoff
2007

Applying the Water Security Diagnostic Framework in Danube countries:

Water is a cross-sectoral topic by nature, intersecting with important development issues, including energy, food, biodiversity, and climate change. In order to assess the status and importance of water in a country's development agenda, the World Bank launched the “Water Security Diagnostics Initiative,” seeking to produce studies that help create a narrative on “Water Writ Large,” its importance for sustainable development, and allowing for an informed debate with decision makers beyond line Ministries.

Guiding such assessments, the Water Global Practice of the World Bank has developed a Water Security Diagnostic Framework (Figure 1).



Endowment

Total available water resource includes the renewal, non-renewal and non-conventional sources of water, including desalinated and reused wastewater.

Architecture

Institutions (legal, regulatory, and policy). Infrastructure (storage, distribution, supply, treatment, resilience, green infrastructure, financing, and capacity building).

Performance

Water resources (storage, regulation, allocation and protection). Water services (coverage, quality, equity, performance). Risks (floods, droughts, landslides, and water pollution/contamination).

Outcomes

Measurement of positive and negative outcomes for people, the economy, and the environment; considering the status, variability, and trends in water-related outcomes.

The Framework intends to establish a consistent and structured approach to diagnosing water security without being overly prescriptive. The Framework analyzes the relationship between a country's water **endowment** (given and subject to change due to climate change) and its linkage to social, economic, and environmental **outcomes**. This is done by examining the role of the water sector **architecture**, encompassing infrastructure and institutions, in the **performance** of the water sector in managing water resources, delivering water services, and mitigating water-related risks. This holistic approach is important to identify the most severe risks and entry points for actions to improve overall water security.

security situation of a country or region. These assessments then form the basis for action planning to improve water security with the involvement of key water-related stakeholders.

Pilot roll-out and subsequent assessments

The roll-out of the assessment methodology includes a number of important steps, starting with a preparatory diagnosis, stakeholder mapping and data collection, and accompanied by stakeholder interviews to gain first deeper insights. In the frame of an initial stakeholder consultation workshop, a first draft water security narrative is presented and discussed, allowing for a fact-checking exercise to eliminate any factual errors, as well as the identification of further relevant data and information sources. An updated water security narrative is then presented and discussed at a second stakeholder consultation workshop, forming the basis for discussions on actions to overcome identified challenges and risks in order to improve water security. The application of a multi-criteria analysis based on a participatory approach helps to prioritize the identified actions, which form a key element of the water security assessment.

The methodology was piloted with the first stakeholder consultation workshops organized in Croatia and Serbia.

More than
80
indicators

Based on the Water Security Diagnostics Framework, a more detailed methodological approach has been developed for the assessment of water security in the Europe and Central Asia region, including the Danube. The

so-called "One-Water Methodology" includes an innovative set of indicators structured in the form of a maturity matrix. This allows for mapping and assessing the most important quantitative and qualitative indicators describing water security. The methodology also includes an approach for the assessment of future trajectories in terms of socio-economic development patterns and climate change, affecting the water



STAKEHOLDER CONSULTATION WORKSHOPS IN CROATIA AND SERBIA.

Following a fine-tuning of the approach, the methodology was then rolled-out in Albania, Bosnia and Herzegovina, and Montenegro, where a first round of stakeholder consultation workshops has been completed.

The water security assessments, including the action plans for the respective countries, form



an essential analytical basis for the further engagement with water sector stakeholders and decision makers on reform requirements, capacity building, and investment needs. The work highlighted, once again, the complexity and inter-sectoral nature of water issues, specifically in the context of a changing climate.



	EFFECTIVENESS	ACCEPTANCE	JUSTICE & ETHICS	FEASIBILITY	FLEXIBILITY	SIDE EFFECTS	URGENTLY
Priority 1: Regional water security	39	28	34	20	26	29	36
Priority 2: National water security	35	24	23	32	30	34	32
Priority 3: National water security	42	21	42	17	18	43	38
Priority 4: National water security	40	22	40	23	19	28	41
Priority 5: National water security	29	28	33	24	30	33	35
Priority 6: National water security	32	34	34	16	25	25	36
Priority 7: National water security	40	33	38	23	29	37	38
Priority 8: National water security	37	30	35	25	31	43	32

STAKEHOLDER WORKSHOPS IN ALBANIA, BOSNIA AND HERZEGOVINA, AND MONTENEGRO

CAPACITY BUILDING ACTIVITIES

Capacity building is another main pillar of Danube Water Program activities and aims to build capacity of the water sector in the Danube region at different levels from utility companies and their management to local government representatives, regulatory agencies, and ministries.

REGIONAL WORKSHOPS

For most of the countries in the Danube region, managing wastewater remains an important challenge to reach water resources protection targets in the context of EU obligations, as well as accession and harmonization processes. The EU Urban Wastewater Treatment Directive (UWWTD) mandates significantly higher levels of collection and treatment than is currently the case. New infrastructure built for compliance creates financial and technical strains for utilities and service providers in the region.

Based on a regional review of wastewater management activities and demand expressed by experts, a knowledge gap was identified: a need for better understanding of the importance of financial sustainability of operation and maintenance of wastewater services. Therefore, in February 2022, a virtual workshop on **“Financial Sustainability of Wastewater Management in the Danube Region”** was jointly organized by the World Bank and the International Commission for the Protection of the Danube River (ICPDR). The workshop served as a platform for regional knowledge exchange with presenters and speakers from international organizations, national institutions, as well as the private sector, and brought in over 225 registrations from 33 countries, including all 16 target and participating countries of the Danube Water Program. All presentations and a workshop report are publicly available on the ‘Voice of the Danube’ following the [link](#).

Read more
here:



WATER UTILITY PERFORMANCE INDICATOR, DATA COLLECTION AND BENCHMARKING

The aim of performance indicator (PI) data collection and benchmarking activities under the Danube Water Program is (i) to achieve national PI data collection in each supported country; and (ii) to offer the D-LeaP Utility Benchmarking Program (UBP) for every country in an appropriate form. The activities regarding national PI data collection and utility benchmarking are managed on a complementary level by the World Bank and IAWD. The software solution of the DANUBIS Data Collection and Management Platform (DANUBIS DCM) has been updated and remains fully functional and stable for continued use by countries until 2029.

National PI data collection and utility benchmarking

The objective of this activity is to facilitate data collection, compilation, and analysis of utility performance data in the water supply and sanitation sector in selected countries, with the overall objective to improve water utility performance and move towards a process of self-sustainability of activities.



In **Montenegro**, the Program assisted the National Energy and Water Regulatory Agency (REGAGEN) to collect and analyze water utility performance data for the year 2021 which was collected in 2022. The activity resulted in the preparation of Annual Utility Benchmarking Reports, providing information on the performance of water utilities in the country. Potential future cooperation with REGAGEN in the support of benchmarking activities will follow the objective of establishing a national benchmarking system that will be self-financed, to ensure self-sustainability of water utility benchmarking and becoming more independent from external donor-funded support.



In **Serbia**, the program supported the Association for Water Technology and Sanitary Engineering (AWTSE), in water utility data collection, analysis, and the preparation of a national benchmarking report in cooperation with the Ministry of Construction, Transport and Infrastructure. The activity has resulted in the preparation and publication of several water utility benchmarking and status of the sector reports. Continued cooperation with AWTSE includes support for the preparation of assessments for the years 2021 and 2022, as well as building ownership for water utility benchmarking among the Serbian government as a longer-term solution. This activity will be coordinated with ongoing discussions on other potential World Bank activities in Serbia.



In **North Macedonia**, the program supported the Association of Providers of Communal Services in the Republic of North Macedonia (ADKOM) in data collection, analysis, and the preparation of a Pilot National Benchmarking report of water services in the Republic of North Macedonia. The activity included support for the establishment of a data collection and management (DCM) system in the Public Utility Companies (PUC), training of PUC employees for DCM data management, and presenting the National Benchmarking Reports to local governments, water utilities and national institutions.



In **Ukraine**, support was provided over the past period to the Danube Water Center on utility benchmarking for utilities participating in the ongoing World Bank urban infrastructure project. Workshops were organized and individual Benchmarking Reports prepared and provided to participating water utilities. The activity was completed in early 2022. The ongoing armed conflict in Ukraine has impacted Program activities, whereas World Bank activities in Ukraine are currently focusing on damage and needs assessments. The Program team will explore possibilities to coordinate with activities in Ukraine and provide support in accordance with the program objectives and means available under the ongoing difficult circumstances.

The Utility Benchmarking Program (UBP) is one of the Foundation Programs of the Danube Learning Partnership. This Program helps participating utilities and staff to establish their own diagnostic of high-impact issues affecting the performance of their utility companies by benchmarking their utility performance against other similar companies and international benchmarks and facilitating dialogue among practitioners on good practices. 3 national and 1 regional previously established UBP Hubs continued to carry out Benchmarking in national languages in 2022.

Hubs are the visible face of the Danube Learning Partnership (D-LeaP) for active participants, as they have the primary capacity building delivery responsibility. Hubs are primarily established by national water utility associations and well-performing utility companies but can also be professional associations or academic institutions.

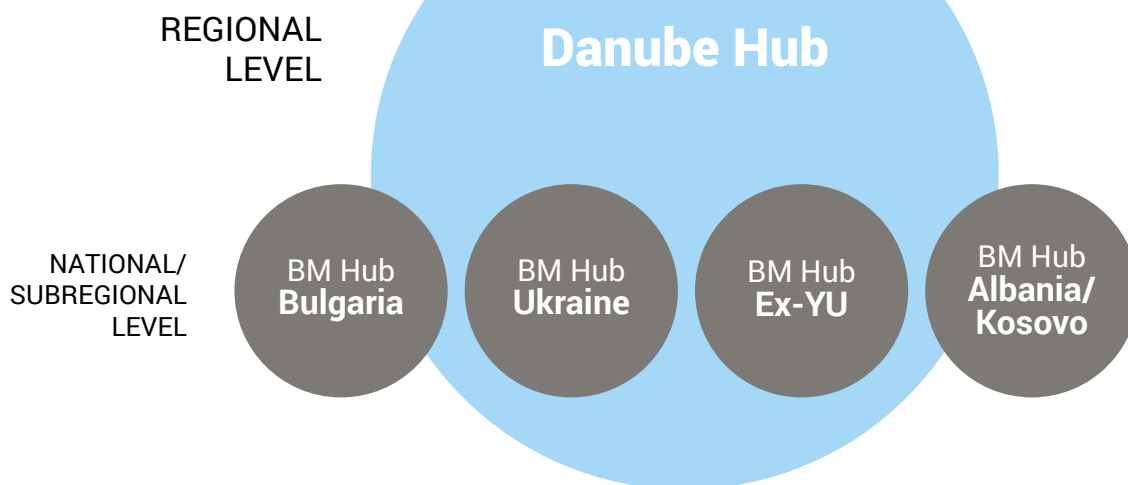
In 2022, three Hubs were active: the Bulgarian Hub, the Albania/Kosovo Hub, and the regional Danube Hub. The Ukrainian Hub is currently on hold due to the ongoing war in Ukraine, but IAWD is in constant exchange to identify a suitable time to reengage. Virtual UBP Hub Coordinators meetings were held on a regular basis every two to three months to discuss the status of the Hubs as well as the ongoing delivery. The 2022 delivery (2021 data) was successfully concluded in the Bulgarian Hub, with the UBP workshop taking place in February 2023, and in the Albania/Kosovo Hub, with the final workshop organized in the frame of the Balkans Joint Conference in November 2022. The Danube Hub will conclude the cycle with the Danube Hub workshop, which is scheduled for May 30, 2023, back-to-back with the 2023 Danube Water Conference. Finally, the IAWD Utility Benchmarking Platform has been extended by another report dedicated to local government representatives, which was financed by the Regional Capacity Development Network (RCDN).

To learn more about the benchmarking activities, please visit <https://www.iawd.at/eng/danube-toolbox/benchmarking>

Read more
here:



OVERVIEW OF BENCHMARKING HUBS
ESTABLISHED UNDER THE UTILITY
BENCHMARKING PROGRAM



THE DANUBE LEARNING PARTNERSHIP (D-LEAP)

Our Vision

A Danube region, where all citizens enjoy sustainable water and wastewater services.

Our Mission

To offer to participating utility companies and sector professionals, through our national partners, a sustainable and comprehensive set of learning and capacity building programs aimed at providing reliable, high-quality and efficient water and wastewater services to all.

D-LeaP was designed as a regional, integrated and sustainable capacity building initiative of national water utility associations and IAWD to provide a comprehensive curriculum to the staff of water and wastewater utilities located in the Danube region and in local languages.

D-LeaP programs strongly depend on the ability to hold physical trainings. Despite the challenges imposed by the Covid-19 pandemic, which included restrictions for travelling and in-person meetings, as well as the energy crisis, the roll-out of new Hubs to more countries was an ongoing effort in 2022. Moreover, two new programs, the Utility Management Training and Access to Financing, were launched and piloted in 2021 and contributed to the portfolio of offers in the region in 2022. Already established programs, which were delivered in 2022, include: (i) foundation programs, (ii) technical programs, and (iii) implementation programs.

Foundation Program Offering:

Foundation programs are the entry point to a continuous improvement cycle and help participating utilities and staff to establish their own diagnostic of high-impact issues affecting the performance of their utility companies. These programs rely on the power of benchmarking utility performance against other similar companies and facilitating dialogue among practitioners on good practices.

UBP
Utility Benchmarking Program
UMT
Utility Management Training

Technical Program Offering:

Once utilities and staff have identified the main issues affecting their performance, they can choose from a range of technical programs covering the main utility management topics. These programs do not only provide training on the solutions to those challenges, but also help utility staff to prepare concrete action or investment plans to address those challenges.

EE
Energy Efficiency
CE
Commercial Efficiency
NRW
Non-Revenue Water
AM
Asset Management
WSP
Water Safety Planning and Crisis Management Program

Implementation Program Offering:

A combination of lack of financing as well as insufficient operating and contractual capacity often means utilities are unable to implement the solutions they have developed. The implementation program offering helps utilities to develop a set of implementation tools.

AF Access to Financing

To find out more about the D-LeaP program offering, please go to <https://www.iawd.at/eng/danube-toolbox/d-leap/programs>

Read more
here:



In 2022, eleven Hubs covering eleven countries have delivered five programs with a total of 103 utilities trained. In addition, four Training of Trainers (ToT) were delivered with 28 trainers trained.



4
ToT events



28
Trainers trained



11
Hubs



11
Countries



5
Programs delivered



103
Utilities trained

INSIGHT: UTILITY MANAGEMENT TRAINING

The Utility Management Training has been a flagship program under the Danube Learning Partnership capacity building efforts in 2022. The two-year curriculum continued to provide mid-career professionals with a holistic view of all aspects of future-orientated utility management.

Introduced in 2021 as a state-of-the-art modular master class for holistic management in the water services sector, it was completed on schedule in 2022 despite all pandemic-related emergencies.

UMT is a mid-career skill-booster for professionals in water utilities, and also a treasure trove of knowledge for decision-makers in industry and administrations with a stake in the sector.

Building on proven D-LeaP programs and collaborating with leading utilities in Central and Eastern Europe, five out of eight training modules covered the major processes and functions in a water utility throughout 2022.

UMT

The first cycle of this program concluded end of 2022, and the participants gathered in Vienna for the final module of their course on "Water Safety Planning and Business Continuity Management." They went through a three-day core training, learning about risk management and crisis management techniques, accompanied by real-life trainings.



Thanks to the financial support of the Global Water Security & Sanitation Partnership (GWSP),

10 out of the 20 participants could be supported with a dedicated scholarship.

We congratulate all the Utility Management Training graduates who received their Certificate of Participation, and we encourage water professionals with an interest in a career-boosting training to turn to the Voice of the Danube for information on future rounds of the training program.

Read more
here:





Based on the learnings from the first cycle of the UMT, the Curriculum for the 2nd cycle has been adapted to the following:

UEFR

Utility Economics, Finance and Regulation

... to introduce the features of regulatory economics and tariffs and to familiarize with core management practices of utility finance and management accounting.

CMCS

Commercial Management and Customer Service

... to introduce the commercial cycle of water utilities as a chain of processes, from meter installation and reading to billing and collection, as well as customer service functions with a focus on digitalization.

AMIP

Asset Management and Investment Planning

... to provide a wide grasp of asset management concepts and tools such as creating asset registers, assessing the condition of critical facilities, design of maintenance manuals, etc.

NOEE

Network Operations and Energy Efficiency

... to highlight the various disciplines within network operations, both water and sewer ones – from purely technical and operations functions to financials, IT solutions and service levels.

EPO

Efficient Plant Operations

... to provides a holistic view on network management from various perspectives – asset planning and investments, design, water-loss reduction, cost control. The key focus of the module is on operations techniques and structuring of proactive network functions.

WSBC

Water Safety Planning and Business Continuity Management

... to provide a framework for utility wide safety planning by introducing both strategic organizational tools, and business processes with high impact on safety, e.g., water-quality laboratories, control rooms, etc.

Preparation

Delivery

Follow Up

MONTH 1-4

Getting to know the trainer(s) and utility partner

Access to Learning Management System (D-LeaP Academy) and receipt of module materials: manual + additional files + reference readings

Introductory webinar

VIRTUAL/ RESIDENTIAL WEEK

Participants arrive at module host city on Monday

4 days of intensive classroom and site visits

Utility host demonstrations + management meeting participation

Virtual networking event/ Concluding cocktail or dinner

Week ends by mid-day Friday

Homework completion back at participant's utility

Continuous exchange with trainer and other participants via the Learning Management System (D-LeaP Academy)

Discussion between participants on module, application of tools, etc.

"UMT equips participants with hands-on methods."

Frosela Filo

Korca utility
(Participant)

"Exchange of experiences and confidence build-up."

Alexandra Garagushkova

Sofia Water
(Participant)

"The UMT pays in the long term as participants bring skills back to the utility."

Jörg Karlhuber

Energie AG Bohemia
(Utility Partner)



Spread over two years the modules combine theory and practice, classroom trainings, and field demonstrations. Each module is organized with an introductory webinar, a one-week “residential” activity and some follow-up work typically based around cases that the UMT participants bring from their own work environments.



Introduction to contemporary tools and techniques in the various areas of utility management



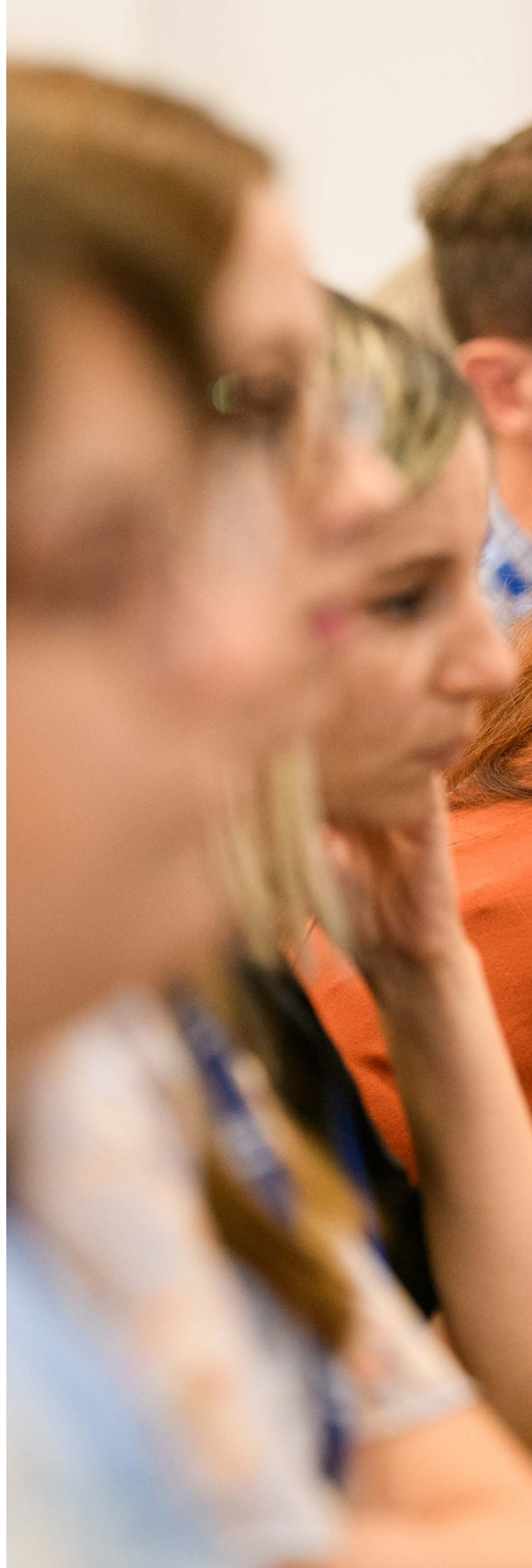
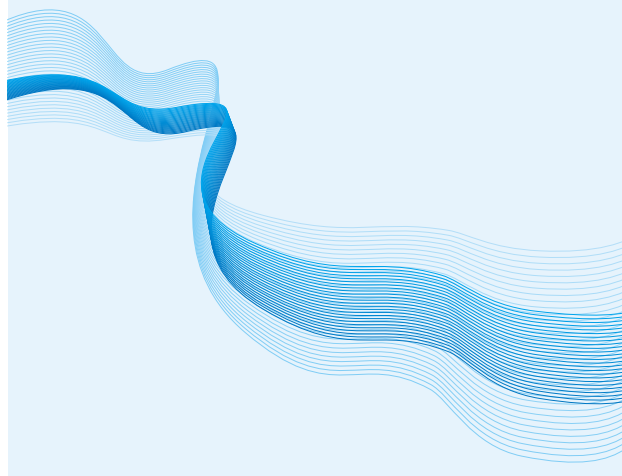
Participating in a network with future leading utility managers



Access to a community of practice in water service sector management



Graduation Certificate including ECTS credits provided by the Academic Partner that can be used for a foundation for a Master's degree



KNOWLEDGE SHARING

Knowledge sharing is the third main pillar of the Danube Water Program and aims to create opportunities for water sector professionals to access and exchange information within and among countries in the region and beyond. A variety of options are offered including major annual conferences, study tours, online webinars, and workshops.

CONFERENCE AND EVENTS

The Program's signature events: Danube Water Conference and Danube Water Forum

The bi-annual Danube Water Conference (DWC) and Danube Water Forum (DWF) have become signature events for the Program and the Danube region and rotate on a yearly basis. While the DWC is hosted in Vienna (Austria), the DWF is organized in the region with the support of a partner institution. Both events serve as an international platform convening sector professionals from the Danube region and beyond to discuss the latest challenges and opportunities in the Danube region water sector. The cross-sectoral and inter-country dialogue created by this annual gathering has been instrumental to create a sense of community, to help professionals in the sector to build and maintain relationships, and to understand the emerging needs and concerns of the water sector and beyond.

2022 Danube Water Forum

After more than two years of virtual events, the 2022 Danube Water Forum was held in-person in Tirana, Albania from June 28-29, 2022. The Forum was co-hosted by SHUKALB, the Water Supply and Sewerage Association of Albania, a long-standing member of IAWD and the Danube Learning Partnership. With the title "Energizing the Water Sector in the Danube Region," the Forum convened senior water sector representatives from the Danube region to discuss the link between energy and water from different angles, with sessions exploring recent developments in the energy market and its effects on utilities in the region, innovative technologies, financing, and the creation of an enabling environment for modernization and reform. In addition, it was the perfect occasion to launch the new World Bank Program for Results (P4R) project on National

Water Supply and Sanitation Sector Modernization in Albania. For promotional purposes, a video on the Danube Water Program, including interviews with key stakeholders, was prepared for launch at the Forum.

For more information on the Danube Water Forum please see page 27.



158

Participants



16

Young Water Professionals



6

Sessions



12

Presentations



1

Gala Dinner (by the seaside)



∞

Endless opportunities to get together

A Regulator Roundtable was organized and delivered in the frame of the 2022 Danube Water Forum in Tirana. The objective of the meeting was to bring together representatives from national regulatory agencies and related bodies from the Danube region, to share information among themselves about the most recent water service regulation developments in each country, as well as discussing the impacts that service regulation can have on emerging topics, particularly on energy efficiency.

Benchmarking and Asset Management Nexus Conference

Back-to-back with the Danube Water Forum, a second event was organized: The Benchmarking and Asset Management Nexus Conference - Key tools for Regulators and Decision Makers. The Nexus Conference was organized jointly by IAWD and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in cooperation with the Water Supply and Sewerage Association of Albania (SHUKALB) and Water and Wastewater Works Association of Kosovo (SHUKOS). The event convened 100 senior water sector representatives from the Danube region to discuss how benchmarking and asset management can be used as key tools for decision making.

International River Symposium

In November 2022, IAWD co-organized the International River Symposium hosted by the International River Foundation in Vienna. The symposium convened more than 400 experts and provided an international exchange for examining best practices in river and watershed management.

COMMUNICATION AND OUTREACH

In 2022, the DWP team continued working to increase Program visibility. The Voice of the Danube (VoD) website has been well received and, as of 2022, has **42,503** page views; **11,061** registered users; and has been accessed from **161** countries.

Now housed within the VoD, the publicly available **DANUBIS.org** utility database includes water and sanitation utility data from more than 600 utilities in 15 countries in the Danube Region and still attracts a growing number of users, with more than 1,700 new page views in 2022.



[Visit DANUBIS.org](https://danubis.org)
for more information.

In addition to the VoD, the Danube Water Program maintains a strong social media presence with 700+ followers on LinkedIn.

After showing great success due to high interest, the Program team continued to organize webinars covering relevant topics on demand, via the **"DWP KnowNow Series"** which was launched in 2021. Each KnowNow spans 75 minutes with a key expert presentation on a timely topic in the region followed by a panel discussion and Q&A.

In 2022, three KnowNow Webinars were delivered reaching a total of 234 participants from more than 26 different countries. Altogether, 15 experts joined the panels on various current issues sharing their experience and views with participants from the region and beyond. The KnowNow series is planned to continue providing relevant and timely information, on demand, during the new program period.



Read more
here:



The Rising Cost of Inaction: How the Energy Crisis Impacts the Water Service Sector in the Danube Region



Mr. Kristoffer Welsien,
Senior Water Supply & Sanitation
Specialist, Water, World Bank
(Panelist)



Mr. Sokol Xhafa,
Acting CEO, Regional Water Company
Pristina, Kosovo
(Panelist)



Ms. Vesna Muslic,
D-LeaP Committee Council Chair &
President of AQUASAN, BiH
(Panelist)



Mr. Christian Hasenleithner,
General Manager, ENERGIE AG
Bohemia
(Moderator)



Read more
here:



From Waste to Value: How the Wastewater Treatment Sector Can Contribute to Mitigating the Energy Crisis in the Danube Region



Mr. Kris Welsien,
Senior Water Supply & Sanitation
Specialist, Water, World Bank, US
(Panelist)



Mr. Gerald Wandl,
Head of Operations, ebswien
kläranlage & tierservice Ges.m.b.H,
Austria (Panelist)



Ms. Frosela Filo,
Head of Finance and Account
Department, Korca Water Supply and
Sanitation JSC, Albania (Panelist)



Mr. Lyubomir Filipov,
Strategic Partnerships and Projects
Director, Sofia Water, Bulgaria
(Moderator)



(Dr)ou(gh)t of Sight, (Dr)ou(gh)t of Mind:
Relevance and Risks of Droughts for the Water
Service Sector in the Danube Region



Mr. Andrea Toreti,
 Senior Researcher, Joint Research
 Centre (JRC), European Commission
 (Presenter)



Mr. Andrea Di Piazza,
 Senior Analyst, Utilitalia, Italy
 (Panelist)



Mr. Vjekoslav Poropat,
 Technical Manager, Istarski Vodovod
 – Buzet, Croatia
 (Panelist)



Mr. Roland Liemberger, Independent
 Non-Revenue Water Advisor, Austria
 (Panelist)



Mr. Stjepan Gabric, Senior Water
 Supply and Sanitation Specialist,
 World Bank, Croatia
 (Panelist)



Ms. Katerina Schilling,
 IAWD, Austria
 (Moderator)



INSIGHT: DANUBE WATER FORUM

Amazing hospitality. A celebration to remember. And more questions and answers than could possibly fit into a tight schedule – This was the Danube Water Forum 2022 in a nutshell.

The date of the Danube Water Forum was not chosen by coincidence but marked a very special day for the Voice of the Danube family: Danube Day 2022. This year, we duly celebrated our river, our region, our community – and our future. The Forum showcased more than ever that our river deserves loving care and protection from our community that adds impact to all our efforts, and our success in the face of more than one crisis.

The first live Danube Water Forum, after two years of pandemic-related isolation, drew in 158 participants coming from 20 different countries, beating all expectations. Encouraging for everybody in the water community was the presence of many Young Water Professionals - much will depend on them in the struggles that the Forum discussed over two exciting days.



“To really move the needle in the water sector we need a holistic integrated approach, structured institutionalized vehicles, data gathering and information sharing to ensure continuous processes. It is never enough to have a one-off intervention that quickly fizzles.”

Ms. Dambudzo Josephine Muzenda,
 Senior Water Supply and Sanitation
 Specialist, World Bank, USA

A fast lane to a water-smart society

At the Forum a vision of a water-smart society was presented which

1. acknowledges the true value of water
2. manages all available water sources to avoid scarcity and pollution
3. closes water and resource loops to foster a resource-efficient circular economy
4. involves all relevant stakeholders in the governance of a resilient water system.

This was not a far-off vision, but an immediate necessity, especially in the light of a projected 35% increase of the global energy demand by 2035 and a projected 55% increase of global water consumption by 2050, and that three out of four risks identified by the IPCC report are water related.



The evening reception brought together friends and colleagues who had not seen each other in years. It also brought the official inauguration of the Albanian water sector reform, a bold streamlining operation. Lively discussion accompanied the sessions throughout the entire Forum!



In search of innovations, sessions brought real-life examples for successful energy-saving programs in utilities. The current energy price-related crisis was no temporary deviation, but rather the sector's future standard operating environment, and on the other hand, crisis and necessity are the mother of innovation and progress.

"I hope we energized you to deenergize," remarked Winston Yu, Practice Manager for Water in Europe and Central Asia (World Bank), in a lively exchange, and with a glance at the results of the ongoing crowd poll on the key takeaways from the Forum he smiled: "I like `energizing hope`."

Mr. Winston Yu,
Practice Manager, Water Europe and Central Asia, World Bank, USA

The Forum also turned to the all-important question of money. Participants were guided through a maze of financing options for energy efficiency measures in utilities, ensuring the listeners that while the complexity and the range of available options may look a bit overwhelming, even the most complex financial



instruments are now proven and wrapped up in ready-to-use documents.

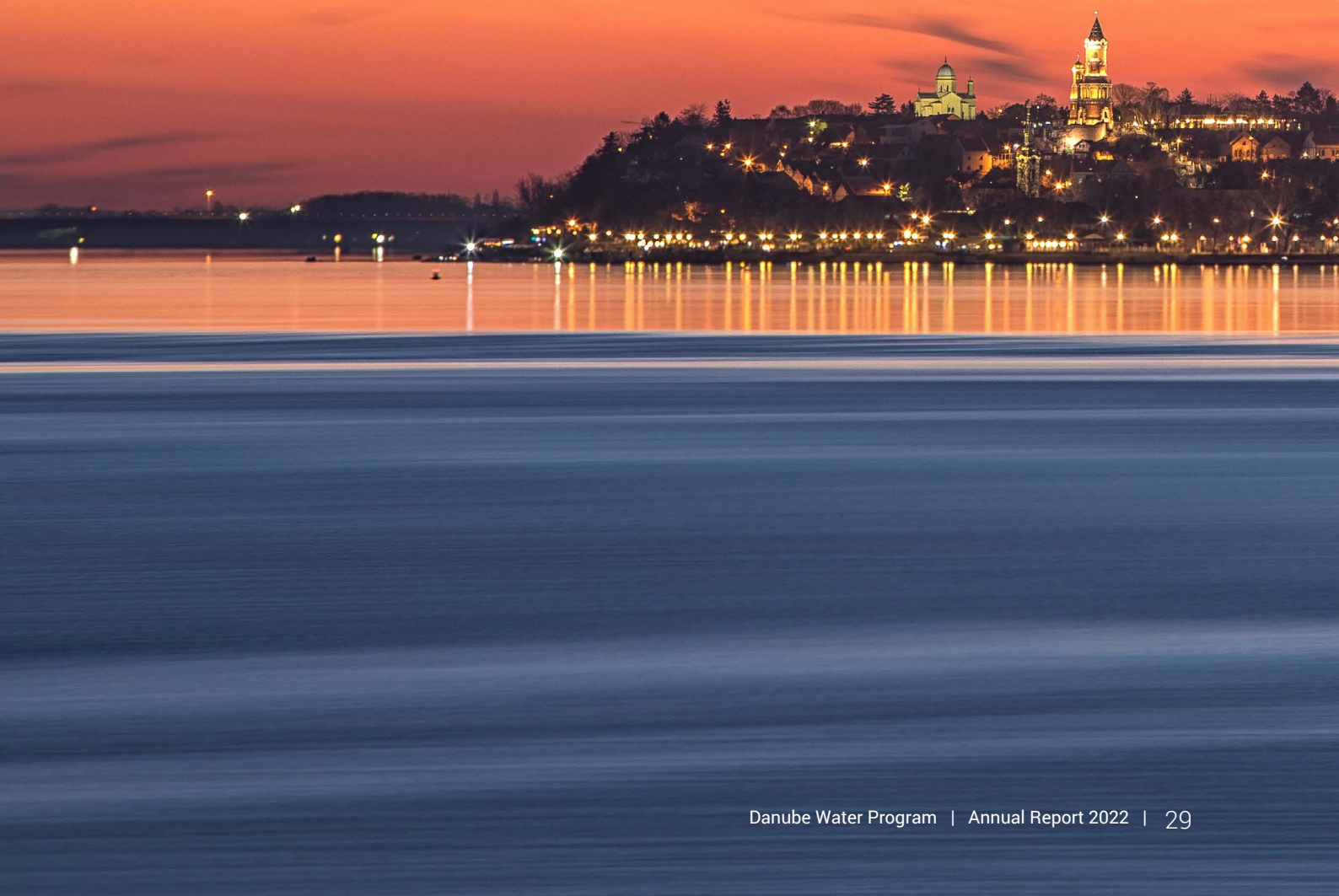
Another session dealt with creating an enabling environment to energize the water sector. The World Bank's conceptual framework for understanding governance bottlenecks in water and sanitation service delivery, has been applied in 20 countries on four continents so far. This instrument could represent the missing link for resolving some of the chronic challenges undermining the water sector.



To read the entire report, click here: https://www.iawd.at/files/File/events/DWP/DWF_2022/2022_DWF_Report.pdf



LOOKING AHEAD



Since its launch, the Danube Water Program responded to a strong demand from countries in the Danube region to provide support towards the achievement of sustainable water supply and sanitation services and water security. The Program helped to make progress in a number of focus areas, while the scope was expanded towards the broader water security agenda in Phase III.

Although the sector is advancing, the challenges are rising in a changing environment, facing the aftermaths of a global pandemic, an ongoing energy crisis, aging workforce, or the increasingly visible impacts of climate change with extreme weather conditions. The latter impose a threat to the region's economy and topics of increasing relevance are water scarcity and drought risk management. The COVID-19 pandemic has caused an unprecedented health, economic, and social crisis. To move towards recovery will require sustained, differentiated, and targeted financial and technical support to governments and the private sector. The COVID-19

crisis brings along the opportunity for countries to Rebuild Better, in a greener, more sustainable and resilient way. These efforts are backed up by the new European growth strategy, the so-called "European Green Deal", including also several reform initiatives for the water sector, which need to be adapted to the realities and needs of the region, particularly for non-EU Member States.

For the next three years the Danube Water Program has set its agenda to address the above-mentioned challenges. While building on the continuation of well-established Program activities, such as the roll-out of D-LeaP programs, the broadened scope of the new fourth Phase of the Danube Water Program under the headline "Fostering Water Security and Resilient Recovery in the Danube Region" is perceived as well-targeted to provide analytics and advice, share knowledge, and further build capacity also in the future, in close cooperation with other development partners active in the region.



DANUBE WATER PROGRAM

**SMART POLICIES, STRONG UTILITIES,
SUSTAINABLE SERVICES**

I ANNEXES

The Annexes are available in electronic version and contain the following information:

A.1 Financial Overview

A.2 Results Indicators Framework

A.3 Regional Events, Trainings and Conferences

A.4 Missions and Technical Visits

A.5 Publications

A.6 Agreements with other Programs and Donors

To review the Annexes, please scan the QR code to access the electronic version.

Read more
here:



For further information

www.danube-water-program.org

www.worldbank.org/en/topic/water

www.iawd.at

www.d-leap.org

www.danubis.org



c/o World Bank
A – 1020 Vienna, Praterstrasse 31/20
office@danube-water-program.org



c/o World Bank Office
A – 1020 Vienna, Praterstrasse 31/20
office@iawd.at

 Federal Ministry
Republic of Austria
Finance

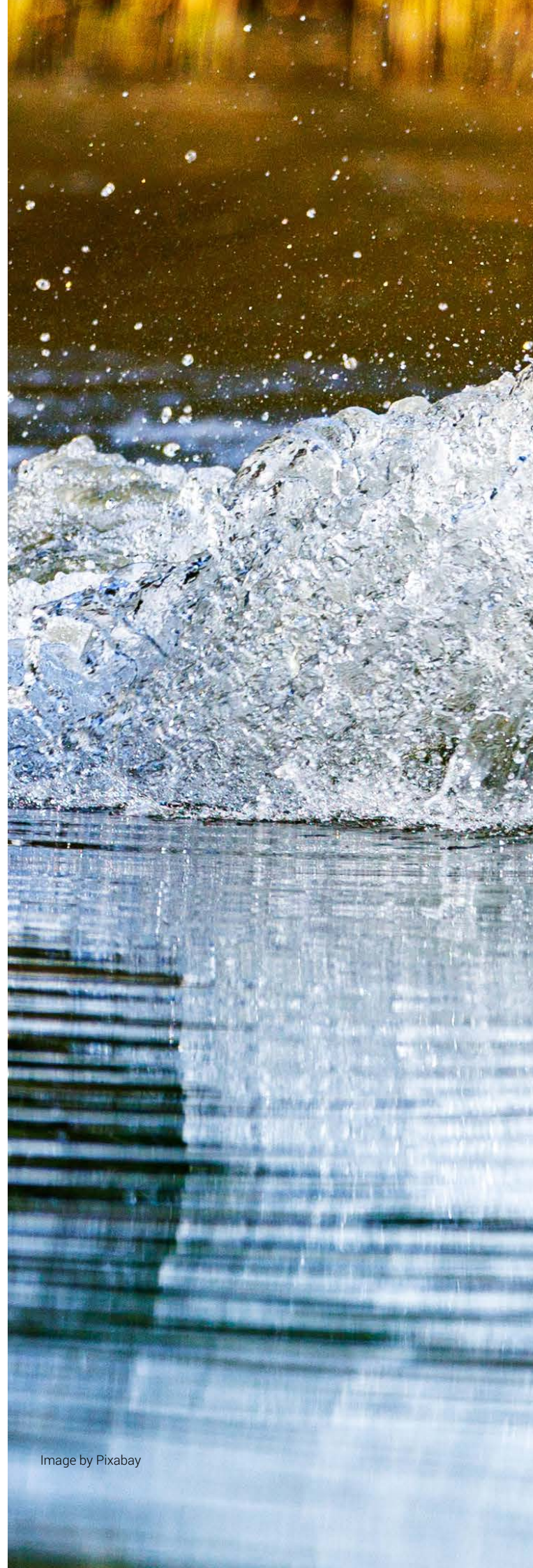


Image by Pixabay