



United Nations
Educational, Scientific and
Cultural Organization



Intergovernmental
Hydrological
Programme



- What's new and impactful from the water family

Ecohydrology Open Online Courses

UNESCO launched a self-enrolment Open Online Course for university students, environmental scientists, practitioners, professionals working at decision-making institutions, and teachers.

The courses are grouped in 3 modules:

- Fundamentals of Ecohydrology
- Application of Ecohydrology
- Transdisciplinary Topics for Ecohydrology

The Ecohydrology Open Online Courses are available at the web platform <http://ecohydrology-ihp.org>

For more details, consult the following link explaining the step-by-step course enrolment <https://vimeo.com/473191353>

Contact Persons

Giuseppe Arduino g.arduino@unesco.org
UNESCO HQ;
UNESCO Chair on Ecohydrology: water for ecosystems and societies, University of Algarve, Portugal;
UNESCO Chair on Ecohydrology and Ecology, University of Lodz, Poland;
Chair on Ecohydrology, IHE Delft, the Netherlands;
Water Research Institute, National Research Council of Italy (IRSA - CNR);
National Research Institute for Agriculture, Food and Environment (INRAE), France;
UNESCO Category 2 Centre ITAIPU: Centro Internacional de Hidroinformática

Climate Risk Informed Decision Analysis Online Course

To support the member states, assess the impact of climate change as well as formulating adaptation pathways, UNESCO launched the Climate Risk Informed Decision Analysis (CRIDA) in 2018. To further strengthen the capacity on the methodology, an online course was launched on 2 November 2020 on the recently developed UNESCO open learning platform (<https://openlearning.unesco.org/>) and can be accessed until 31 December.

The UNESCO Open Learning platform and the online CRIDA course is co-funded by the Flemish UNESCO Science Trust Fund (FUST) from the Government of Flanders in Belgium.

Contact Person

Koen Verbist - k.verbist@unesco.org

Linking Ecohydrology and Biotechnology in Solving Environmental Problems in Tanzania

Between Sept 7th and October 6th, 2020, the chair hosted students for field practical training. Among others, the students were exposed to: principles of Ecohydrology and IWRM, remote sensing and practical application of GPS and GIS field excursion and observation of riparian

vegetation at Mindu dam, assessment of water quality and eutrophication and socio-economic software for data analysis including MS Excel, SPSS, STATA.

Link: <https://www.smcese.sua.ac.tz/>

Contact Person

Dr. Makarius C.S. Lalika - makarius.lalika@yahoo.com;
lalika_2mc@sua.ac.tz

SADC- Integrated Water Resources Management Initiative

The UNESCO Office in Harare organized a special session on the SADC Integrated Water Resources Management initiative (SADC-WIN) on 29 October 2020. The programme addressed the root causes of the food and energy security crises, resilience building and improving people's livelihoods, by adopting an integrated holistic approach anchored on four pillars:

- Strengthening planning, policies and strategies;
- Early warning, hazard mapping, disaster risk management
- Demonstration, innovation, action research and learning alliances;
- Institutional and human capacity development and awareness raising.

For more details <https://en.unesco.org/events/unesco-special-session-waternet-symposium-sadc-win-taking-communities-beyond-short-term>.

Contact Person

Koen Verbist - k.verbist@unesco.org

Introductory Webinar on Groundwater Governance

UNESCO's office in Harare organized an online webinar on effective groundwater governance. The webinar exposed participants/attendees to the basics of groundwater governance, and of the associated legal dimension domestic and international. A fully-fledged online course on Groundwater Governance is now being developed which will be hosted on the UNESCO open learning platform (<https://openlearning.unesco.org/>).

For more information

https://events.unesco.org/event?id=Online_Course_on_Groundwater_Governance_-_An_Introductory_Webinar2376075776&lang=1033.

Contact Person

Muchaneta Munamati - m.munamati@unesco.org

Water and Climate Change: Women's Coping Strategies in West Africa

On 13 October 2020, the WWAP Capacity Programme 2020-2021 was officially launched, with the high-level online advocacy event 'Water and Climate Change: Women's Coping Strategies in West Africa'. The event organized by the UNESCO World Water Assessment Programme

(WWAP) in partnership with UNESCO Multi Sectoral Regional Office (MSRO) Abuja and the Regional Center for Integrated River Basin Management (RC-IRBM). The webinar featured a panel of regional experts speaking on the climate change-related challenges impacts in terms of water and gender in the West Africa region. In order to improve water resources management in face of climate change, three actions were highlighted: taking into account a gender approach within development strategies and resources management, including women in water resources management, and seeking for political commitment in terms of financial resources for gender-related outcomes.

Contact Persons

Laurens Thuy - l.thuy@unesco.org
Simona Gallese - s.gallese@unesco.org

Call for extended Abstracts on Youth and Water Security in Africa- Online Writers Workshop

Earlier this year, UNESCO partnered with the International Science Council Regional Office for Africa (ISC ROA) and the African Ministers' Council on Water (AMCOW) to issue a Call for Extended Abstracts on Youth and Water Security in Africa. The premise of this Call underpins UNESCO's Operational Strategy on Youth 2014-2021 and aimed at providing a medium for knowledge sharing and exchange as a means to advancing and addressing knowledge gaps on water security issues in Africa with a focus on the experience of youth and young professionals. Overall, 119 extended abstracts were received from regions worldwide and taken through a rigorous peer-review process with the involvement of relevant UNESCO, ISC ROA and AMCOW Programme Staff and Partners. Following the peer review, fifty (50) extended abstracts were shortlisted and will be included in an online booklet of abstracts. The authors of these 50 shortlisted abstracts were invited to submit complete manuscripts by 30 November to be reviewed and considered for publication. They were also invited to participate in an online writer's workshop on 30 October 2020. This online writer's workshop provided information on scientific writing/manuscript preparation to support the youth and young professionals with the finalization of their complete manuscripts and contributed to building the capacity of youth.

Contact person

Nairobi, Hydrology nairobi.hydrology@unesco.org

The Ecosystems, Society and Economics of the Region of Aral (ESERA) project

The Ecosystems, Society and Economics of the Region of Aral (ESERA) project started in April and will last until November 2020. The activities under this project should contribute to raise awareness and increase the attraction of science and research on issues within environmental and human sciences in the region of Aral. The overall aims of the project are twofold increase the scientific and research capacity of young researchers through the case studies' directed at the regional security of the socio-economical pathway, including the challenges related to biodiversity, water quality, the dramatic changes in agricultural productivity questioning food and social aspects, as well as raise awareness about the importance of cooperation and governance at all levels as a cross-cutting issue crucial for the improvement of socio-economical pathway in Central Asia.

Contact Person

Almas Kitapbayev - kitapbayev@dku.kz
DKU- Deutsch-Kasachische Universität, German MFA- German Ministry of Foreign Affairs, IFAS- International Fund for saving the Aral

Online Workshop on “Charting New Normal for Urban Water & Wastewater Services” 14 October, 2020

The online workshop on “Charting New Normal for Urban Water & Wastewater Services” was held virtually on 14 October 2020 as one of the approved proposals of the Regional Centre on urban Water Management (RCUWM-Tehran) Governing Board Meeting (GBM-2020) which was held online on Wednesday 23 September 2020. This online workshop was organized by the IWA Water Security and Safety Management Specialist Group.

The main objective of this online workshop was to share recent experiences, activities and lessons learned on business continuity planning in water and sanitation sectors during the COVID-19 pandemic.

For more information: <https://rcuwm.ir/news-events/covid-19-pandemic-charting-new-normal-for-urban-water-wastewater-services/>

Contact Person

Ali Chavoshian (RCUWM Director) - chavoshian@gmail.com

Restoring Dried Wetlands from Naturally Treated Urban Water

The UNESCO Chair in Water and Environment Management for Sustainable Cities at Sharif University of Technology, Tehran, Iran, has been recently granted a project on restoring high priority dried wetlands from naturally treated urban water, which is funded by the Iran Department of Environment. The combined impacts of decreased precipitation due to global warming and declined environmental flow as a result of anthropogenic activities have posed serious threats to the water resources in Iran. This situation has remarkably degraded the wetlands across the country, where 55% of surface area in 45% of wetlands has dried over the past two decades. This has in turn led to the intensified aerosol concentration in the nearby residential areas around the dried lakes. As such, this project aims to identify two wetlands with the most endangered condition, and design naturally treatment systems to restore the wetlands using treated urban water from the nearby cities.

<https://www.pnas.org/content/early/2020/09/29/2008383117>

Contact Person

Dr. Mohammad Danesh-Yazdi - danesh@sharif.edu;
unescochair@sharif.edu

From Water Management to Water Economy

On 8 October 2020 UNESCO Jakarta organized an interview session in the ongoing “Sustainability Insight” series featuring Dr. Mochammad Amron, Executive Director of Indonesian Water Partnership, Indonesia, and Prof Naseer Gillani, Chair of Development Finance of IHRO, Pakistan. The session explored linkages between water management and the economy. Dr. Amron of Indonesia stressed the importance of an enabling environment supported by law, while Dr. Gillani of Pakistan explained how the evolution of water recognition in global agendas such as the SDG framework could leverage benefits.

Link of the event: <https://en.unesco.org/news/ffit-sustainability-insight-21-water-management-water-economy>

Contact Person

Shahbaz Khan - s.khan@unesco.org

IHP Regional Steering Committee for Asia and the Pacific and the Catalogue of Hydrologic Analysis Workshop

The UNESCO Water Family in the Asia and the Pacific gathered for a special online regional steering committee meeting and its associated technical workshop on 26-27 October 2020. The event included presentations on water sector impacts of – and responses to - the coronavirus pandemic from four countries - Indonesia, Malaysia, Pakistan, and Thailand. The event also included updates on global IHP developments from the RSC-AP Chair, Prof Zhongbo Yu of China as well as a joint discussion on the Strategic Plan for IHP-IX.

Focusing on dam reservoir operation, a dedicated workshop was held on 27 October, featuring presentations on approaches and methods from five countries of China, Japan, Republic of Korea, Mongolia, and the Philippines. The workshop took the next steps towards the development of the 2nd volume of the Catalogue of Hydrologic Analysis (CHA), a newly established regional cooperative publication series in the region.

For more details consult the link;

<https://en.unesco.org/news/covid-19-impacts-and-responses-shared-special-session-regional-unesco-water-science-network>

<https://www.facebook.com/UNESCOJakarta/posts/1300881653637342>

<https://twitter.com/unescojakarta/status/1321758912958230528>

Contact Person

Hans Thulstrup - h.thulstrup@unesco.org

The Water Justice Hub

The Water Justice Hub was established on 14 October 2019 as an initiative of the UNESCO Chair in Water Economics and Transboundary Water Governance at the Australian National University. The official launch of the Water Justice Hub was organised on 28 September 2020, in Canberra, Australia. The ANU-UNESCO Chair is calling for greater water justice, especially for Indigenous Australians. Bringing together leading experts from Australia and around the world, the Water Justice Hub's mission is to respond to water injustice and promote both 'voice' and truth-telling in relation to water. While the Hub will have a primary focus on Australia, especially justice for First Peoples, it will also respond to the global challenges of delivering 'water for all' or Sustainable Development Goal (SDG) 6. The Water Justice Hub responds to water injustice by delivering on three key objectives: ensuring everyone's basic water needs are met; making sure water distribution is fair; and ensuring all people are represented in water decision-making.

For more details, please visit <https://waterjusticehub.org/>.

Contact Person

Quentin Grafton - quentin.grafton@anu.edu.au

nhatmai.nguyen@anu.edu.au

UNESCO Chair in Water Economics and Transboundary Water Governance

Webinar on Escazú Agreement: challenges and opportunities for water security in Latin America

The webinar's main objective was to discuss the challenges and opportunities of the Regional Agreement on Access to Information, Public

Participation and Justice in Environmental Matters for water security in Latin America and the Caribbean. During the webinar Representatives from the Economic Commission for Latin America and the Caribbean and the Mexican Ministry of Foreign Affairs explained the processes of the regional agreement within the context of the international agenda and the importance of its content to water-related matters, such as transparency of data and protection to environmental defenders. More than 120 people participated in the meeting. The webinar was held on 7 October. The video of the session is available on YouTube (<https://www.youtube.com/user/redaguaunam/videos>).

To see the video and main conclusions consult the following link:

http://www.agua.unam.mx/archivo_eventos.html

Contact Persons

Fernando González-Villarreal - fgv@pumas.ii.unam.mx

Jorge Arriaga - jarriagam@iingen.unam.mx

Regional Centre for Water Security, Mexico

Webinar Integrated drought risk management

The main objective of the webinar was to analyze the opportunities of integrated risk management as a tool for preparation and response to droughts in Latin America.

The meeting facilitated representatives from the Regional Water Center for Arid and Semi-arid Zones in Latin America and the Caribbean and the Mexican Institute of Water Technology discussing the challenges and opportunities of the integrated risk management framework for preparation and response to droughts, especially in the context of Latin America. The webinar was held on 21 October. For more details consult the following link: <https://bit.ly/2FdLDa7>

Contact Persons

Fernando González-Villarreal - fgv@pumas.ii.unam.mx

Jorge Arriaga - jarriagam@iingen.unam.mx

Regional Centre for Water Security, Mexico

Webinar on Integrated risk management of extreme hydrological events

The objective of the webinar was to analyze the opportunities of integrated risk management as a tool for preparation and response to extreme hydrological events. The main outcome of the meeting was that Representatives from the National Center for Prevention of Disasters (Mexico) and UNESCO Chair on Hydro meteorological Risk will discuss the challenges and opportunities of the integrated risk management framework for preparation and response to extreme hydrological events. The session focused on hurricanes as Mexico is facing a Category 4 in the south of the territory. The webinar was held on 14 October.

Contact Persons

Fernando González-Villarreal - fgv@pumas.ii.unam.mx

Jorge Arriaga - jarriagam@iingen.unam.mx

Regional Centre for Water Security, Mexico

Webinar on 1944 Water Treaty between Mexico and the United States

The main objective of the meeting of this webinar was to discuss the present situation and future perspective around 1944 Water Treaty between Mexico and the United States. The meeting facilitated representatives from International Boundary and Water Commission, the National Autonomous University of Mexico and the Postgraduate College

will discuss the tensions between Mexico and the United States derived from the breach of the Treaty and analyze the environment to negotiate a new legal instrument. The webinar was held on 18 October.

For more details consult the following link: <https://bit.ly/2GuTvVn>

Contact Persons

Fernando González-Villarreal - fgv@pumas.ii.unam.mx

Jorge Arriaga - jarriagam@ingen.unam.mx

Regional Centre for Water Security, Mexico

Governance of Transboundary Aquifers - Latin America and the Caribbean Regional Course

Two webinars were organized on Oct. 7th (<https://bit.ly/3hOHVkh>) and Oct. 14th (<https://bit.ly/35XGPK3>), their objectives were to develop capacities in groundwater governance, promote international cooperation, and share experiences, case studies and lessons learned in Latin America and the Caribbean (LAC).

The two-day meeting will allow a clear understanding of the concept of groundwater governance and its application, with special emphasis on transboundary resources.

For more details consult the following link <https://www.ceregas.org/> or Twitter: @ProyectoCeReGAS

Contact Person

Alberto Manganelli - amanganelli@ceregas.org

UNESCO-IHP Montevideo Office and Regional Center for Groundwater Management (CeReGAS)

IHE conducts Interview about Pavitra ganga's water governance work published in October

Anshuman (TERI) and Tineke Hooijmans (IHE Delft), were interviewed for the Pavitra Ganga website. In the interview they emphasize the value of local stakeholder engagement. They explain that involving the local stakeholders highlights the possible pitfalls and priorities, which is key to making the innovations realistic and effective. This European-Indian collaboration project is triggering knowledge transfer between the countries on current and highly relevant topics, such as climate change and water re-use.

Web links: <http://www.un-ihe.org/news/interview-about-pavitra-gangas-water-governance-work>; <https://pavitra-ganga.eu/en/about>

Contact Person

Anna San Llorente I Capdevila - a.sanllorentecapdevila@un-ihe.org
IHE Delft and PAVITRA GANGA

IHE Organized PhD Symposium 2020

The theme of the 2020 edition is Collaboration for Sustainability: Inter- and trans-disciplinary research to solve water-related issues. It looked at how different disciplines and non-academic groups have been (or could be) integrated into the research developed by the water community. The event was held from October 7-8 online and was free of charge on the IHE OpenCourseWare platform (<https://ocw.un-ihe.org/course/view.php?id=105>).

Web links: <http://www.un-ihe.org/phd-symposium-2020>

Contact Person

Anna San Llorente I Capdevila - a.sanllorentecapdevila@un-ihe.org
IHE Delft

Final AfriAlliance Conference

The Final AfriAlliance Conference was held from 28 - 30 October 2020. This Conference explored the experiences of the entire AfriAlliance project to:

- Showcase innovations for the needs of African stakeholders;
- Foster mainstreaming of innovation by water and climate governance and by appropriate financing mechanisms;
- Identify communication and coordination mechanisms for enhanced engagement between Africa and Europe for water and climate;
- Ensure sustainability and uptake of AA outputs for stakeholders (working in water and climate) in Africa and Europe.

The Conference was held at the 21st WaterNet Symposium.

Web links: <https://afrialliance.org/events/final-afrialliance-conference>; <http://www.un-ihe.org/final-afrialliance-conference>

Contact Person

Anna San Llorente I Capdevila - a.sanllorentecapdevila@un-ihe.org
IHE Delft

MOTA Webinar Series: Decision Support for Strategic Planning and Implementation: The Motivation and Ability Framework

This webinar is part of the Motivation and Ability (MOTA) Framework: Decision Support for Strategic Planning and Implementation. The webinars will discuss its applications and similar methods; and propose an agenda for further work. Water management professionals, policy analysts, planners and researchers are invited to participate, learn more about the MOTA framework and help shape future avenues for application, research and development.

This is the first webinar in a series of three. More information on the full webinar series can be found here (<https://www.un-ihe.org/news/motivation-and-ability-framework-webinar-series>).

Web links: <http://www.un-ihe.org/webinar-1-decision-support-strategic-planning-and-implementation-motivation-and-ability-framework>

Contact Person

Anna San Llorente I Capdevila - a.sanllorentecapdevila@un-ihe.org
IHE Delft and PAVITRA GANGA

Threats to grain production in U.S. High Plains by aquifer depletion

According to new research of an international team of scientists the depletion of groundwater sources in parts of the United States High Plains is so severe that peak grain production in some states has already passed. Among the authors is professor Maciej Zalewski, Director of the European Regional Centre for Ecohydrology Polish Academy of Sciences (PAS). Their results were published in Proceedings of the National Academy of Sciences.

For more details consult the following link:

<https://www.pnas.org/content/early/2020/09/29/2008383117>

Contact Person

Maciej Zalewski - m.zalewski@erce.unesco.lodz.pl

European Regional Centre For Ecohydrology, Polish Academy of Sciences (PAS) u/a UNESCO

Monocultures threaten the natural hydrological cycle

In the latest issue of NATURE Geoscience, an international team of scientists show that the current direction in which development of forestry and agriculture is going towards, promoting monoculture, has a negative impact on water resources and the possibility to adapt to global climate changes. Scientists came to these conclusions based on the analysis of ecohydrological processes. One of the co-authors is Professor Maciej Zalewski, Director of the European Regional Centre for Ecohydrology PAS.

Scientists postulate to develop "Intelligent Ecosystems", based on the analysis of ecohydrological processes. Such ecosystems have an enhanced capacity for water retention and higher biodiversity, both of which generate a broad spectrum of socio-economic benefits, such as resilience to climate change and cultural and educational potential.

For more details consult the following link:

<https://www.nature.com/articles/s41561-020-0641-y>

Contact Person

Maciej Zalewski - m.zalewski@erce.unesco.lodz.pl
European Regional Centre For Ecohydrology, Polish Academy of Sciences (PAS) u/a UNESCO

Antibiotic resistance genes in wastewater and the river system

There is a growing concern about the fate of antibiotic resistance genes (ARGs) during wastewater treatment and their potential impacts on the receiving water bodies. Scientists from Poland hypothesize that the quantity of ARGs in effluents may be related to the size of wastewater treatment plants (WWTPs). Up to date, only several attempts have been made to investigate the impact of the above factors at the catchment scale, and therefore the goal of the study was to explore possible differences in the quantity of ARGs in treated wastewater from small, medium-sized and large WWTPs in the catchment of the Pilica River (9258 km²). The results were published in Science of the Total Environment Journal.

For more details consult the following link:

<https://www.pnas.org/content/early/2020/09/29/2008383117>

Contact Person

Edyta Kiedrzyńska - e.kiedrzyńska@erce.unesco.lodz.pl
European Regional Centre For Ecohydrology, Polish Academy of Sciences (PAS) u/a UNESCO

A catchment-scale assessment of the sanitary condition of treated wastewater and river water based on fecal indicators and carbapenem-resistant *Acinetobacter* spp

In the COVID era urbanization and population growth have created more considerable sanitation challenges in cities and communities in many parts of Europe and the world. As such, it is imperative to identify the most environmentally harmful microbiological and chemical sources of pollution, these being wastewater treatment plants (WWTPs) which release wastewater of low quality. An extensive study was performed by scientists from the European Regional Centre For Ecohydrology PAS of the sanitary conditions of river water and treated wastewater from seventeen WWTPs of various sizes along the Pilica River catchment in central Poland. The results were published in Science of the Total Environment Journal.

For more details consult the following link:

<https://www.sciencedirect.com/science/article/pii/S0048969720357958>

Contact Person

Edyta Kiedrzyńska - e.kiedrzyńska@erce.unesco.lodz.pl
European Regional Centre For Ecohydrology, Polish Academy of Sciences PAS u/a UNESCO

Beyond Water: Science Diplomacy for Local Conflict Prevention

UNESCO-SIMEV Chair (www.unesco-simev.org) in collaboration with UNESCO Hydropolitics Chair, CLINGENDAEL —The Netherlands Institute of International Relations and Montpellier International Centre for Interdisciplinary Research on Water System Dynamics ICReWARD will organize on November 6th a live session dedicated to "Beyond water: Science Diplomacy for Local Conflict Prevention" in the framework of the Geneva Peace Week. More than 500 persons participated. GPW is a leading annual forum in the international peacebuilding calendar, and the flagship event of the Geneva Peacebuilding Platform. This year, the thematic focus is "Rebuilding trust after disruption: Pathways to reset international cooperation". Geneva Peace Week 2020 was held totally online from 2-6 November 2020. Attendees The forum was free and open to the public, and details can be found following the link:

<https://eu.eventscloud.com/website/3030/>

Contact Persons

Gilbert M. Rios - gilbert.rios@umontpellier.fr
Héléa Khaizouraneane - helea.khaizourane@umontpellier.fr
UNESCO-SIMEV Chair

All of England's rivers are polluted - revealing the 'invisible water crisis' – in The Birmingham Brief - Intelligent thought on policy issues.

An astonishing report released around this year's "World Rivers Day" (last Sunday in September), revealed that none of England's 4600 rivers, lakes and other waterways met "good" ecological and chemical standards in 2019-2020 as designated by the EU Water Framework Directive. The implications of no rivers in England achieving "good" water quality are clear for our wildlife and recreation; but perhaps less apparent are the serious human health impacts of contaminated drinking water and food (due to irrigation). The Environment Agency reports "all of the rivers, lakes and streams in England are polluted" - highlighting that the goal of achieving healthy waters by 2027 is slipping out of reach. When coupled with another report on 2 October documenting an increase in water company related pollution events, despite significant fines imposed by the regulator, the future seems bleak for our rivers.

<https://www.birmingham.ac.uk/news/thebirminghambrief/index.aspx>

Contact Person

Professor David M. Hannah - d.m.hannah@bham.ac.uk

New website for UNESCO Chair in Water Science

The UK Commission for UNESCO updates the website in summer 2020, including new pages for the UNESCO Chair in Water Science.

The team at the University of Birmingham is on the hunt for innovative and sustainable solutions to solve the water crisis.

Reliable access to clean water is essential to our health, prosperity and security. But, billions of people around the world are struggling daily with lack of water, polluted water or poor access to water, and water-related disasters such as floods and droughts.

Read more here: <https://unesco.org.uk/chairs/chair-in-water-science-at-the-university-of-birmingham>

Contact Person

Professor David M. Hannah - d.m.hannah@bham.ac.uk

Groundwater depletion in US High Plains leads to bleak outlook for grain production

The depletion of groundwater sources in parts of the United States High Plains is so severe that peak grain production in some states has already been passed, according to new research. An international team of scientists, including experts from the University of Birmingham, has extended and improved methods used to calculate peak oil production to assess grain production in three US states, Nebraska, Texas and Kansas. They related the levels of water extraction from the Ogallala aquifer; one of the largest underwater reservoirs in the High Plains, over the past five decades, to the amounts of grain harvested in each state and used this model to predict future trends. Their results are published in Proceedings of the National Academy of Sciences. Professor David Hannah, who holds the UNESCO Chair in Water Sciences at the University of Birmingham, is a co-author of the paper.

<https://www.birmingham.ac.uk/news/latest/2020/10/groundwater-depletion-in-us-high-plains-leads-to-bleak-outlook-for-grain-production.aspx>

Contact Person

Professor David M. Hannah - d.m.hannah@bham.ac.uk

G-WADI Strategic Meeting

The strategic meeting of UNESCO IHP's "Global Network on Water and Development Information for Arid Lands" (G-WADI) reviewed historic missions and goals of the initiative, and examined the progress in addressing some of the opportunities and revised objectives outlined in the G-WADI strategy document (UNESCO, 2017). It was attended by G-WADI Global Secretariat, all Regional Secretariats, founding members, scientific and academic institutions, as well as UNESCO staff members from Headquarters and Field Offices. In total, 32 participants (26 men and 6 women) joined the meeting.

Contact Person

Patrycja Breskvar - p.breskvar@unesco.org

Intensive monoculture is putting water systems in peril

The global spread of vast forest plantations and agricultural monocultures are turning once diverse landscapes into areas of land supporting single plant species, with profound implications for our terrestrial water cycle, according to new research. A new paper published in Nature Geoscience and written by a global collaboration of interdisciplinary researchers studying ecohydrological systems, calls for policymakers and practitioners to consider these water-vegetation interactions in their land management decisions. Professor David Hannah, who holds the UNESCO Chair in Water Sciences at the University of Birmingham, is a co-author of the paper.

<https://www.birmingham.ac.uk/news/latest/2020/09/intensive-monoculture-is-putting-water-systems-in-peril.aspx>

Contact Person

Professor David M. Hannah - d.m.hannah@bham.ac.uk

COVID-19 pandemic should be a wake-up call for water security

Urgent action on water security is essential to better prepare societies for future global health crises, say experts at the University of Birmingham in the UK and Northwestern University in the US. In a comment article published in Nature Sustainability, the researchers are urging policy makers across the world to focus on behavioural change, knowledge promotion and investment in water infrastructure. The call follows studies revealing nearly a quarter of households in low- and middle-income countries have been unable to follow basic guidelines on handwashing – recognised as critical for preventing the spread of the coronavirus pandemic. Professor David Hannah, who holds the UNESCO Chair in Water Sciences at the University of Birmingham's School of Geography, Earth and Environmental Sciences, says:

"The COVID-19 pandemic has laid bare the urgent need for global action on water security. This is a basic human right that is not being met in large sections of the world's population and COVID-19 has provided us with a wake-up call that we cannot afford to ignore."

<https://www.birmingham.ac.uk/news/latest/2020/08/covid-19-pandemic-should-be-a-wake-up-call-for-water-security.aspx>

Contact Person

Professor David M. Hannah - d.m.hannah@bham.ac.uk

Addressing Water Management Challenges through Decision Scaling and Adaptation Pathways

The webinar addressing Water Management Challenges through Decision Scaling and Adaptation Pathways, was held on 29 October 2020, 15:30-17:00 CET. This webinar was the third edition in the monthly series on climate-resilient water management approaches, hosted by UNESCO's Intergovernmental Hydrological Programme (IHP), together with the Alliance for Global Water Adaptation (AGWA) and the International Center for Integrated Water Resources Management (ICIWaRM). During the webinar, participants explored two bottom-up approaches: Decision Scaling and Adaptation Pathways. Presenters will touch on the processes' history, relevance, and practical applications. To highlight their role in addressing water management challenges, presenters will share real-life examples of case studies that were performed using the two approaches.

Register at https://unesco.org.zoom.us/webinar/register/WN_1uWyUE3nRpuNx0YXuecZzA

For more information, see the homepage of the series:

<https://en.unesco.org/news/adaptation-age-uncertainty-tools-climate-resilient-water-management-approaches>

Contact Person

Patrycja Breskvar - p.breskvar@unesco.org

UNESCO-IHP Information Meeting

On 29 October 2020, UNESCO IHP organized an Information meeting with Member States to brief them on the processes involved in developing IHP-IX.

Contact Person

Alexander Otte - a.otte@unesco.org

Theme V - Online Conference “Addressing Groundwater Resilience under Climate Change, Session on “Groundwater Education & Capacity Building

“Resilience under Climate Change” The conference’s main goal is to, ultimately, promote the sharing and exchange of state-of-the-art scientific and policy knowledge on the links between an increased resilience of groundwater resources and climate change for the sustainable governance, use and management of these resources in all regions of the world. This event was held on 30 October.

For more details consult the following link
<https://iwraonlineconference.org/programme/>

Contact Person

Jorge Ellis j.ellis@unesco.org

UNESCO World Cities event, Theme: Community centered urban development: A Paradigm of Inclusive Growth

On the occasion of the World Cities Day 2020, UNESCO in the framework of the UNESCO Cities Platform of which Creative Cities Network is a part of, will bring together speakers from academia, public and private sectors, and civil society for an “Urban Dialogue”, to continue the discussion on the integral and essential role of communities in building sustainable and resilient cities. This event was held on 30 October 2020

This celebration will also be an opportunity for UNESCO to showcase the full range of its expertise and activities in the urban context, contributing to the implementation of the 2030 Agenda, and notably SDG 11 on sustainable cities and communities. Various flagship publications of the city Networks and Programmes of the Platform will be presented during this event, which will further complement the global theme of the World Cities Day 2020 “Valuing our communities and cities”.

Contact Persons

Alexandros K. Makarigakis a.makarigakis@unesco.org
Kaixin Lin k.lin@unesco.org

Texas Society of Architects Conference, 2020 Pinch Points: “Advancing Equity in Architecture Practice”

There are multiple milestones an architect faces that act as pinch points, or barriers, that can hold careers back and influence employee retention. Through an interactive dialogue, we will explore emerging equity, diversity and inclusion (EDI) trends at key career pinch points and how these trends impact the architecture profession. A panel of firm leaders discussed strategies for addressing these pinch points through increasing

both staff and leadership’s success in navigating and overcoming them. This event was held on 28 October 2020.

For more details consult the following link
<https://web.cvent.com/event/6e25c007-341e-460b-9c95-8b3a5f3a8440/websitePage:ca08f716-6b20-4c36-be00-9ab243c61544>

Contact Person

Adrian Parr
adrian.parr@uta.edu

Architectural Record Innovation Conference Live Presentation: Seeking Equity in Architectural Education

Architectural Record brings together key figures who are generating a range of creative solutions for the built environment today and into the future. From small scale interventions to large developments, the projects presented at the conference will highlight how shifting values, emerging technologies and new concepts are driving the future of architecture.

Session Description: Three prominent educators from three very different institutions will debate how to bring greater diversity and inclusion to architectural education, in terms of students and faculty, as well as how to revise the curriculum to reflect a multiplicity of perspectives beyond the Western canon. This event was held on 27 October.

For more details consult the following link
<https://www.architecturalrecord.com/innovation-conference>

Contact Person

Adrian Parr
adrian.parr@uta.edu

Emerging Leaders Program/Topic of “Cultural/Sustainable, The Citizen Architect

The AIA Dallas Emerging Leaders Program is an innovative leadership development course that is interactive, and dialogue centered made up of 20 young professionals. A panel of speakers were invited to discuss a “Cultural/Sustainable, The Citizen Architect”. This event was held on 23 October 2020.

Contact Person

Adrian Parr adrian.parr@uta.edu

Women in Architecture 4th Annual Empowering Women in Design Conference October 2nd, Design Justice

The upgrading of slum communities was a central feature of the UN Millennium Development goals. In my capacity as a UNESCO water chair I spent over 4 years working with slum communities in Nairobi, with additional visits to communities in the Dharavi slum in Mumbai. In particular, I conducted a longitudinal study of Nairobi slum upgrading initiatives, documenting the asymmetrical impact these had for women living in the slums. These experiences in the field and the subsequent findings highlight the importance of gendering design in the public interest and the specific role female architects can play in advancing the

needs of female minorities throughout the design process. This event was held on 2 October 2020.

For more details consult the following link

<https://aiatxda.zohobackstage.com/EmpoweringConference#/?lang=en>

Contact Person

Adrian Parr adrian.parr@uta.edu

Regional Centre for Training and Water Studies (RCTWS) participation of The Regional Centre on Urban Water Management (RCUWM-Tehran) Governing Board

On 23th October 2020 RCUWM held the 11th Governing Board meeting, RCTWS accepted to be a member of RCUWM Governing Board as category II centers under auspices of UNESCO. Due to the Covid -19 pandemic, RCUWM Governing Board meeting was held online.

Contact Person

Dr Mamdouh Antar m_antar2000@rctws.org

Regional Centre for Training and Water Studies (RCTWS) participated in Cairo Water Week (CWW)

Regional Centre for Training and Water Studies (RCTWS) participated in Cairo Water Week (CWW) which is considered one of the biggest water-related events at the national, regional and international levels. It is an annual event organized by the Egyptian Ministry of Water Resources and Irrigation, under the patronage of H.E. Mr. Abdel Fatah El-Sisi, President of the Arab Republic of Egypt, in collaboration with national, regional and international partners.

this year's Conference is the third in a series concerned with the broad topic of water and sustainable development. The 2020 Conference is also a part of a longer agenda of conferences, symposia, and meetings that will consider the topic of Water Security. The conference is an important platform for professional engagement, the exchange and sharing of ideas, learning from others and identify areas for partnerships and collaborations. Cairo Water Week 2020 took place during the period from 18th to 22nd of October 2020 in Cairo – Egypt.

Contact Person

Dr Mamdouh Antar m_antar2000@rctws.org

Meeting with the Minister of Water in Iraq

On the sidelines of the Cairo Water Week 2020 conference, RCTWS honored with visit of the Engineer / Director of the Office of the Minister of Water in Iraq. The meeting identified the national and regional activities of RCTWS and the RCTWS's strategy in activating cooperation and transferring expertise in the field of capacity building

Contact Person

Dr Mamdouh Antar
m_antar2000@rctws.org

Open Science and the Decolonization of Knowledge

Regional Centre for Training and Water Studies (RCTWS) participated in the webinar on Open Science and the Decolonization of Knowledge that

held online on Wednesday, 28 October 2020. The webinar is organized jointly by UNESCO (Regional Bureau for Sciences in the Arab States – Cairo and Cluster Office for Maghreb – Rabat), the Canadian Commission for UNESCO and the UNESCO Chair in Community-Based Research and Social Responsibility in Higher Education.

The webinar supported the UNESCO consultations on the development of a Recommendation on Open Science, an international normative document to be adopted by the UNESCO General Conference in November of 2021. The webinar was based on a brief entitled "Open Science Beyond Open Access: For and With Communities A Step Towards the Decolonization of Knowledge".

Themes

- Openness to publications and data
- Openness to society
- Openness to excluded knowledge

Contact Person

Dr. Mamdouh Antar
m_antar2000@rctws.org