World Water Week | Call for engagement

Water, ecosystems and human development

26–31 August, 2018

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We depend on healthy ecosystems, and they depend on us



In recent months, hurricanes and floods have wreaked havoc in the Caribbean and North America, while parts of Africa, Europe and India have suffered droughts and even famine. Events like these expose our vulnerability to water variability. They remind us that we are all touched by water, and that we rely heavily on good water governance.

According to predictions, almost all of us will be more exposed to water variability and volatility over the coming decades, for example flood losses are projected to increase fivefold in Europe by 2050. To protect lives and livelihoods we must combine managed and natural ecosystems with physical infrastructure and good governance, to adapt to an increasingly unstable climate and escalating demand for fresh water.

This will be an area of special attention during World Water Week in 2018. In the third year of implementing the 2030 Agenda for Sustainable Development, the Week will focus on the very basis of our existence – water, ecosystems and human development – the ecosystems on which all life depends, and the critical role of water in their functions. Just weeks before, global leaders will meet in the High Level Political Forum to review the progress towards SDG 6. I look forward to the outcome of the Forum, and hope that it will help drive discussions during the Week, particularly in relation to our stock-taking of water in the SDG and climate processes.

World Water Week is an ecosystem of water professionals, connecting actors of different ages, genders, cultures and professions, in a larger movement towards a water wise world. An important step in this journey is to convince actors from other communities, who may be unaware of their dependence on and impact on water, to take part. We invite you to join us in this endeavour!

In these pages you can read about the many opportunities to engage in the World Water Week in 2018. Explore the theme, the seminars, and learn how to submit session proposals. We look forward to receiving them, and welcoming you to Stockholm!

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Torgny Holmgren Executive Director Stockholm International Water Institute



World Water Week is organized by the Stockholm International Water Institute (SIWI). One of the world's leading water institutes, SIWI' works to strengthen the governance of freshwater, globally, regionally, nationally, and locally.

Our vision is a water wise world – a world that recognizes the value of water and ensures that it is inclusively shared and used sustainably, equitably and efficiently for all.

Founded in 1991 we believe that the best way to tackle water crises, and help bring about lasting change – with the ultimate goal being the eradication of poverty – is to strengthen water governance among public and private actors alike.

Our mission is to "Strengthen water governance for a just, prosperous and sustainable future".

We are a strong international team of knowledge-generators, convenors, facilitators, and trainers that have built unique expertise in strengthening the systems and processes that govern access to fresh water.

We also award the prestigious Stockholm Water Prize, under the patronage of the H.M. King Carl XVI Gustaf, and the Stockholm Junior Water Prize.

This announcement is published by the Stockholm International Water Institute. Cover photo: iStock | Graphic design: Marianne Engblom

World Water Week



Photo: Mikael Ullén

World Water Week is the annual focal point for the globe's water issues. It is a meeting place for scientists, policy makers, and private sector and civil society actors to network, exchange ideas, and foster new thinking around the most pressing water-related challenges. It inspires collaborative action and bridges science, policy and practice.

Many partnerships and alliances have been formed among individuals as well as organizations during previous World Water Weeks. It is also where informal follow-up on implementation of actions, commitments and decisions from international processes and stakeholders often takes place.

In 2017, over 3,300 participants from more than 130 countries gathered in Stockholm.

In 2018, we will strive for World Water Week to be even more inclusive and innovative. The Gold Standard classification will be expanded to include all sessions. We will also continue to encourage participation from beyond the water sector. Visit page 9 to learn how your organization can get involved. In 2017, over 3,300 participants from more than 130 countries gathered in Stockholm.



Participants by organization

📕 NGO/Civil Soc/Prof 📃 Gov. agency 📃 Private sector

Scientific/Research/Academic 🔲 Intergov. agency 🗌 Media

The World Water Week community

World Water Week could not happen without our community of advisors and supporters.

Key Collaborating Partners

Each year, we team up with three Key Collaborating Partners to widen the reach of the Week, enrich the discussions, and encourage participation. In 2018, the Key Collaborating Partners are:

African Development Bank (AfDB) The AfDB Strategy for 2013–2022 calls for substantial "investments in integrated water development and management to attain sustainable water, food and energy security for green and inclusive growth". This is in direct support of the 2025 Africa Water Vision for equitable and sustainable use and management of water resources for poverty alleviation, socioeconomic development, regional cooperation and the environment; as well as the SDGs. The 2018 theme resonates with the Bank's agenda.



World Water Assessment Programme (WWAP) of

UNESCO "You can't manage what you don't measure." Providing a real picture of the state, use and management of water resources worldwide is at the heart of the mandate of the UN World Water Assessment Programme (WWAP) of UNESCO. The programme coordinates the production of key evidence-based knowledge products (annual UN World Water Development Report, SDG 6 Synthesis Report) on behalf of UN-Water in close cooperation with many Members and Partners.

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AFRICAN DEVELOPMENT BANK GROUP

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative, onthe-ground solutions to the world's toughest environmental challenges. Being a 2018 Key Collaborating Partner is an important part of our strategy to bring together public and private stakeholders to advance more sustainable watershed management through nature-based solutions.



Scientific Programme Committee

The Scientific Programme Committee is comprised of professors, scientists, and experts from water and developmentrelated fields. Their role includes development of the World Water Week thematic scope and seminars.

Members are:

- Dr Torkil Jønch Clausen, SIWI (Chair)
- Mr José Carrera, CAF Development Bank of Latin America
- Prof Gyewoon Choi, Incheon National University
- Dr Guillermo Donoso Harris, Pontificia Universiad Católica de Chile
- Dr Phil Graham, SMHI
- Dr Dipak Gyawali,
- Nepal Academy of Science and Technology
- Dr Anders Jägerskog, The World Bank Group

- Ms Eiman Karar, UNEP
- Dr Louise Karlberg, SEI
- Dr Marianne Kjellén, UNDP
- Mr Jon Lane, Independent consultant
- Ms Karin Lexén, Swedish Society for Nature Conservation
- Ms Maimuna Nalubega, AfDB (co-opted member)
- Mr Rami Narte, SIWI
- Dr Belynda Petrie, OneWorld
- Dr Diego Rodríguez, The World Bank Group
- Mr Will Sarni, Water Foundry
- Dr Danka Thalmeinerova, GWP
- Mr Stefan Uhlenbrook, WWAP (co-opted member)
- Ms Kari Vigerstøl, TNC (co-opted member)
- Mr Torgny Holmgren, SIWI (Vice Chair)
- Mr Adrián Puigarnau, SIWI (Secretary)



Photo: Mikael Ullén

Young Scientific Programme Committee

The Young Scientific Programme Committee (age 35 and under) is a group of individuals selected each year to support the Scientific Programme Committee. They collaborate with experienced scientists and water professionals and develop the seminar' programmes.

Advisory Committee

The Advisory Committee advises SIWI on strategic issues in order to develop and improve World Water Week. It aims to strengthen the Week as a meeting place for decision makers connected to water-related challenges and their impact on the world's environment, human health, economic development and poverty reduction agendas.

Strategic Network

Both public and private water decision-makers and users play an important role in the identification and implementation of innovative, sustainable, water wise solutions. We collaborate with a range of different organizations and sectors to work towards this vision. Whether you are at the beginning of your water journey, an established actor in the water sector, or a sustainability thought-leader, we invite you to be part of the solution. If you would like to support World Water Week, please contact us. We welcome your support.

By supporting World Water Week you have the opportunity to:

- Advance knowledge and new thinking
- Strengthen your brand within the water and development community
- Showcase collaboration
- Present your research
- Promote your approach, project or initiative
- Connect with digital audiences
- Communicate your value
- Support and reward innovation
- Support forgotten stakeholders





Strategic Partners

BMZ M Federal Ministry for Economic Cooperation and Development



Strategic Supporters

ARUP

The theme Water, ecosystems and human development

In the third year of implementing the 2030 Agenda for Sustainable Development, the 2018 World Water Week focuses on the very basis of our existence: the ecosystems on which all life depends, and the critical role of water in their functions. We depend on healthy ecosystems as habitats for plant and animal life, and for services for human development and well-being. In our development efforts, we invariably affect and change our environment, but we need to do so without compromising the sustainability of vital ecosystems. The UN focuses on "nature-based solutions" as the theme for the 2018 World Water Day and World Water Development Report. In Stockholm, we align the present 2018 Thematic Scope with this, and we go further to explore the wider water, ecosystems and human development agenda.

The 17 Sustainable Development Goals (SDGs) and Paris Climate Agreement, set ambitious targets for our future development. The present Thematic Scope focuses in particular on SDG 6, target 6: "by 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes"; SDG 15, target 1: "by 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands"; and SDG 9.1 "develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all". While each of the SDG targets have one or more indicators through which the performance in achieving the targets is monitored, the interdependence between them needs to be recognized and guide integrated development. Considering the 14th global Conference of the Parties to the Biodiversity Convention in late 2018 the bio-diversity dimension of ecosystem development and management will be given special attention.

The Thematic Scope below outlines the rationale and overall content of the theme "Water, ecosystems and human development".

The systems perspective – water and ecosystems from source to sea Whether living in rural or urban areas, in mountains or near the coast, we all live in river basins in which upstream developments affect downstream conditions. On its way from hilltop to ocean water sustains terrestrial and aquatic ecosystems that regulate flows and water quality while providing services for our development and livelihoods. At the downstream end, where deltas and estuaries connect to the sea, river sediments and pollutants, from point and non-point sources, determine the morphology of the coasts and quality of marine waters. Hence, we need to understand and manage our river basins, and the ecosystems within them, holistically, as one interdependent system. Climate change exacerbates the challenge, and we need to master risk management and resilience building to cope with change and reduce the impacts of disasters. Well understood and well managed, our ecosystems can play an important role in adaptation to climate change.

With over half of the world's population living in cities by mid-century, the majority near the coast or at navigable rivers, holistic system thinking also calls for addressing rural-urban linkages as highlighted in SDG 11 and the New Urban Agenda adopted by Habitat 3 in 2016.

The development perspective – balancing green and grey **solutions** As societies develop, we build infrastructure that changes the landscape and alters the patterns of water flows, along with the substances and sediments that they carry. While such developments can create economic and social benefits, they often come at a cost to the environment. Conventional "grey" investments adversely affect both natural habitats and biodiversity and ecosystem services to people who depend on the land, forests, rivers, lakes and wetlands for their living. By changing the environmental determinants of health, they may also affect the health status of communities with important economic and social consequences. While such trade-offs are inevitable, nature-based solutions, and "green" investments, that take advantage of the natural systems and processes can create win-win situations that provide economic and societal benefits while maintaining ecosystem integrity or even improving environmental conditions. Examples include soil and water management in the watersheds, wetland and mangrove restoration, groundwater recharge and storage, rainwater harvesting, buffer zone management, nature-based wastewater management and agro-forestry. These kinds of activities provide similar benefits as built infrastructure, and they may also serve to improve erosion and sedimentation management and nutrient recycling, along with natural solutions to flood management by creating 'room for the river' or utilize green spaces in the urban environment.

While nature-based solutions should be the first option to consider, we still need to build physical infrastructure, such as dams, to store and regulate flows to provide water supply, irrigation, energy and control of floods and droughts. It is not an either-or, but a question of complementarity and finding the right balance and economic trade-offs. We also need to protect existing infrastructure and other capital and social assets by building resilience to extreme events and projected climate change and increased variability. In the spirit of a circular economy our approach to development and growth



Photo: iStock

needs to be increasingly multi-facetted and green. This is particularly evident in how industrialisation and consumption patterns affect ecosystems beyond our geographic proximity as we trade goods and services globally.

The human and social perspective – a people's agenda

Humans have always depended on livelihoods derived from ecosystems; millions of people, including many of the world's poorest, still sustain their daily lives through rain-fed farming, agro-forestry and inland fisheries. Human health and wellbeing depend on how we manage and protect the natural systems around us, and we need to do so by tapping into traditional knowledge and aspirations of the local population, men and women, old and young. Respect for ecosystems values require understanding of their vital role in sustaining life and underpinning development and need to translate into responsible human behaviour, from farmers, fishermen, workers and consumers. This calls for awareness, education and capacity development at all levels of society.

The economic perspective – rethinking ecosystems

values Understanding ecosystem values and quantifying natural capital are critical to any economic analysis of development scenarios, investments and financing strategies. That includes both tangible values that can be translated into monetary terms, and intangible values such as biodiversity, culture, recreation and natural and scenic beauty. It particularly concerns human health, as communities caught in the poverty trap may be forced to use their natural resources base unsustainably. Investments in infrastructure, whether built or natural, as well as payment for ecosystem services, must be based on a proper assessment of environmental and social ecosystem cost and benefits. The circular economy, including the reuse and recycling of wastewater and nutrients, has significant potential in applying innovative systems thinking to ecosystem management.

Financing strategies usually build on a range of legal and market-based instruments, including taxes, royalties and fees. Future strategies might take a value-based systems approach to



Photo: iStock

economic analyses taking into account ecosystems as a whole, transitioning from a sectoral to an ecosystems perspective on pricing. Nature-based solutions may open new potentials for adaptation finance.

The governance perspective – towards integrated water and ecosystems management Good water and ecosystem governance is at the heart of the triple bottom line for sustainable development: economic, social and environmental. While our ecosystems underpin all development, they also represent competing demands for water among the human needs for water supply, food, energy and other uses. The ecosystems approach to water management, including consideration of environmental flows, is complementary to integrated water resources management (IWRM) that has been adopted as SDG 6, target 5, and constitutes the overall approach to water governance. The ecosystem dimension of the 'water, energy and food security nexus' needs to be better explored, including its transboundary and trade aspects. The public good nature of the ecosystems can provide benefits to communities and countries sharing them, thereby creating incentives for improving cooperation. These approaches should also align with integrated coastal management downstream, and integrated urban water management for the towns and cities in the basins concerned.

We must also address increasing risks and uncertainties due to climate change, such as long term hydrologic changes, sea level rise and increased variability and extreme weather events. These challenges, if not addressed, can result in regional security issues for states and regions. Increasingly degrading ecosystems in the world's semi-arid and arid areas erode the livelihoods for poor people who respond by migrating towards better opportunities elsewhere.

Citizen stewardship can contribute to mobilizing collective action through environmental advocacy and shared knowledge and understanding, involving traditional authorities, local communities and tribal populations. Public-private-civic partnerships with appropriate roles for private sector and industry can mobilize important actors and create new partners for ecosystem-sensitive development.

How will you engage in World Water Week in 2018?

There are several ways to engage in World Water Week. The theme guides the construction of the World Water Week programme. SIWI is also interested in receiving session proposals that link to previous themes, and/or have a strong focus on current debates, generate new ideas and advance solutions.

Click here for a detailed timeline and overview of the Week or visit: www.worldwaterweek.org To apply, visit: https://programme.worldwaterweek.org/engage

Start here!





Photo: Mikael Ullén

Gold Standard

Inclusiveness is at the core of SIWI's work. In 2018, we encourage all sessions to pursue Gold Standard classification.

Criteria include:

- Gender representation: At least 40% of presenters are female
- Young professional representation: At least one presenter is 35 years or younger.
- Innovative format: Event format encourages audience participation

See detailed list of criteria here.

Seminars

The seminars are the scientific core of the Week. Nine seminars take place during the Week and their content is connected to the thematic scope (see page 6).

Abstract submissions Actors from all disciplines who wish to present their research at the seminars during World Water Week are welcome to submit abstracts. Abstracts can be submitted on any subject related to the issues being addressed by the seminars (see page 14–18). They are reviewed by the Scientific Programme Committee. Selection criteria includes versatile and dynamic content, innovation, and regional and sectoral diversity.

Additionally, all abstracts selected will be included in the Abstract Volume and published online. Also, **all accepted abstracts will be invited to submit an extended abstract to Water Alternatives**, an interdisciplinary journal on water, politics and development.

Length: approximately 10 minutes Price: View terms and conditions Deadline: 21 January 2018

(All prices are excluding VAT)



Event discounts

Event convenors can apply to receive a 10% discount on the full event price when gold standard critiera are met. An additional 10% discount will be available to events that meet financial assistance criteria (more information).

Photo: Mikael Ullén

Events

Events aim to advance knowledge and/or present new findings, and often include a discussion or an interaction with an audience. Topic proposals submitted by organizations are selected by SIWI. Once selected, event programmes are developed and managed by the organization(s) that submit the proposals (convenors).

SIWI welcomes proposals from all sectors and encourages collaboration with other organizations to help build partnerships and bring diverse perspectives to the Week.

Length: 90 minutes Price: SEK 28 800* –36 000 Deadline: 21 January 2018 (*with maximum discount)

(All prices are excluding VAT)

Showcases

A Showcase is a space for convenors to tell their water stories, promote different approaches and share their perspectives, initiatives, tools and projects. Convenors can invite perspective partners to a short presentation, or hold a small networking event or launch.

Length: 45 or 90 minutes Price: SEK 24 000–40 000 (extra fees will apply for external participants) Deadline: 15 March 2018 (Applications open 1 February 2018)

(All prices are excluding VAT)



Photo: Thomas Henrikson



Photo: Lotta Samuelson

Field visits

Field visits are sessions held at unique locations close to Stockholm. They are a chance for local convenors to demonstrate practical case studies, initiatives, tools or projects.

Length: 2–4 hours (incl. transport time) Price: SEK 20 000 Deadline: 15 March 2018 (Applications open 1 February 2018)

(All prices are excluding VAT)



Photo: Creo

Sofas

The Sofa is the window into the Week. A cross between a speakers corner and an interview studio, and broadcasted live beyond the walls of the Week, experts, decision-makers and leaders will be interviewed on a variety of water-related issues. Host a segment to highlight a hot topic, interdisciplinary collaboration, knowledge sharing, or to increase understanding of key water issues.

Length: 1 x 20–25 minute segment OR 1 x 15 minute + 1 x 3 minute segments Price: SEK 27 000–30 000 Deadline: 30 April 2018 (Applications open 16 March 2018)

(All prices are excluding VAT)

Exhibition

Develop or enhance your brand. Engage with water and development decision-makers and present your organization's water and environment-related work by exhibiting at the Week. Different sized spaces available.

Price: SEK 23 000-43 000 Deadline: 30 April 2018 (Applications open 16 March 2018)

(All prices are excluding VAT)



Photo: Mikael Ullén



Photo: Istock

Closed meetings

For many, the Week is an opportunity for participants to meet their international networks in person. Host a committee meeting, annual general meeting, board meeting, project initiation or a brainstorming session. Rooms of varying sizes, and IT facilities available.

Length: 1hr-full day Price: SEK 2 000-20 000 (Applications open in April 2018)

(All prices are excluding VAT)



Photo: Mikael Ullén

Volunteer at World Water Week

Would you like to experience the atmosphere of the Week, are interested in water and want to build your network? Help us deliver the world's leading annual event for water and development by becoming a volunteer. Volunteers receive registration to the Week (including lunch), access to social events, public transportation within Stockholm and endless networking opportunities.

The Young Scientific Programme Committee Are you 35 years old or younger, and interested in water and development issues? Apply* to be one of nine committed young professionals supporting the Scientific Programme Committee.

Collaborate with experienced scientists and water professionals, develop the programme of one of the world's most renowned water conferences, and gain visibility within the water community. Your involvement also adds another, important perspective to the Scientific Programme Committee's work.

The members of the Young Scientific Programme Committee will work with the Scientific Programme Committee to develop the programme of the seminars.

***Send your resume,** motivation letter (indicating seminar of interest), and a letter of recommendation, by 3 December 2017 to adrian.puigarnau@siwi.org.

Tasks include:

- Review the abstracts received for each of the seminars (January and March)
- Provide support in the planning of the seminars programme (April and August).
- During Wold Water Week, support the seminar rapporteur teams.

The Assistants The Assistants are part of the wider World Water Week team during the conference. As an assistant, you are the face of SIWI. You will have the possibility to network, gain professional work experience, and attend some sessions.

The Rapporteurs The Rapporteurs help to report on the cross-cutting trends, knowledge and innovations discussed in sessions at World Water Week. As a rapporteur you will capture, summarize and analyse the discussions – an instrumental part of the concluding process.

Deadlines:

- Young Scientific Programme Committee:
- 3 December 2017
- Assistants & Rapporteurs: 1 May 2018
- (Submission opens 1 April 2018)

Seminars

Tapping into collective wisdom: Gender sensitive development and water ecosystems

Co-convenors: SIWI, World Water Assessment Programme UNESCO. Women for Water Partnership and Australian Water Partnership



Water is key to combating poverty and achieving sustainable development, while improving human health, livelihood, equitable economic growth and sustaining ecosystems. Water use reflects the social differences, power relations and values present in society

that impact women's empowerment. Gender inclusion in sustainable water resources management has long been widely endorsed globally for emphasising the people-water-ecosystems connection; Gender differentiated indigenous knowledge systems have historically placed such concerns within a broader social and institutional context. Examples of development interventions based on respecting traditional/indigenous knowledge can be useful to highlight the importance of this evolutionary collective wisdom accumulated over time. Conversely, insensitive policy interventions have undermined women's empowerment and could impact achieving SDGs as well as gender equality through ways to address broader social equity within a water, development and ecosystem nexus. We aspire to establish the links between SDGs 6.6, 15.1, 1 and 5 through this seminar.

The main objective of the seminar will be to contribute to better understanding sustainable development for enhanced ecosystems through gendered transformative approaches. It aims to elaborate on development interventions that capitalised on indigenous/traditional knowledge enhancing water ecosystems. Such approaches would have internalised social structures/systems and power relations in different locations and in context specific development. Examples that show enhanced water allocations control, management, use or protection due to women's participation will be sought. Contributions establishing baseline and monitoring tools to show such impact will be useful in the implementation of the relevant SDGs 6.6, 15.1, 1 and 5.

IWRM and ecosystem based approaches: Complementary, duplicating or competing?

Co-convenors SIWI, Global Water Partnership, The Action Platform for Source-to-Sea Management, National and Kapodistrian University of Athens, Greece (tbc) and the Global Environment Facility – International Waters



Water plays multiple roles in ecosystems and society. Yet, the dependency of human wellbeing on ecosystems has been given insufficient attention whence, historically, narrow economic pursuits have been given priority over environmental concerns. This

is addressed through ecosystem based approaches. Through integrated water resources management (IWRM), managers and stakeholder are to deal with the complex task of securing and balancing water for people, industry, food production, navigation, hydropower and the environment. Yet, the perspective of the recipients (the water bodies receiving the flows of used water), is a dimension that has often gone missing or being the second-order priority. This particularly affects coastal zone ecosystems, which are among the most productive and the most threatened ones on the planet, and whose management has fallen in-between the mandates of responsible authorities. Agenda 2030 sets out to implement IWRM at all levels (target 6.5). Target 14.1 highlights the source-to-sea continuum in its ambition to prevent and reduce marine pollution, particularly from land-based activities, and target 15.1 subscribes to an ecosystem approach.

This seminar will discuss the ecosystem dimension of IWRM. How is the maintenance of ecosystem services accounted for in IWRM? What are the conflicts or complementarities between IWRM and ecosystem based approaches? How can enhancing ecosystem functions support the implementation of IWRM? What mechanisms and incentives exist to help stakeholders collaborate and overcome sectorial and geographic confines? How can the Agenda 2030 help integrate action of interlinked goals? We invite cases illustrating applications and interlinkages of IWRM and ecosystem based approaches.

The emerging politics of sustainable ecosystems

Co-conveners: SIWI, the World Bank, Stockholm International Peace Research Institute, Planetary SecurityInitiative (tbc) and The Hague Institute for Security Studies (tbc)



A new form of geopolitics embracing cooperative solutions for ecosystem and freshwater distribution management is essential. Environmental consequences, high-value ecosystems, and sustainability security are often hidden from view of global politics.

This session draws attention to the political economy benefits of resolving ecosystem challenges through progressing the SDG 6 debate – freshwater ecosystems are essential to human health, environmental sustainability and economic prosperity – and the security implications of escalating resource use. These combined challenges move us dangerously close to the 'planetary boundaries'. Ecosystems and water bodies are reaching 'closed' status, and increasing infrastructure investments in developing countries necessitates trade-offs. Shared ecosystems create subnational, national or regional interdependencies with public goods-neglect or overexploitation leading to cooperative and/or conflicting outcomes. The broader sociopolitical context and relations between communities, sectors, or countries are the determinants. An emerging consequence is increased migration as people seek to live closer to critical, healthy natural resources.

Cooperatively managed, shared water systems, integral to broader ecosystems, can provide reliable services to its dependents. Conversely, inappropriate management, or conflict between sectoral policies, can lead to security challenges, particularly when ecosystems limits are being tested. New partnerships are needed to agree a flexible formula for equitably sharing aquatic resources. Their common objective? Security for all stakeholders, while adapting to changing conditions, foremost those resulting from climate change. This seminar will consider good practice in cooperation and management of joint systems alongside situations which have led to or increased the likelihood of conflict. Concrete, policy-relevant approaches will be encouraged.

Ecosystem-based water management: From innovation to practice

Co-conveners: SIWI, The Nature Conservancy, Cap-Net UNDP and the Natural Capital Project



Much learning has been generated in recent years about ecosystems-based water management, but is it reaching the right audiences at a meaningful scale? Do practitioners have the right tools and knowledge to apply the ecosystems approach to their own water

management? If not, what is hindering uptake? Does practical implementation match theory? Is innovative use being made of technical applications, such as remote sensing, communications technology or big data analytics? Is indigenous knowledge sought out and utilised? Theorists and researchers need to learn from practitioners and vice versa; policy makers need to incorporate knowledge gained on the ground into their policy and leadership processes. With active participation from these different groups, the seminar will identify pathways to address barriers to uptake through partnerships, guidance and tool development, case studies, collaborative research and more. Our overall aim is to identify water management practice that achieves measurable positive outcomes for people and nature.

This seminar will take stock of current progress and uptake in integrating ecosystem approaches into water management practice. We invite papers that address questions on appropriate knowledge, tools and policies for applying ecosystems thinking to managing water resources. Can we innovatively combine tools such as remote sensing, communications technology or big data analytics with indigenous knowledge? How can we overcome governance challenges of ecosystem approaches? Can we accomplish SDGs 6 and 15 with existing tools and policies? Where do we need to advance science and how can results be effectively shared with practitioners? We welcome innovative case studies that address these issues.

Outside the fence: Industry's role in ecosystem management

Co-conveners: SIWI, WWF and International Council on Mining and Metals (tbc)



Demand for water from the private sector is increasing. The OECD projects that by 2050, 40 percent more water is required globally than in 2000. While addressing operational water issues, industries are now implementing strategies that address

water in watersheds and value chains and proactively engaged on policy and technology innovation. Complex challenges ("wicked problems") such as water and ecosystems and their impact on human development require collective action and business ecosystem strategies. In many cases the public sector alone lacks the resources needed to address these complex challenges. For the SDGs to be achieved by 2030 the private sector will be a critical partner with other stakeholders. The private sector must have a strategy which compels them to move beyond their fence line to address risks (including proactively engaging with the public sector, consumers, customers and other stakeholders), drive business growth and contribute to solving environmental and social issues.

The more expansive role for the private sector is driving innovation in public policy, technology, business models, partnerships and financing/funding of solutions. This seminar will explore the financial, technical, social and resource management business cases for private sector across global value chains. This seminar will highlight case studies that have effectively addressed water, ecosystems and human development needs through collective action and business ecosystem strategies. Most importantly, this seminar will bring together diverse stakeholders from the private sector including the information, communication and technology (ICT) and entrepreneurial communities.

Sustainable infrastructure for inclusive green growth

Co-conveners: SIWI, African Development Bank, World Water Assessment Programme UNESCO, Daegu Metropolitan City, Korea and International Water Management Institute



Recent estimates indicate that, globally, \$1.2 to \$2.4 trillion is needed annually for investment in water and sanitation development. A significant part of this will be built infrastructure. However, traditional built infrastructure often disregards natural

capital and can often be, as a consequence, sub-optimal and unsustainable from an ecosystems perspective as it disrupts existing ecological processes. To achieve the new sustainability goals, a paradigm shift is necessary that places the potential option of non-structural measures and complimentary natural infrastructure at the core of water development decision-making. However, there are constraints to implementation and further innovation is required. This seminar will draw on successes and lessons learnt in view of

- I) the effectiveness of sustainable/green infrastructure across differing temporal and spatial scales;
- 2) financing in sustainable/green infrastructure as a feasible investment;
- 3) governance for achieving efficient sustainable/green infrastructure;

- 4) maintenance and operation, expansion, and rehabilitation of sustainable/green infrastructure; and
- 5) technical innovation including smart IT.

The seminar will provide an opportunity to discuss what exactly is meant by sustainable infrastructure from an ecosystem and water development perspective, and present pragmatic ideas for financing and investment of sustainable/green infrastructure in water resources management in developing countries as well as developed countries. It will promote novel approaches for achieving the SDGs and for better manage competing interests between sectors. The seminar will contribute to improving the understanding about different stakeholder' needs and responses, thereby promoting improved operational approaches. Innovative approaches and technologies for sustainable infrastructure will be introduced through successful case studies.

Is there such thing as innovative financing for ecosystems management?

Co-conveners: SIWI, African Development Bank and The Nature Conservancy



The 2030 Development Agenda acknowledges the importance of sustainable management of natural resources (i.e. ecosystems) as critical to achieving the Sustainable Development Goals (SDGs). This requires that financing strategies and instru-

ments for maintaining and expanding built and natural infrastructure, as well as other ecosystem services, build on a range of legal and market-based instruments, including taxes, royalties and fees. These strategies require the development of markets with clear and well defined enabling conditions. These enabling conditions must include the design of regulatory, legal, and voluntary mechanisms that overcome the public goods aspect and incentivize investments in ecosystems management and its services. These services and the social conditions and norms around them must be clearly defined and understood in order to elicit proper demand. The development of financing strategies will include different instruments composed of public financial resources, private finance, as well as blended finance (public and private financial resources).

The objective of the seminar is to reflect and discuss enabling environments and new and innovative financing mechanisms that contribute to the scaling up of new and existing efforts to increase financing of ecosystem services. The seminar will focus on financing structures and mechanisms that are being implemented. The seminar will focus on the following questions: i) what are the enabling conditions that promote the development of markets? and ii) can innovative mechanisms such as impact investments, green bonds, climate funds, payment for environmental services, venture capital, pooled financing, be scaled up? Examples from around the world will be presented.

Investing in freshwater ecosystems and biodiversity: A key development challenge

Co-conveners: SIWI, International Union for Conservation of Nature, Federal Ministry for Economic Cooperation And Development (Germany) and the Albertine Rift Conservation Society



Conserving biodiversity and freshwater related ecosystem services is essential to help achieve the ambitious goals of Agenda 2030. Equally, ecosystems and the freshwater services they provide will be needed to achieve the Paris Agreement on Climate Change

and the objectives of the Convention on Biological Diversity (CBD). Freshwater management is key for protecting and sustaining biodiversity. At the same time healthy ecosystems play a critical role in maintaining freshwater quantity and quality, and thereby support an array of productive uses essential for economic development. The negative impact of development activities on freshwater biodiversity has increased dramatically over the last 40 years. A range of dilemmas is apparent in the Sustainable Development Goals (SDG). Achieving food security and reducing energy poverty is likely to create multiple trade-offs for freshwater management, biodiversity, and freshwater ecosystem services. Yet to achieve the ambition of the SDGs society must adopt wiser strategies for managing freshwater systems.

This seminar will elaborate on the role of freshwater in sustaining ecosystems, and the role of biodiversity in sustaining water quality and quantity. Furthermore, opportunities to balance the needs of human development with freshwater biodiversity conservation will be explored, including options for improving land use governance. Specifically, the seminar will link to the upcoming COP 14 for the CBD. The seminar will also develop key recommendations to link biodiversity and ecosystem protection to critical development needs. In addition, the seminar aims to highlight the challenge to improve development interventions that better recognise the freshwater systems they rely upon and impact.

Urban and ecosystem development: Hand in hand

Co-conveners: SIWI, CAF - Development Bank of Latin America and Urban Waters Hub



Urbanization continues to be a major demographic trend. World's urban population increased to 54 per cent of the world population in 2014, proportion that is expected to grow to 70 per cent by 2050. These trends pose serious challenges to ecosystem

health and human well-being; however, urbanization is not inherently bad for ecosystems if they are well managed in an Integrated Urban Water Management (IUWM) fashion. Traditional approaches have proven insufficient and the development of an urban ecosystem approach in times of uncertainty and increasing vulnerability is crucial. Additionally, aiming for green cities development means working with nature to comprehensively reshape and retrofit urban areas. Thus, it is critical to reframe urban design and management as an urban ecosystem, considering rural-urban-coastal linkages in an overall basin context and a green economy framework. This has the potential to fully harnesses the vital urban contribution to sustainable development, improve well-being, foster resilience, and protect the environment.

The objectives of the seminar are to contribute to the future adoption of an ecosystem approach to improve urban policy development and management, in the context of the New Urban Agenda, green cities concept and the urban and water related SDG targets. The seminar will focus on experiences that reframe urban design and management, taking an urban ecosystems approach, and considering ruralurban-coastal linkages in an overall basin context and a green economy framework. We aim to draw replicability lessons from evidence-based experiences of innovative urban planning retrofitting urban areas to both provide for current and future challenges as well as increased resiliency.



Prizes

Recognizing outstanding achievements in water, SIWI hosts the world's most respected water prizes – the Stockholm Water Prize and Stockholm Junior Water Prize. SIWI is grateful for the years of support from prize patrons, H.M. King Carl XVI Gustaf and H.R.H. Crown Princess Victoria of Sweden.



Photo: Mikael Ullén

Stockholm Water Prize

The world's most prestigious water award honours visionary women, men and organizations whose outstanding work contributes to the conservation and protection of water resources, and to the well-being of the planet and its inhabitants. The Laureate is announced on UN Water Day, and awarded by the prize patron, H.M. King Carl XVI Gustaf during World Water Week.

Stockholm Junior Water Prize

The Stockholm Junior Water Prize has, for 22 years, brought together some of the world's brightest young minds. The competition aims to encourage young people's interest in water and the environment.

Each year, thousands of students between the ages of 15 and 20, from around the world, enter national competitions in the hope of making it to the international final in Stockholm. The winner is announced by the prize patron, H.R.H. Crown Princess Victoria of Sweden during World Water Week.

What: Stockholm Water Prize award ceremony and royal banquet When: Wednesday, 29 August 2018 Time: 16:30 What: Stockholm Junior Water Prize dinner and award ceremony When: Tuesday 28 August 2018 Time: 18.00

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