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And
Call for Abstracts

Africa Water Security Conference (AWS-2026): Towards a Water-Secure and Resilient Africa

TBD, Addis Ababa, Ethiopia
September 21-23, 2026

Organized by

Africa Center of Excellence for Water Management (ACEWM),
College of Natural and Computational Sciences,
Addis Ababa University

www.aws-2026.org

Conference Background

Water is an essential resource for Africa's sustainable development. Rapid population growth, climate change, and economic expansion are placing unprecedented pressure on the continent's water resources. Effective water management is now critical to ensure food and energy security mitigates conflicts, protect ecosystem health, and achieve the water-related Sustainable Development Goals (SDGs).

This Africa Water Security Conference (AWS-2026) is organized by the Africa Centre of Excellence for Water Management (ACEWM) under the College of Natural and Computational Sciences, Addis Ababa University and its partners. This conference will serve as a premier platform for scientists, engineers, practitioners, policymakers, and government officials from Africa and around the world to share knowledge, innovate solutions, and forge collaborations.

We expect over 500 participants to engage in discussions on technological and institutional solutions to current water resource challenges and to chart future pathways for sustainable water management in Africa, ensuring we "leave no one behind."

Water is at the heart of Africa's development challenges and opportunities. The continent faces rapid population growth (expected to double by 2050), accelerated urbanization, and increasing climate variability that intensify stress on water and aquatic ecosystems. According to UN Water (2023), one in three Africans still lack access to safe drinking water and the IPCC (2022) warns that climate-induced water insecurity could reduce agricultural yields by up to 20% by 2050 if no adaptive measures are taken.

At the same time, Africa is also a hub of innovation in decentralized water supply, community-led adaptation, and nature-based solutions. Building on Africa's scientific capacity, the Africa Water Security Conference (AWS-2026) will serve as a premier international platform to:

- Exchange cutting-edge scientific knowledge
- Co-develop innovative solutions for water security and aquatic ecosystem health
- Strengthen partnerships between science, policy, and practice

Conference Program at a Glance

- Registration & Welcome Reception: September 20, 2026
- Scientific Sessions & Opening Ceremony: September 21-23, 2026
- Conference Dinner: September 22, 2026
- Post-Conference Excursions: September 24-26, 2026

Important Dates

- **December 01, 2025:** Online Registration & Abstract Submission Opens
- **March 30, 2026:** Abstract Submission Deadline
- **May 30, 2026:** Notification of Abstract Acceptance
- **June 30, 2026:** Early-Bird Registration Deadline
- **September 21, 2026:** On-Site Registration Begins

Call for Abstracts

Prospective participants are invited to submit extended abstracts for oral or poster presentation. Abstracts must be original and should align with the sub-themes listed below. Please indicate your presentation preference during submission.

Submit abstract online at: www.aws-2026.org

Abstract Guidelines: Check out for the detailed abstract guideline on the abstract submission page of the website.

Organizing Committee

1. Dr. Bikila Warkineh, Executive Dean, CNCS, AAU
2. Prof. Feleke Zewge, ACEWM, CNCS, AAU
3. Dr. Dessie Nedaw, CNCS, AAU
4. Prof. Tenalem Ayenew, CNCS, AAU
5. Prof. Abebe Getahun, CNCS, AAU
6. Dr. Adey Feleke, CNCS, AAU
7. Dr. Andualem Mekonnen, CNCS, AAU
8. Dr. Girum Ayalneh, CNC, AAU
9. Dr. Tadesse Alemu, CNCS, AAU
10. Dr. Birhanu Yitayew, ACEWM, CNCS, AAU
11. Prof. Nigus Gabbiye, Bahir Dar Institute of Technology, Bahir Dar University,
12. Dr. Getachew Tegegne, Addis Ababa Science and Technology University
13. Dr. Fasikaw Atanaw Bahir Dar Institute of Technology, Bahir Dar University
14. Dr. Shimelis Kebede, CTBE, AAU

Conference Secretariat

All correspondence concerning registration, abstract submission, application for sponsorship and payments for conference participation and excursion should be addressed to:

Africa Center of Excellence for Water Management
College of Natural and Computational Science, Addis Ababa University
4-kilo Campus, P. O. Box 1176, Addis Ababa, Ethiopia
Digital Library Bld. 4th Floor, R.N. 403
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International Scientific Committee

1. Dr. Alemseged Tamiru, International Water Management Institute (IWMI), Ethiopia
2. Dr. Amha Belay, Founder and CEO at Algae4All LLC., USA
3. Prof. Assefa Melese, Florida International University, USA
4. Dr. Fasil Ejigu, the Arctic University of Norway (UiT), Norway
5. Dr. Jane Tanner, Rhodes University, South Africa
6. Prof. Michael Templeton, Imperial College London, UK
7. Dr. Moez Louati, IAHR Africa Division/IHE Delft, The Netherlands
8. Prof. Nancy Love, University of Michigan, USA
9. Prof. Seifu Tilahun, International Water management Institute (IWMI), Ghana

10. Dr. Semu Moges, University of Connecticut, USA
11. Prof. Yang Hong, The University of Oklahoma, USA
12. Prof. Yutaka Sakakibara, Waseda University, Japan

Roles and Responsibilities ISC:
The International Scientific Committee (ISC) is paramount to ensuring the scientific integrity, quality, and global relevance of the Africa Water Security Conference (AWS-2026). The committee's primary role is to provide expert academic and technical oversight across all phases of the conference.

- Scientific Direction and Thematic Oversight
- Abstract Review and Selection
- Promotion of the Conference and Call for Abstracts
- Identification of Key Contributors
- Plenary and Keynote Speakers Recommendations
- Support in resource mobilization
- Support for Post-Conference Publications
- Strategic Advice and Conference Impact

By fulfilling these roles, the International Scientific Committee will be instrumental in establishing AWS-2026 as a premier, scientifically-credible platform for advancing water security discourse in Africa.

High-Level Conference Steering Committee Members

TBA

Role of the Steering Committee:

- Provide high-level strategic guidance and oversight for the conference.
- Lend credibility and prestige to the event, aiding in participant attraction.
- Facilitate connections with key networks, donors, and partner institutions.
- Assist in mobilizing resources and political support.
- Help shape the key conference messages and outcomes for maximum impact.

Scientific Sub-Themes

ST1. Water Security for Sustainable and Equitable Development

Achieving water security—the reliable availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems, and production—is a fundamental prerequisite for sustainable development. In Africa, this is not just a resource issue but a core determinant of poverty reduction, public health, gender equality, and economic resilience. This sub-theme moves beyond traditional water resources management to explore the intricate linkages between water security and the broader sustainable development agenda.

We seek contributions that address how to build equitable, resilient, and inclusive water systems that can underpin sustainable societies and economies in the face of growing demand, climate variability, and global change. We welcome research, case studies, and analyses that provide

insights into the measurement, governance, economics, and technological innovations critical for achieving water security for all.

Key Topics include:

- **Measuring and Monitoring Water Security:** Developing robust indicators, frameworks, and assessment tools to evaluate water security status at various scales (local, national, regional).
- **Water as a Catalyst for SDGs:** Analyzing the critical interlinkages between water security (SDG 6) and other goals, including zero hunger (SDG 2), good health (SDG 3), clean energy (SDG 7), and sustainable cities (SDG 11).
- **Equity and Inclusion in Water Access:** Addressing the challenges of ensuring water security for all, focusing on marginalized communities, gender dimensions, and pro-poor water service delivery.
- **Economics of Water Security:** Exploring financing mechanisms, valuation of water, and economic instruments to incentivize sustainable water use and attract investment in water infrastructure.
- **Innovative Governance and Institutional Frameworks:** Examining effective models for water governance that promote integrated decision-making, stakeholder participation, transparency, and conflict resolution.
- **Technology and Innovation for Water Security:** Harnessing the power of new technologies—such as remote sensing, AI, big data, smart water grids, and low-cost sensors—for improved water resources assessment, management, and delivery.
- **Building Resilience:** Strategies for enhancing the resilience of water systems and dependent communities to climatic shocks, economic disruptions, and other stressors.
- **Mainstreaming Water Security in Development Planning:** Approaches for integrating water security considerations into national and regional policies, poverty reduction strategies, and climate adaptation plans.

ST2. Climate Change and Water Security: Building Adaptive and Resilient Systems

Climate change is fundamentally altering the global water cycle, exacerbating hydrological variability and amplifying extreme events. Africa, despite contributing minimally to global greenhouse gas emissions, faces disproportionate risks due to its high dependency on climate-sensitive sectors and limited adaptive capacity. This sub-theme addresses the critical intersection of climate change and water security, focusing on the development of robust strategies to mitigate vulnerabilities and enhance resilience.

We seek contributions that advance scientific understanding, showcase innovative adaptation technologies, and promote effective governance frameworks to secure water resources in a changing climate, thereby safeguarding ecosystems, livelihoods, and economic stability. Submissions on predictive modeling, nature-based solutions, sectoral adaptation, and financing mechanisms are particularly encouraged.

Key Topics include:

- **Climate Hydrology and Predictive Modeling:** Improving the accuracy of climate projections, downscaling techniques, and hydrological models to forecast water availability, droughts, and floods under changing climate scenarios.

- **Impacts on Water Resources Systems:** Assessing the effects of climate change on surface water and groundwater recharge, lake levels, river flows, glacier melt, and water quality.
- **Extreme Events Management:** Developing early warning systems, preparedness plans, and response strategies for increasingly frequent and severe floods, droughts, and storms.
- **Nature-Based Solutions (NbS) for Adaptation:** Implementing and evaluating ecosystem-based approaches—such as wetland restoration, watershed management, and green infrastructure—for climate resilience, water regulation, and protection from climate-related hazards.
- **Adaptation in Key Sectors:** Designing and implementing climate-resilient water management practices for agriculture (irrigation), urban water supply, energy production (hydropower), and ecosystem conservation.
- **Innovative Technologies for Water Security:** Leveraging advancements in desalination, water recycling, efficient irrigation, atmospheric water harvesting, and remote sensing to bolster water security in data-scarce and vulnerable regions.
- **Socio-Ecological Resilience:** Understanding and enhancing the capacity of social and ecological systems to absorb climate shocks and adapt to long-term changes, with a focus on community-led initiatives and indigenous knowledge.
- **Finance, Policy, and Governance for Adaptation:** Creating enabling environments through climate-finance mechanisms, adaptive water governance structures, transboundary cooperation, and mainstreaming climate adaptation into national water policies and development planning.

ST3. Transboundary Water Resources: Fostering Cooperation, Peace, and Shared Prosperity

Over 60% of Africa's freshwater resources are found in transboundary river and lake basins, making cooperative management not merely an option but a necessity for regional water, food, and energy security. Effective governance of shared waters presents a unique challenge, often complicated by divergent national priorities, historical tensions, and climate change impacts. However, it also offers an unparalleled opportunity for dialogue, diplomatic engagement, and collaborative development that can serve as a catalyst for broader regional integration and peace. This sub-theme will explore the political, technical, institutional, and legal instruments that can transform transboundary waters from potential sources of conflict into engines of sustainable and equitable growth for all basin states.

We seek contributions that analyze the dynamics of water diplomacy, benefit-sharing, institutional mechanisms, and data sharing. We welcome case studies of successful cooperation, research on financing transboundary infrastructure, and analyses of climate adaptation strategies in shared basins that highlight pathways to peace and shared prosperity.

Key Topics include:

- **Water Diplomacy and Hydro-Politics:** Analyzing negotiation processes, conflict prevention mechanisms, and the role of regional organizations and international law (e.g., UN Watercourses Convention) in facilitating cooperation.
- **Benefit-Sharing Approaches:** Moving beyond volumetric water allocation to models that focus on optimizing and sharing the wide range of benefits derived from water use, such as energy production, agricultural output, and ecosystem services.

- **Institutional Mechanisms for Cooperation:** Evaluating the effectiveness of existing River Basin Organizations (RBOs), joint commissions, and other governance structures in managing shared water resources.
- **Data and Information Sharing:** Developing frameworks, technologies, and trust-building measures for the transparent exchange of hydrological, meteorological, and environmental data across borders.
- **Financing Transboundary Water Infrastructure and Management:** Exploring innovative investment models and cooperative financing mechanisms for joint projects like dams, irrigation schemes, and pollution control.
- **Climate Change Adaptation in Transboundary Basins:** Addressing the challenges of managing shared waters under climate uncertainty, including coordinating adaptation strategies and managing compounding risks of droughts and floods.
- **Ecosystem-Centered Management in Transboundary Contexts:** Developing cooperative frameworks for the protection of shared aquatic ecosystems, wetlands, and biodiversity.
- **Stakeholder Engagement and Multi-Track Diplomacy:** Examining the critical role of local communities, civil society, the private sector, and academia in supporting formal transboundary cooperation processes

ST4. Water Pollution and Quality Management: Addressing Conventional and Emerging Contaminants

The integrity and safety of our water resources are under unprecedented threat from a complex mixture of pollutants, ranging from traditional pathogens and nutrients to increasingly prevalent industrial chemicals, pharmaceuticals, and microplastics. Effective water quality management is a cornerstone of public health, ecosystem vitality, and socioeconomic development. This sub-theme addresses the critical challenge of detecting, assessing, and mitigating water pollution through advanced science, innovative technology, and robust policy frameworks.

We seek contributions that move beyond conventional approaches to tackle both legacy issues and the frontier of emerging contaminants, ensuring water quality security for communities and ecosystems across Africa. We welcome research on detection methods, treatment technologies, risk assessment, pollution prevention strategies, and policy analyses that offer solutions for safeguarding water quality.

Key Topics include:

- **Emerging Contaminants of Concern:** Detection, fate, transport, and ecological and human health impacts of pharmaceuticals, personal care products, endocrine-disrupting chemicals, per- and polyfluoroalkyl substances (PFAS), and microplastics.
- **Diffuse Pollution and Watershed Management:** Strategies to monitor, model, and mitigate non-point source pollution from agricultural runoff (pesticides, fertilizers) and urban stormwater.
- **Point Source Pollution and Industrial Wastewater:** Advances in treatment technologies, effluent standards, and regulatory compliance for industrial and municipal discharges.
- **Water Quality Monitoring and Sensing Technologies:** Innovation in real-time sensors, biosensors, remote sensing, citizen science, and data analytics for water quality surveillance.
- **Risk Assessment and Regulation:** Developing science-based water quality guidelines, ecological and human health risk assessment frameworks, and policies for priority pollutants.

- **Remediation and Treatment Technologies:** Novel, cost-effective, and sustainable solutions for water and wastewater treatment, including green technologies, bioremediation, and advanced oxidation processes.
- **Legacy Pollutants and Contaminated Site Management:** Addressing historical contamination from mining, industrial sites, and inadequate waste disposal.
- **Source Water Protection and Pollution Prevention:** Implementing holistic catchment protection plans, polluter-pays principles, and circular economy approaches to minimize waste and pollution at the source.

ST5. Urban and Rural Water Security: Resilient Systems for Supply, Sanitation, and Resource Recovery

Africa's rapid urbanization and population growth are placing immense strain on conventional water and sanitation systems, exacerbating water scarcity and public health challenges. Traditional linear models of "abstract, use, dispose" are no longer viable. This sub-theme champions a paradigm shift towards integrated, resilient, and circular water management systems that are adaptive, efficient, and equitable.

We seek contributions on innovative technologies, business models, and governance frameworks that can secure sustainable water supply and safely managed sanitation for both burgeoning cities and often-neglected rural communities, transforming wastewater from a waste product into a valuable resource for energy, nutrients, and water reuse. Case studies on decentralized systems, circular economy applications, and strategies for equitable service delivery are highly encouraged.

Key Topics include:

- **Resilient Water Supply Systems:** Enhancing reliability through diversification of sources (e.g., rainwater harvesting, managed aquifer recharge, surface water), climate-resilient infrastructure, and smart water management technologies to reduce non-revenue water.
- **Decentralized and Nature-Based Solutions:** Implementing scalable, cost-effective systems for water and sanitation in peri-urban and rural areas, including constructed wetlands, packaged plants, and community-led management models.
- **Circular Economy and Resource Recovery:** Advanced technologies and processes for extracting energy (biogas), nutrients (phosphorus, nitrogen), and reclaimed water from wastewater for agricultural, industrial, and potable uses.
- **Equitable Access and Inclusive Services:** Designing pro-poor tariffs, gender-responsive sanitation solutions, and models for extending services to informal settlements and marginalized communities.
- **Urban-Rural Water Linkages:** Managing the water interdependencies and competing demands between urban centers and their surrounding rural hinterlands.
- **Financing and Governance for Sustainable Services:** Exploring innovative financing mechanisms, public-private partnerships, and regulatory reforms to attract investment and improve utility performance.
- **Sanitation Safety Planning and Public Health:** Implementing comprehensive risk-based management approaches for sanitation systems to protect human health from source to reuse or disposal.
- **Climate Adaptation and Disaster Resilience:** Hardening water and sanitation infrastructure against floods, droughts, and other climate-related shocks to ensure continuous service delivery.

ST6. Nature-Based Solutions for Water Security and Resilient Ecosystems

This sub-theme focuses on harnessing the power of natural and restored ecosystems to address critical water challenges in Africa. It moves beyond conventional engineering ("grey infrastructure") to explore how protecting, managing, and restoring ecosystems can provide sustainable, cost-effective, and adaptable solutions for improving water security, enhancing water quality, building climate resilience, and supporting biodiversity. The sub-theme will cover the scientific foundations, practical implementation, governance, and economic valuation of NbS, emphasizing their role in achieving sustainable development and community well-being.

We seek contributions that cover the scientific foundations, practical implementation, governance, and economic valuation of NbS, emphasizing their role in achieving sustainable development and community well-being. We welcome case studies, monitoring results, and analyses that demonstrate the effectiveness, economic benefits, and co-benefits of nature-based solutions for water security.

Key Topics include:

- **Wetlands as Natural Water Regulators:** Exploring their role in natural water storage, flood attenuation, groundwater recharge, and dry-season flow maintenance.
- **Wetlands for Water Purification:** Utilizing the natural filtering capacity of wetlands to improve water quality by trapping sediments, absorbing excess nutrients (nitrogen, phosphorus), and breaking down pollutants.
- **Water Quantity Management:** Using ecosystems for water storage, recharge, and securing supply.
- **Water Quality Improvement:** Employing natural systems like wetlands and buffers to filter pollutants.
- **Climate Adaptation:** Leveraging ecosystems for flood control, drought mitigation, and disaster risk reduction.
- **Implementation & Governance:** Effective models for community-led projects, policies, and financing (e.g., Payments for Ecosystem Services).
- **Monitoring & Business Cases:** Tools for evaluating success and demonstrating the economic value of NbS compared to traditional infrastructure.
- **Co-Benefits:** Exploring synergies with biodiversity conservation, livelihood creation, and sustainable development.
- **Integrating Wetlands into Basin-Scale Planning:** Managing wetlands as critical components within broader watershed and river basin management strategies.

ST7. Digital and Smart Water Management: Leveraging Technology for a Water-Secure Africa

The digital transformation of the water sector is revolutionizing how we monitor, manage, and govern water resources. From data acquisition to decision support, digital technologies offer unprecedented opportunities to enhance efficiency, improve service delivery, and build resilience across urban and rural settings. This sub-theme focuses on the application of cutting-edge digital tools—such as the Internet of Things (IoT), Artificial Intelligence (AI), big data analytics, and smart sensors—to solve Africa's pressing water security challenges.

We seek contributions that demonstrate the practical implementation, benefits, and scalability of digital solutions for creating smarter, more responsive, and sustainable water systems. Submissions on smart sensing, AI applications, decision support systems, and strategies for

bridging the digital divide are welcomed, showcasing how technology can be leveraged for water security.

Key Topics include:

- **Smart Sensing and Real-Time Monitoring:** Deploying networks of low-cost sensors, satellite remote sensing, and drone technology for real-time data collection on water quantity, quality, groundwater levels, and infrastructure performance.
- **Data Analytics, AI, and Machine Learning:** Utilizing advanced algorithms for forecasting water demand, predicting floods and droughts, detecting leaks and pollution events, and optimizing the operation of water distribution and treatment systems.
- **Digital Water Infrastructure and IoT:** Implementing smart meters, automated control systems, and digital twins for water and wastewater utilities to reduce non-revenue water, enhance operational efficiency, and improve asset management.
- **Citizen Science and Crowd sourced Data:** Engaging the public through mobile platforms and simple sensors to expand data collection, enhance monitoring coverage, and foster community awareness and participation in water management.
- **Cyber security and Data Governance:** Addressing the critical challenges of data privacy, security, interoperability, and the development of robust governance frameworks for the ethical use of water-related data.
- **Decision Support Systems (DSS) for Water Governance:** Developing integrated, user-friendly platforms that translate complex data into actionable insights for policymakers, water managers, and farmers for improved planning and crisis response.
- **Bridging the Digital Divide:** Strategies for building digital capacity, ensuring affordable connectivity, and developing context-appropriate technologies to ensure inclusive adoption of digital water solutions across Africa.

ST8. The Water-Energy Nexus: Integrated Management for Sustainable Development

Water and energy are inextricably linked—energy production requires water, and water provisioning, treatment, and distribution require energy. This interdependence, known as the water-energy nexus, is particularly crucial in Africa, where economic growth is driving demand for both resources amidst increasing climate variability. Sustainable development demands integrated management that optimizes the use of both, minimizes trade-offs, and maximizes synergies. This sub-theme will explore the technical, policy, and governance innovations needed to secure this vital nexus, ensuring that the pursuit of water security does not compromise energy goals, and vice versa, thereby supporting a resilient, low-carbon future for the continent.

We seek contributions that explore the technical, policy, and governance innovations needed to secure the water-energy nexus. We welcome studies on the water footprint of renewable energy; models for integrated resource planning; case studies of successful circular systems; analyses of cross-sectoral governance; and techno-economic assessments of solar-powered water systems that support a resilient, low-carbon future for Africa.

Key Topics include:

- **Hydropower in a Changing Climate:** Assessing the impacts of climate change, sedimentation, and changing flow regimes on hydropower generation; optimizing multi-purpose reservoir operations for energy, water supply, and flood control.
- **Energy for Water:** Analyzing the energy footprint of water infrastructure, including abstraction, conveyance, treatment (especially for desalination and reuse), and

distribution; promoting energy efficiency and renewable energy integration in the water sector.

- **Water for Energy:** Evaluating the water footprint of different energy technologies (e.g., thermal power plants, biofuels, hydropower, and cooling systems); developing strategies for water conservation and sustainable sourcing in the energy sector.
- **Integrated Nexus Planning and Modeling:** Developing tools and frameworks for joint water and energy resource planning at local, national, and transboundary scales to identify synergies and avoid conflicting policies.
- **Circular Economy and Co-Management:** Innovative solutions that recover energy (e.g., biogas from wastewater) and utilize treated wastewater for energy production (e.g., cooling), creating closed-loop systems.
- **Policy, Governance, and Institutional Coordination:** Examining mechanisms to break down silos between water and energy ministries, foster cross-sectoral dialogue, and create enabling regulatory and tariff structures.
- **The Nexus and Climate Resilience:** Building adaptive capacity in both sectors by developing diversified energy mixes that are less vulnerable to water scarcity and resilient water systems that can withstand energy disruptions.
- **Renewable Energy for Water Security:** Deploying solar, wind, and geothermal power to drive water pumping, irrigation, and treatment systems, particularly in remote and off-grid communities.

ST9: Ecosystems and Water Security

This sub-theme establishes the critical role of intact and healthy ecosystems as the fundamental foundation for water security. It focuses on the scientific understanding, protection, and sustainable management of the core ecological processes that generate, filter, and regulate freshwater, ensuring long-term water quantity and quality for people and economies.

We seek contributions that advance the scientific understanding, protection, and sustainable management of the core ecological processes that generate and regulate freshwater. We welcome research on the hydrological impacts of land-use change; studies quantifying ecosystem services; models for setting and implementing e-flows; analyses of successful policies for protecting ecological infrastructure; and economic valuations of natural water regulation.

Key Topics:

- **Ecosystem Services for Water Security:** Quantifying the role of forests, grasslands, wetlands, and soils in regulating water cycles, including groundwater recharge, base flow maintenance, and erosion control.
- **Biodiversity and Hydrological Function:** Investigating the links between aquatic and terrestrial biodiversity and the stability, resilience, and purity of water supplies.
- **Protecting Ecological Infrastructure:** Strategies for designating and managing water towers, riparian buffers, and critical recharge zones through legal protection, community stewardship, and payment for ecosystem services (PES) schemes.
- **Environmental Flows (E-Flows):** Establishing and implementing science-based e-flow requirements to maintain river and wetland ecosystem health while balancing human water needs.
- **Ecosystem Degradation and Water Risks:** Assessing the impacts of deforestation, land degradation, and wetland loss on water availability, quality, and the frequency of hydrological extremes (floods and droughts).
- **Policy and Economics of Ecological Infrastructure:** Mainstreaming ecosystem valuation into water resources planning and developing financial instruments for conserving water-related ecosystems.

We welcome research on the hydrological impacts of land-use change; studies quantifying ecosystem services; models for setting and implementing e-flows; analyses of successful policies for protecting ecological infrastructure; and economic valuations of natural water regulation.

ST10. Sea Access for Common Regional Integration & Development

The Red Sea is a vital maritime corridor connecting Africa, Asia, and Europe, holding immense strategic, economic, and ecological significance. For both littoral and landlocked states, equitable and cooperative access to the Red Sea is not just a matter of national interest but a fundamental catalyst for broader regional integration, economic interdependence, and sustainable development. This sub-theme moves beyond viewing sea access as a zero-sum game, instead exploring how collaborative frameworks, shared infrastructure, and joint management can transform the Red Sea into a common asset. It will focus on fostering a collective identity around the Red Sea as a hub for peace, shared prosperity, and resilience for all nations in the region.

We seek contributions that explore how collaborative frameworks, shared infrastructure, and joint management can transform the Red Sea into a common asset for peace and prosperity. We welcome strategies for developing a sustainable Blue Economy; scientific research on the Red Sea ecosystem; and policy papers on ensuring equitable benefits from sea access for all nations in the region.

Key Topics include:

- **The Geopolitics of Regional Integration:** Analyzing how cooperative sea access agreements, port partnerships, and shared security initiatives can serve as confidence-building measures and drivers for deeper political and economic integration among Red Sea states.
- **A Regional Blue Economy Strategy:** Exploring cooperative frameworks for sustainably managing and developing shared fisheries, aquaculture, maritime tourism, and marine biotechnology to ensure benefits are equitably distributed across the region.
- **Environmental Security as a Common Goal:** Addressing shared vulnerabilities—such as coral bleaching, marine pollution, and sea-level rise—through joint marine conservation areas, coordinated research programs, and unified policies for protecting the common Red Sea ecosystem.
- **Science and Knowledge as a Foundation for Cooperation:** Promoting joint marine scientific research, data-sharing platforms, and regional academic partnerships as neutral grounds for collaboration and trust-building.
- **Socio-Economic Development and Equity:** Evaluating how inclusive sea access can stimulate job creation, skills transfer, and balanced economic development across the region, reducing disparities between coastal and inland communities.

International Significance

This conference comes at a critical juncture:

- In 2026, countries will review progress on SDG 6 ahead of the 2030 Agenda deadline.
- Global climate negotiations increasingly highlight water as a key adaptation challenge
- Africa, home to over 60% of the world's transboundary waters, is central to debates on cooperation, peace, and sustainable development.

AWS-2026 will place Africa at the center of international water dialogue, linking regional realities with global solutions.

National Partners

1. Ministry of Water & Energy (MoWE)
2. Environment Protection Authority (EPA)
3. Institute of Foreign Affairs (IFA), Ministry of Foreign Affairs (MoFA)
4. Ethiopian Water Technology Institute
5. Ethiopian Maritime Authority
6. Ministry of Agriculture
7. Ethiopian Environmental Protection Authority (EPA)
8. Ethiopian Water Technology Institute (EWTI)

International Partners

TBA

Publication Opportunity

Conference Proceeding will be published and Peer-reviewed selected papers presented at the conference will be considered for publication in a special issue of a reputable international journal which will be identified

Plenary and Keynote Speakers

The organizing committee will invite prominent scientists to deliver plenary lectures and key note speeches. Confirmed speakers will regularly be updated on the conference website (www.aws-2026).

Post Conference Excursion

Visit to the Ethiopian Grand Reissuance Dam (GERD) will be organized for interested participants and guests. Full details will appear in the Conference website (www.aws-2026) soon.

Registration

Online Registration will be opened on March 30, 2026. Please visit the AWS - 2026 conference web site (www.aws-2026) and complete the online registration form.

Registration Fees

Category	Early-Bird (Until Mar 15)	Standard/On-Site
Regular Participant	$200	$300
Student*	$80	$100
Accompanying Person	$100	$200
Post-Conference Excursion to GERD	$300	$300

*Proof of full-time student status is required.

The registration fee includes:

- Admission to all scientific sessions
- Conference materials
- Coffee/tea breaks and lunches
- Welcome reception and conference dinner

Conference registration fees will cover costs of reception, coffee/tea breaks and lunch during the scientific sessions, conference materials, and conference dinner. Post-conference excursion fees will cover costs of transportation, accommodation, meals, and guidebook.

Please be advised that the registration fee do not include travel insurance. Please ensure that you have your own insurance policy before traveling.

Payment Methods

Considering the financial setup of the host country, any payments (conference registration, excursion) can be made only by Bank Transfer before the conference dates or at the registration desk during onsite registration.

Bank transfer Address:

Name of Bank: National Bank of Ethiopia
Address: Ledeta Sub City, Sudan Avenue Addis Ababa Ethiopia
Account Name: Africa Center of Excellence for Water Management
Account Number: 0100171300036
Swift have Code: NBETETAA

Please send the scanned copy of the bank transfer document to Mrs. Birhane Azage at the following address: birhane.azaghe@aau.edu.et.

Cancellation/Refund Information: Please note that no cancelation/refund is possible after payment.