

Vision

To promote innovation and collaboration, and co-create a sustainable future for water resources.

Mission

To coordinate and promote water management innovation, technology research and development, and sustainable development activities to generate synergistic effects, collectively addressing water challenges faced by countries in Asia and Europe, and driving economic growth, increased employment opportunities, and environmental improvement in these regions.

Principle

Non-profit, open, impartial, mutually beneficial, and inclusive.



www.asemwater.org

Post Address: Hunan Sci-tech Building, No. 233, Yuelu Avenue, Changsha City Hunan Province, People Republic of China

Tel: 0086-731-88988865

Fax: 0086-731-88988865

E-mail Address: asemwater@asemwater.org

WeChat Account: 亚欧水资源

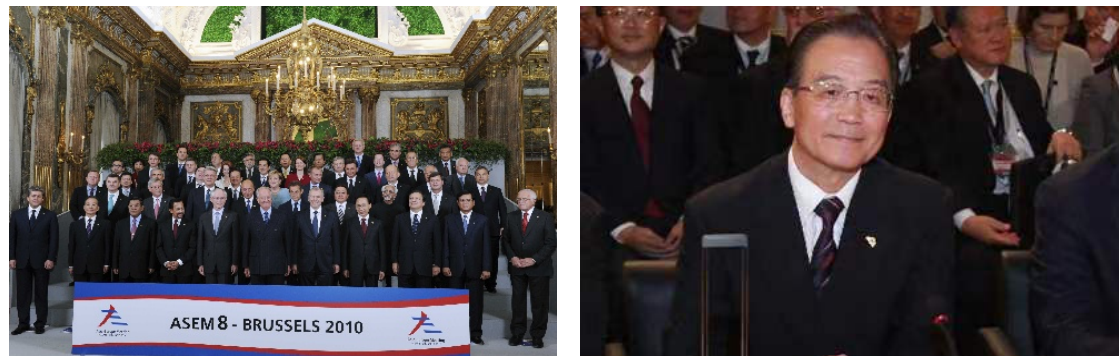


ASEM Water Resources Research and Development Center

Overview of ASEM Water Resources Research and Development Center

In October 2010, the then Premier of the State Council of China, Wen Jiabao, proposed the establishment of the "ASEM Water Resources Research and Development Center" during the 8th Asia-Europe Summit, aiming to enhance water resource management capabilities through scientific and technological cooperation and promote sustainable development among Asian and European countries. This proposal was well-received by the members of the Asia-Europe Meeting (ASEM) and was included in the "Chair's Statement" adopted at the meeting.

To implement this initiative proposed by the Chinese government, the Ministry of Science and Technology, the Ministry of Foreign Affairs, and the People's Government of Hunan Province jointly established ASEM Water Resources Research and Development Center (hereinafter referred to as "ASEMWater"). ASEMWater is an important member of the ASEM family and represents the first scientific cooperation institution established with headquarters in China under the ASEM mechanism. It is also the first international organization to be headquartered in Hunan. Over the past decade, ASEMWater has been involved in exploratory development and operations, mainly focusing on the United Nations *2030 Sustainable Development Agenda*, the Belt and Road Initiative, and other major strategies. It has accelerated the advancement of science and technology innovation cooperation in the field of water resources between Asia and Europe and has promoted sustainable water resources utilization among Asian and European countries, working towards the common destiny of Asia-Europe water resources.



Introduction to the Asia-Europe Meeting

The Asia-Europe Meeting (ASEM), established in 1996, is a significant inter-regional and intergovernmental forum for Asia and Europe. ASEM aims to enhance mutual understanding, strengthen trust, and promote the establishment of a new, comprehensive partnership between Asia and Europe through political dialogue, economic cooperation, and cultural exchange. As of the present, ASEM consists of 53 member states, including 30 European countries, 21 Asian countries, and two international organizations—the European Union and the Association of Southeast Asian Nations (ASEAN).

Milestones

1996

The inaugural Asia-Europe Summit, held in Bangkok, Thailand, marked the official establishment of the Asia-Europe Meeting (ASEM).

2002

The "Seminar on Asia-Europe Water Resources Management" was held in Changsha and adopted the "Changsha Declaration on Asia-Europe Meeting Water Resource Management Scientific and Technological Cooperation."

2009

The "Forum on Asia-Europe Water Resources Management International" adopted the "Changsha Initiative," proposing the establishment of a sustainable cooperation mechanism to promote the sustainable utilization of water resources in Asia and Europe. It also highly acknowledged the solid foundation that Hunan has formed in the international cooperation on water resources in areas such as online collaboration, platform development, talent exchange, and technology transfer.

2011

In 2011, ASEM Water Resources Research and Development Center was officially established in Changsha, Hunan.

2014

A Seminar on Asia-Europe Urban Water Management was held in Changsha, Hunan.

2018

The Third ASEM Seminar on Urban Water Management was held in Budapest, Hungary.

2021

The ASEM Water Resources Research and Development Center celebrated its 10th anniversary.

1999

The first Asia-Europe Meeting of Ministers for Science and Technology has identified water resource management as one of the priority areas for future cooperation.

2005

China and the European Union officially launched the "Asia-Europe Meeting Water Resource Science and Technology Cooperation Platform Development" project as part of the European Union's Sixth Framework Programme, with the participation of more than 40 countries from Asia and Europe.

2010

The then Chinese Premier, Wen Jiabao, proposed the establishment of the "ASEM Water Resources Research and Development Center" during the 8th Asia-Europe Summit. This proposal received a positive response from members of the Asia-Europe Meeting (ASEM) and was included in the "Chair's Statement" issued at the meeting.

2012

The then Chinese Premier, Wen Jiabao, proposed the establishment of an "Asia-Europe Water Resource Science and Technology Innovation Cooperation Network" during the 9th Asia-Europe Summit held in Laos. He emphasized the need to strengthen exchanges and cooperation in the field of water resource management between Asia and Europe to serve the economic and social development of countries in these regions. The "Chair's Statement" adopted at the meeting explicitly welcomed the establishment of the "ASEM Water Resources Research and Development Center" in Hunan Province, China in 2011.

2016

During the 11th Asia-Europe Summit, the "Chair's Statement" explicitly recognized the role played by the ASEM Water Resources Research and Development Center. Additionally, the second Seminar on Urban Water Management was held in Changsha, Hunan.

2020

The Fourth ASEM Seminar on Urban Water Management was held in Chenzhou, Hunan.

2022

The Fifth ASEM Seminar on Urban Water Management was held both online and offline in Changsha, Hunan.

Main Functions

To provide consultation for the development of water resource cooperation and utilization plans for Asia-Europe Meeting (ASEM) members.

To organize and conduct collaborative research on water resource utilization and integrated management among members of the Asia-Europe Meeting (ASEM).

To organize and implement the Asia-Europe Water Resource Science and Technology Cooperation Program.

To organize visits, inspections, and technology exchange activities related to water

To provide water-related policy and innovation technology consulting services, Board of Directors as well as facilitate the transfer and demonstration of innovative technologies and products

To host international training programs and academic conferences in the field of water resources.

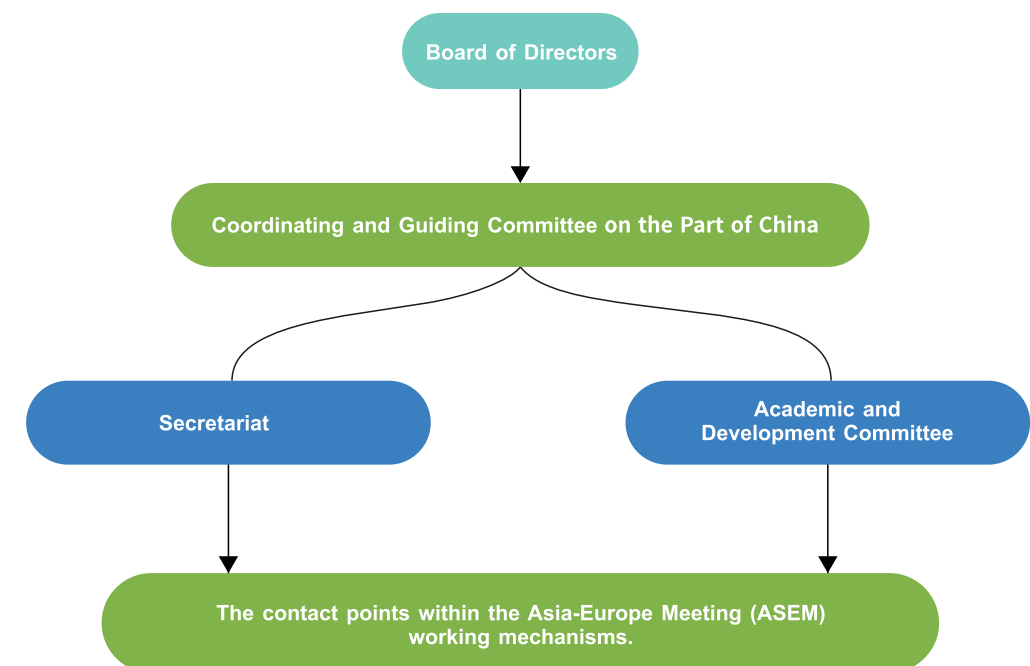
ASEMWater is a non-governmental, non-profit international scientific organization. Built on the voluntary participation principle, it is jointly established by government departments, higher education institutions, research institutions, international organizations, innovative enterprises, non-governmental organizations, and other stakeholders from Asia and Europe in the field of water resource research and utilization within the Asia-Europe Meeting (ASEM) framework.

The Rhine

Organizational Structure

ASEMWater has the following organizational structure:

1. Board of Directors: The highest decision-making body responsible for major development and planning decisions of ASEMWater. It guides the establishment of the Academic and Development Committee and the Secretariat.
2. Coordinating and Guiding Committee on the Part of China: Given that ASEMWater have not yet had a broad-based international board, this Committee temporarily exercises the decision-making functions on behalf of the Board of Directors.
3. Academic and Development Committee: This committee serves as the academic and decision advisory body of ASEMWater and is composed of 24 internationally renowned experts in the water resources field recommended by 14 Asia-Europe Meeting member countries.
4. Secretariat (Hunan Provincial Water Resources Research and Development Cooperation Center): The Secretariat is the permanent executive body of ASEMWater and also serves as the executive body of the Coordinating and Guiding Committee on the Part of China. It is responsible for implementing the decisions of the Board of Directors (Coordinating and Guiding Committee on the Part of China) and organizing various agreed-upon activities.



Achievements in Recent Years

Asia-Europe Water Resource Science and Technology Innovation Cooperation Network

Signing strategic partnership agreements with 62 government departments, academic institutions, industry associations, businesses, and international organizations among ASEM members. Establishing cooperation nodes with over 140 influential innovation institutions and alliances. Facilitating over 400 exchanges and visits by high-level science and technology professionals from Asia and Europe, achieving knowledge sharing through demand matching, and creating a sustainable cooperation mechanism.



62 Institutions

Signed strategic partnership agreements with 62 Asia-Europe Meeting member institutions.

400 Persons

Conducted over 400 exchanges and visits.

140 Nodes

Established cooperation nodes with over 140 influential innovation institutions and alliances.

Research Institutions and Water-Related Enterprises Involved

Achievements in Recent Years

Asia-Europe Water Resource Science and Technology Innovation Cooperation Network

Since the establishment of the ASEMWater, it has facilitated the signing of 5 memorandums of cooperation on sister-city relationships among the People's Government of Hunan Province and local governments of Asia-Europe Meeting member countries.



Jointly launched the "Dongting Lake-Biwa Lake Waterfowl Protection Initiative."



Signed a memorandum of friendly city relations with Lincolnshire, United Kingdom.



Signed a memorandum of friendly city relations with Shiga Prefecture, Japan.



Signed an agreement with the Public Service Division of Singapore.



Signed a memorandum of friendly city relations with the Swiss canton of Schaffhausen.

Established a water innovation research and development base to strengthen testing, demonstration, and technology promotion

Reinforced the fundamental support capacity and developed research and demonstration bases.

Currently, we have collaborated with domestic and international organizations to create research bases such as the "Dongting Lake Wetland Ecology National Positioning Research Station," "National Heavy Metal Pollution Prevention and Control Engineering Technology Center," "Chenzhou sub-Center of ASEMWater," and the "Romania Water Resources Research and Technology Demonstration Base (Eastern Europe)."

We have Initiated the construction of the "Dongting Lake Ecological Protection Public Technology Service Platform." This platform leverages the spatial capacity of the Dongting Lake region and brings together innovation resources from the Asia-Europe water-related industry technology cluster. It utilizes remote sensing satellites, mooring vessels, unmanned aircraft, and unmanned boats equipped with high-spectral sensing devices to acquire high-resolution image data of the Dongting Lake region, as well as water resources, aquatic ecology, and water environment data. This platform is intended to create a technology platform for intelligent monitoring and innovative research and development that is interdisciplinary, cross-regional, cross-departmental, and cross-industry, and is the first of its kind in China.

The Xiang River

Addressing various needs and accelerating the transfer and transformation of results.

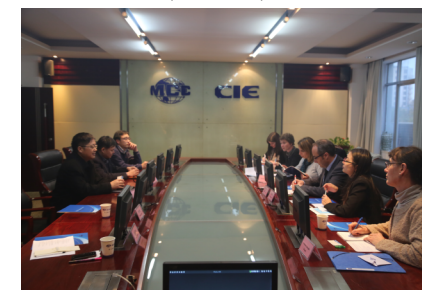
We have collaborated with the embassies and consulates of countries including the United Kingdom, France, Australia, Sweden, Japan, and Singapore in China to organize 50 technology matchmaking events, involving participation from over 400 organizations. This has facilitated over 30 cooperation intentions among international agencies and Hunan Province.



A technology matchmaking event with Japanese companies.



A technology exchange and cooperation matchmaking event involving water-related representatives from Asia-Europe Meeting member countries.



The technology matchmaking conference with French companies



The technology matchmaking conference with Hungarian companies

Constructing a multi-level cooperation mechanism to foster academic exchanges and knowledge dissemination.

Hosted high-level international conferences

Jointly organizing 18 high-profile, high-level, and high-quality thematic seminars on innovative water cooperation in partnership with Asian-European cooperation partners. These seminars have served 5,300 experts from Asia and Europe.

2014

The First ASEM Seminar on Urban Water Management

亚欧新型城镇化与水可持续管理研讨会
ASEM Seminar on Sustainable Management of Water Resources in the Context of Urbanization



2016

The Second ASEM Seminar on Urban Water Management



2018

The Third ASEM Seminar on Urban Water Management



2017

International Environmental Technology Seminar



2015

The Forum on Dongting Lake-Biwa Lake Ecology



2022

The Fifth ASEM Seminar on Urban Water Management



2020

The Fourth ASEM Seminar on Urban Water Management



2019

China-Switzerland (Hunan) Modern Agriculture Environmental Protection Technology Exchange Conference

Organizing international training courses on advanced and applicable technologies.

In Changsha, we conducted 8 sessions of international training courses on small hydropower generation technology, training over 200 participants from countries including Thailand, Cambodia, and Pakistan.



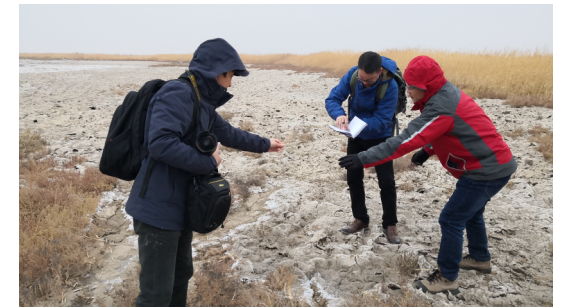
Cooperating to carry out water-related science popularization activities.

We have held "June 5th" World Environment Day and similar science outreach events for multiple years, benefiting over 1,300 people.



Focusing on common hot issues, and enhancing collaborative research and innovative cooperation.

Using projects as a vehicle, we have prioritized areas of cooperation including lake water resource management, watershed ecosystem restoration, new village and town development, wastewater treatment, agricultural water conservation, flood control under extreme weather conditions, and more. We emphasize basic research and addressing common challenges. Leading or Participating in the implementation of over 100 bilateral and multilateral water-related research projects at international, national, and provincial levels. We have also introduced nearly 30 innovative water-related technologies and equipment for demonstration and application in Hunan and across China.





Dongting Lake

Protection of Dongting Lake

In order to thoroughly implement the important guidance of General Secretary Xi Jinping on "safeguarding the clear waters of a river" and "ensuring the cleanliness of a lake for the Yangtze River," and adhering to the concept of "systematic monitoring, joint collaboration, and resource sharing," the Hunan Dongting Lake Wetland Ecosystem National Field Scientific Observation and Research Station has been jointly established by the Institute of Subtropical Agriculture, Chinese Academy of Sciences, in collaboration with Hunan Academy of Forestry, Beijing Forestry University, and ASEMWater. This station brings together domestic and international scientific and technological resources and expertise. The Station conducts comprehensive and systematic monitoring of the Dongting Lake ecosystem, as well as hydrological and water quality dynamics, and changes in biodiversity. The goal is to understand the ecological structure and functions of the Dongting Lake, reveal patterns in hydrological dynamics and the sources and characteristics of water pollution migration. This scientific observation and research Station supports long-term and stable ecological system research at Dongting Lake and assists in government decision-making regarding the ecological protection and comprehensive environmental governance of Dongting Lake. With the existing resource base at Dongting Lake, they plan to gradually expand the scope of observation and research, improve the layout and equipment of multiple sites in East Dongting Lake, South Dongting Lake, and West Dongting Lake, and integrate data. This will form a network for sharing scientific observation and research technological resources related to the Dongting Lake ecosystem.

ASEMWater places a particular emphasis on establishing the Dongting Lake-Yangtze River Ecological Protection Technology Innovation Base. This base is dedicated to achieving the goals of ecological protection and restoration for Dongting Lake and the Yangtze River. Leveraging modern information technology, it enables real-time, all-weather dynamic perception of the region. The base integrates research and technology in lake and wetland protection and monitoring, wetland ecological restoration and water environmental management, watershed water security, and disaster early warning. This integrated approach encompasses fundamental research and technological integration, demonstration, and civilian-military collaboration. It is intended to provide support and incubation services for scientific water protection, management, and utilization, facilitating the transformation of military-civilian cooperation achievements.



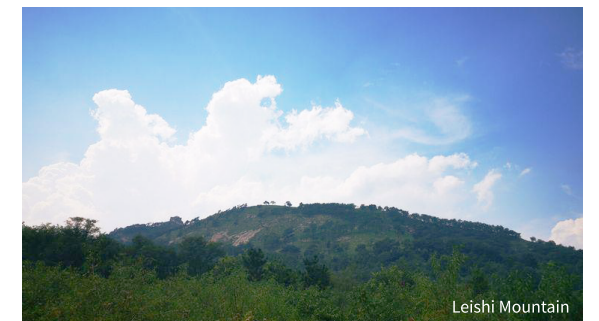
Flux Tower



Railway Station of Dongting Lake



Dongting Lake



Leishi Mountain

Chenzhou sub-Center of ASEM Water Resources Research and Development Center

The Chenzhou sub-Center of ASEMWater is jointly established by the Chenzhou Municipal Government and ASEMWater. It focuses on scientific research, technology exchange, talent exchange, technology transfer, demonstration and promotion, personnel training, capacity building, and sharing of experiences and data in the field of water resources. The primary objective of the sub-Center is to build an East River Basin ecosystem monitoring system and a watershed ecosystem big data and information service center. This initiative aims to facilitate international collaboration and advance cooperative research and development in water-related areas. It is dedicated to creating a demonstration base for watershed ecosystem protection and lake ecosystem restoration.



The Chenzhou sub-Center of ASEMWater serves as a core innovation platform in the construction of the Chenzhou National Sustainable Development Agenda Innovation Demonstration Area in Hunan (Chenzhou). This platform focuses on gathering research teams specializing in water ecology monitoring and ecological management and restoration technology. It aims to facilitate the optimization of the spatial layout of the watershed's ecological economy, rational structural adjustments, continuous improvement of environmental quality in the East River Basin, enhancement of natural asset capital, increased efficiency of ecosystem service functions, reduction of resource and environmental pressure, and mitigation of ecological security risks. This platform supports and radiates to drive sustainable water resource utilization and green development in the region.

Additionally, the Chenzhou sub-Center platform serves as a hub to coordinate various domestic water-related technological innovation resources. It explores new technologies, methods, and systematic solutions for monitoring deep-water lakes and watershed ecosystems, promoting industrial transformation, and creating effective models that are operational, replicable, and scalable. It demonstrates the ecological priority and green development in the Yangtze River Economic Belt, providing practical experience and a model for China's implementation of the United Nations 2030 Sustainable Development Agenda.

Lancang-Mekong Project



ASEMWater is collaborating with various domestic and international organizations and institutions, including Hunan Normal University, Hunan XianDao Yanghu Reclaimed Water Company, the City Administration of Bangkok, Thailand, the Ministry of Natural Resources and Environment of Laos, the Mekong River Commission of Cambodia, the Environmental Department of Lake Biwa, Japan, and Hannover Wasser, Germany. This collaboration is based on the 2020 Lancang-Mekong Cooperation Special Fund project titled "Demonstration and Promotion of Low-Impact Urban Domestic Wastewater Treatment Capacity Enhancement and Environmental Protection Scientific Popularization under Low-Impact Development Background." This project is aimed at promoting and demonstrating technologies and concepts related to urban domestic wastewater treatment and environmental protection. It draws from the experience of Lake Biwa in Shiga Prefecture, Japan, and incorporates the planning and design principles of China's sponge city construction. The project focuses on enhancing the operational capacity and water efficiency management of demonstration wastewater treatment plants in various regions in Thailand, Laos, and Cambodia. It also encourages the establishment of a water environmental protection system that involves students, local communities, government, and businesses, ultimately aiming to serve as a model for and be extended to other regions within the Lancang-Mekong region.

LCM Project Delegates Visiting Hunan Lihe Technology Co., Ltd.



LCM Project Delegates Visiting the Primary School Affiliated to Hunan Normal University

Background

The Lancang-Mekong Cooperation (LMC) is a new type of sub-regional cooperation mechanism initiated and established by China, Cambodia, Laos, Myanmar, Thailand, and Vietnam. Its main objective is to deepen friendly relations and practical cooperation among these six countries within the Lancang-Mekong River region. The LMC aims to promote the economic and social development of the riparian nations, create an economic development belt along the Lancang-Mekong River, build a community with a shared future among the participating countries, and support the development of the ASEAN community and regional integration. It also contributes to advancing South-South cooperation and implementing the United Nations 2030 Sustainable Development Agenda, while collectively safeguarding and promoting the sustained peace, development, and prosperity of the region.



The Lancang River

In November 2014, Chinese Premier Li Keqiang proposed the establishment of the Lancang-Mekong Cooperation (LMC) mechanism at the 17th China-ASEAN Summit. In March 2016, the first LMC Leaders' Meeting was held in Sanya, Hainan, officially launching the LMC cooperation process. In January 2018, the second LMC Leaders' Meeting took place in Phnom Penh, Cambodia, marking the transition of LMC from its incubation stage to a more mature phase. In August 2020, the third LMC Leaders' Meeting was successfully held via video conferencing, signifying that LMC had entered a comprehensive development phase. This meeting emphasized the positive message of unity and cooperation among the six LMC countries to promote development in the region.



The Lancang River



The Mekong River

Target Cooperation in the Future

Water Environment



- Traceability and Prevention Strategies for New Types of Water Pollutants.
- Theory and Technology for Water Source Protection and Low-Carbon Restoration and Governance.
- Smart Monitoring of Water Environmental Pollution and the Resource Utilization of Pollutants.

Water Resources



- Mechanisms of Regional Water Resource Evolution under the Influence of Climate Change and Human Activities.
- Urban Stormwater Resource Management and Low-Carbon Utilization.
- Research on Regional Water Resource Allocation Based on Large-Scale Hydraulic Engineering Groups.

Water Management



- Theory and Technology for Accurate Prediction and Efficient Utilization of Water Resources Demand in Changing Environments.
- Research and Development of Observation and Monitoring Platforms for Water Cycle Elements and Key Processes.
- Development of Multi-Level Water Management Information Systems for Regions and Nations.

Water Ecology



- Theory and Technology for Ecological Protection in River, Lake, and Reservoir Source Areas.
- Assessment of Ecological Carrying Capacity and Functional Evaluation of River, Lake, and Reservoir Systems.
- Quantitative Assessment of Ecological Water Demands and Techniques for Ensuring Ecological Needs.

Water Disaster



- Mechanisms of Formation, Development, and Response to Water Scarcity Disasters under Climate Change.
- Watershed Water Scarcity Disaster Scheduling and Management.
- Research on Medium and Long-Term Water Scarcity Disaster Warning and Forecasting.

Water Culture



- Research on the Connotation and Value System of Water Culture.
- Systematic and Regional Research on Water Cultural Heritage.
- Promotion and Popularization of Water Culture.



The Danube River



Lake Geneva



The River Wensum



Lake Biwa, Japan

促进创新与合作， 共创**水资源**可持续发展的未来

INNOVATION AND COOPERATION
FOR A SUSTAINABLE FUTURE OF WATER RESOURCES

