



Fighting corruption in the water sector can be lonely and dangerous. Promoting water integrity is a job for the brave.

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Is it possible to realise the human right to water while keeping acceptable revenue levels? Meet eThekweni Water and Sanitation.

► INTERVIEW: PAGE 11

The UN Watercourses Convention has come into force. We asked two water law experts to comment.

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STOCKHOLM

# WATERFRONT

THE FORUM FOR GLOBAL WATER ISSUES | # 3 | AUGUST 2014



## NO TIME TO WASTE

*Securing water's place in the agreements that will steer our future*

PUBLISHED BY STOCKHOLM INTERNATIONAL WATER INSTITUTE



# AN AFRICAN AFFAIR

We are at the threshold of an important year. 2015 is the final year for the Millennium Development Goals, formulated by

the United Nations in 2000 after the adoption of the Millennium Declaration. After varied success in achieving the eight MDGs, for the past few years the international community has been busy discussing a new development agenda and a new set of Sustainable Development Goals to replace the current setup.

In July, the Open Working Group presented the UN Secretary General with a report that will form the basis for discussions at this year's General Assembly starting in September.

World Water Week, in the first week of September, is exceptionally well positioned between these two important events, and we hope that delegates at the Week will take the opportunity to discuss the Post-2015 development agenda and water's place in it. We want to think further than the need for a dedicated water goal in the

new set of Sustainable Development Goals, we should also talk about how to implement a water goal!

The Week is also about celebrating excellence. The winner of the Stockholm Industry Water Award 2014, eThekweni Water and Sanitation, has managed to realise the human right to water in the Durban metropolitan area.

By coincidence, this year's Stockholm Water Prize Laureate, Dr. John Briscoe, is also South African.

It feels very fitting, therefore, that we were recently able to announce the establishment of our first international centre, in South Africa! We consider this the first step in a wider international expansion by SIWI. But first, see you at the Week, where this year we will focus on energy and water.

Torngy Holmgren  
Executive Director  
Stockholm International Water Institute  
Twitter: @TorngyHolmgren



## STOCKHOLM WATERFRONT

Stockholm WaterFront is a quarterly magazine that aims to inform the global water debate and be a source of knowledge and inspiration for professionals worldwide with an interest in water issues. Stockholm Water Front mixes popular science articles with news reporting and carries analyses by some of the world's most knowledgeable water writers. It is published in print and digitally by Stockholm International Water Institute, and is free of charge.

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## FEATURED CONTRIBUTOR

Flavia Rocha Loures is an independent consultant on water governance, and a PhD candidate at Xiamen University (China).

Previously, she led the global initiative on the UN Watercourses Convention at WWF, on which she comments in this issue.

"Working on the UNWC's ratification was both a challenge and a delight. Often it seemed like an impossible task; then I'd cross paths with the visionary people that inspired me to keep going. Now I'm embarking upon a new adventure, but the UNWC remains in all of those capable hands, for entry into force – albeit a milestone – is but a new beginning."



# BRIEFING

## SIWI TO HOST INTERNATIONAL CENTRE FOR WATER COOPERATION



Photo: iStock

Under the auspices of UNESCO, and supported by the Swedish Government, SIWI will host the new International Centre for Water Cooperation, an independent research institution. The centre will focus on transboundary water management in connection with peace, conflict and regional development. The centre's academic partners are the University of Gothenburg and Uppsala University.

Read more | [www.siwi.org/programmes/international-centre-for-water-cooperation](http://www.siwi.org/programmes/international-centre-for-water-cooperation)

## FIVE SELECTED FOR SIWI JOURNALIST GRANT

Five journalists from as many countries have been awarded the World Water Week Journalist Grant, and will travel to Stockholm to report on the world's most important annual water meeting. The grant winners are Ugochi Anyaka from Nigeria, Shiba Nanda Basu from India, Doreen Chilumbu from Zambia, Amantha Perera from Sri Lanka and Martin Ssebuyira from Uganda.

Read more | [www.siwi.org/media/world-water-week-journalist-grant](http://www.siwi.org/media/world-water-week-journalist-grant)



## SIWI CO-PUBLISHES GENDER AND VIOLENCE TOOLKIT

A Violence, Gender and WaSH Practitioner's Toolkit has been developed on behalf of WaterAid for organisations and governments that provide access to essential WaSH services, to help better identify and acknowledge risks and contribute to their reduction in practical ways. The development of the toolkit was led by the SHARE Research Consortium – funded by the UK Department for International Development (DFID).

Read more | [www.siwi.org/news/siwi-co-publishes-gender-and-violence-toolkit](http://www.siwi.org/news/siwi-co-publishes-gender-and-violence-toolkit)

## SAFE WATER TO POOR CITY DWELLERS IN KENYA

An estimated 56,000 of Nairobi's poorest residents will benefit from a programme initiated by four partner organisations. Co-funded by Borealis, Borouge and OFID, with implementation and project management by WSUP, the programme will deliver a safe and reliable water service costing a tenth of what residents currently pay to private water vendors.

Read more | [www.borealisgroup.com](http://www.borealisgroup.com)

## WORLD BANK RAISED ENERGY AND WATER FUNDING

World Bank has increased investment in roads, bridges, energy, clean water, and other critical infrastructure projects by 45 percent, to USD 24.2 billion in 2014. The jump in financing was due to increased demand from developing countries. These types of investments, including through public-private partnerships, are considered critical in reducing poverty. Earlier this year, the World Bank embarked on implementing its Thirsty Energy Initiative. They are one of the key collaborating partners to 2014 World Water Week in Stockholm.

Read more | [www.worldbank.org](http://www.worldbank.org)



Photo: Sanna Gustafsson, SIWI

## SIWI IN NEW OFFICES

Earlier this year, SIWI moved to new offices in the Östermalm area of Stockholm, just east of the city centre. On May 22, partners and friends of SIWI were invited to a house-warming party that included a performance by the SIWI Choir. "SIWI is a central actor in the global work for smart water management. We are proud that Stockholm, the city on water, is the Institute's base, and look forward to following SIWI's crucial efforts in the years to come", said Mr. Sten Nordin, Mayor of Stockholm.

# 0.007%

The part of all water on earth that is accessible for direct human uses. This is the water in lakes, rivers, reservoirs and underground shallow enough to be tapped at an affordable cost. Only this amount is regularly renewed by rain and snowfall, and is therefore available on a sustainable basis.

Source: Global Change, University of Michigan



# SIWI: BIGGER THAN STOCKHOLM

**WITH BOOMING POPULATIONS, RAPID URBANISATION AND GROWING ECONOMIES, THERE IS A PRESSURE ON AFRICA'S WATER RESOURCES LIKE NEVER BEFORE. TO SUPPORT GOVERNMENTS AND POLICY MAKERS IN WATER MANAGEMENT, SIWI HAS OPENED A REGIONAL CENTRE FOR AFRICA.**

Populations grow, and more food is needed to sustain them. Cities grow, and become huge water consumers. When water is not available in the immediate area, it has to be drawn over long distances, often across transboundary basins, which in turn has political implications.

The African continent has the largest percentage of transboundary basins in the world.



**Anton Earle,  
SIWI**

"The only way to manage all these demands is effective water management, and SIWI is and will be at the forefront of these efforts," says Anton Earle, director of SIWI's newly opened Africa Regional Centre.

The centre, based in Pretoria in South Africa, is the Institute's first international office.

Anton Earle explains that Africa was a natural first place to permanently establish SIWI internationally. "Over half of SIWI's international programmes are African or have African components in them. We had a continental spread already."

Earle, a South African native, argues that "we need a water understanding beyond water. We need to see the water dimension of regional development", and says that having a permanent base in the region will offer better insight into the social and human aspects of water resources, an advantage when supporting governments and policy makers in the region.

The work at the centre will focus on further developing programmes and projects with regional partners in government, civil society and the private sector. There will also be emphasis on sharing experiences from Africa in managing water challenges with other developing nations, such as the BRIICS (Brazil, Russia, India, Indonesia and China in addition to South Africa) countries.

Anton Earle hopes African governments and policy makers will see SIWI as a trusted support.

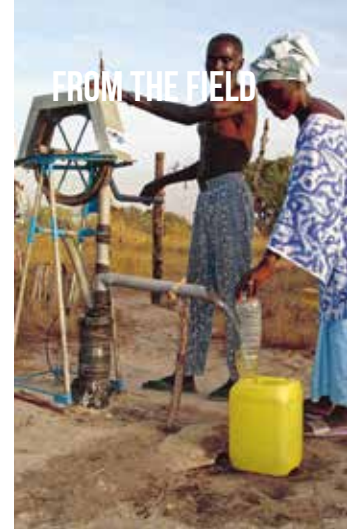
"We want them to see us as a part of a solution in delivering on their mandates in water and environments".

Read more | [www.siwi.org/knowledge-services/africa-regional-centre](http://www.siwi.org/knowledge-services/africa-regional-centre)



## SIWI'S AFRICAN PARTNERSHIPS

- Department of Water Affairs in Botswana's Ministry of Minerals, Energy and Water Resources
- NamWater, Namibia
- Rand Water, South Africa
- EU Water Initiative Africa Working Group and AMCOW
- Waternet
- Economic Community of West African States (ECOWAS)
- Southern Africa Development Community (SADC)
- Laker Victoria Basin Commission (LVBC)
- Orange-Senqu River Basin Commission
- International Water Management Institute (IWMI)
- Global Water Partnership – various regions in Africa



# WATER INTEGRITY: A JOB FOR THE BRAVE

**TEXT** | SANNA GUSTAFSSON **PHOTO** | SANNA GUSTAFSSON, RICARDO SPENCER, WIN, USAID AND HÅKAN TROPP

**LACK OF INTEGRITY IN WATER MANAGEMENT MEANS HUGE COSTS FOR SOCIETY, IN LOST LIVES AND STALLED DEVELOPMENT. BUT WHERE CORRUPTION IS ENTRENCHED, PROMOTING FAIR PRACTICES CAN BE MET WITH STRONG RESISTANCE. STOCKHOLM WATERFRONT HAS MET TWO PEOPLE WITH FIRST-HAND EXPERIENCE.**

Sierra Leonean capital Freetown is home to about two million people, with less than half of the population receiving piped water. Guma Valley Water Company, the public water utility responsible for providing the city with clean drinking water, has struggled to perform the task successfully for a long time. The implications of the water shortage on the citizens of Freetown are huge and worsened in 2012 when Sierra Leone experienced its worst cholera outbreak in over 15 years.

That same year, the utility was struggling with its own economy.



with Maada during the first African Water Integrity Summit in Lusaka, where he was one of the case presenters.

He recounts dealing with institutionally entrenched corruption, and the frustration of trying to influence a culture that is so pervasive that employees and stakeholders do not even consider it unethical.

“Statements like ‘this is our time’ or ‘we may not have another opportunity’

“Ironically, the fortunes of some people in the company were thriving. Most of them were constructing homes and driv-

ing expensive vehicles,” describes Maada S.

Kpenge, one of the employees. Stockholm WaterFront caught up

were used to justify the behaviour.”

Maada likens going against a corruptive cabal to fighting for your life. “The hunter of corruption can easily become the hunted in such settings, having to endure smear campaigns against themselves and their families.” The risk associated with being a water integrity ambassador is something Zimbabwean Andrew Dadirai knows all too well. He works



for ZiFEDA, a civil society organisation lobbying for ethical conduct in Chitungwiza, a town where rapid urbanisation

has given rise to illegal settlements stressing water resources. Its residents have suffered some of the worst water related woes of the country.

He describes that even though he has first-hand experience of the town’s water challenges, he initially did not feel comfortable with sharing ●●●



... them during the summit. This uncertainty was felt by many of his fellow case presenters. “We shared a common concern, a fear of backlash. The problem was not in finding cases of corruption in our countries’ water sectors. Rather, we were not sure about our security as ambassadors.”

“Corruption in the water sector in Chitungwiza has its roots in the political background of the country. Many people who end up in government lack basic governing skills and use intimidation to cover for their lack of integrity,” says Andrew.

He explains how residents are both perpetrators and victims of corruption. “Many actors are indirect beneficiaries

of corruption and do not want to participate in anti-graft efforts in fear of exposure,” says Andrew. Most affected are women and girls who spend their most productive time in long queues waiting to fetch drinking water.

Andrew believes that a meaningful dialogue between the stakeholders, service providers and consumers around the issues of service delivery is imperative for change to be possible.

*“Statements like ‘this is our time’ were used to justify the behaviour”*

Evidently, promoting water integrity is not an easy task to take on. This was emphasised over and over during the summit. Bekithemba Gumbo, Director of Cap-Net UNDP, one of the organisers, stated: “As you might imagine, dealing with corruption is for the brave hearted. The ambassadors need support in the form of resources, new knowledge, and best practices.”

Luckily, there are silver linings to both Maada’s and Andrew’s stories. In the case of Guma Valley Water Company in Freetown, employees got tired of the destructive culture and initiated an internal change management campaign against corruption. Structural changes had to be made. Putting in place a robust and transparent information system was a key to better monitor all the company’s activities. Two years on, the company is generating a lot more revenue than before, development partners are showing greater interest, and employees are revitalised by seeing the positive effects of minimised corruption. Maada however stresses that there is no quick fix to changing a pervasive culture. “Integrity is an on-going battle, so you need to be patient.” He highlights the imperative role of change agents. “You have to live by example; people watch what you do, not what you say. It is the ambassadors that have a crucial role in orchestrating a turnaround.”

In Chitungwiza, the new town administration led by the Mayor

## WHAT IS WATER INTEGRITY?

Integrity in water means that stakeholders and institutions adhere to principles of transparency and accountability, and participation. The integrity challenge has many faces; concealed financial transactions, manipulation of information, discrimination in all forms, illegal water abstraction and biased processes.

Transparency International research shows that as much as 25 per cent of

all water investments – or about USD 50 billion – is lost to corruption every year.

SIWI initiated capacity building on water integrity in sub-Saharan Africa in 2011, and has now implemented similar programmes in Latin America as well as in the Middle East and North Africa.

More about our SIWI’s integrity work:  
[www.watergovernance.org/integrity](http://www.watergovernance.org/integrity)



and the Town Clerk have agreed for a team of water experts and ambassadors led by Andrew to train councillors and senior management in water integrity. The latest workshop was held in July, where participants agreed on a shared vision to improve water service delivery challenges and decided to adopt a public participatory framework for all stakeholders in Chitungwiza. ZiFEDA has involved many churches in major development projects, thereby becoming key stakeholders in the fight against corruption. The court and police of Chitungwiza have welcomed the water integrity ambassadors' work and committed to investigate corruption and punish perpetrators.

So which are the success factors in this story? Andrew underlines that water corruption is usually fed by corruption from other sectors, therefore a multi-stakeholder, participatory approach is important in the fight for integrity. "An ambassador needs to develop strong interpersonal skills to help establish meaningful dialogue between various actors and to engage the community. Integrity starts with us and the commitment we have made", he concludes.

The struggle of a water integrity worker can be a lonely one. Participants of the summit therefore applauded initiatives bringing them together across city and country boundaries. Sharing cases proved a welcome boost for their work.

Two new friends were Asha Wamuthoni Abdulrahman from Kenya and Lazare Nzeyimana from Burundi. They had both been inspired by a particular rainwater harvesting case from Burkina Faso and were eager to go back to their respective countries and lobby for the method.

Asha described how her perspective has changed by engaging with other water integrity ambassadors. "I think this initiative has really born fruit. I'm not only thinking in terms of me and my village any more, but looking at the continent as a whole."

Both were convinced that many drawbacks of corruption can be avoided by transferring information and knowledge across borders. Said Lazare: "I can feel that there is a strong commitment growing here: to jointly fight water corruption, to mobilise our water integrity efforts and to grow by sharing best, and worst, practices." ●



## THE WATER INTEGRITY SUMMIT

The Water Integrity Summit in Lusaka, April 29-30, 2014, organised by SIWI and partners, brought together 90 experts and stakeholders from 22 African countries. The summit highlighted water integrity cases from across Africa that produced apparent benefits on the ground. The participants called for political leaders to commit to water integrity as an instrument that has already proven its weight in practice.

The Lusaka Statement, the main output of the summit, was discussed further at the Africa Water Week and at AMCOW's 9th General Assembly, both held in May 2014. AMCOW has called for water integrity to be included in all their future events, the 7th World Water Forum, as well as in the consultations on the Post-2015 development agenda.

Read the full Lusaka Statement:  
[www.watergovernance.org/integrity/summit](http://www.watergovernance.org/integrity/summit)

*"You have to live by example; people watch what you do, not what you say"*



## WATER IN SUB-SAHARAN AFRICA

**344** million people in Africa rely on improved water sources

**300** More than 300 of the 800 million people in sub-Saharan Africa live in water-scarce environments

**115** people die every hour from diseases linked to poor sanitation, poor hygiene and contaminated water

## INFLUENCING THE POST-2015 DEVELOPMENT AGENDA:

IT AIN'T OVER TILL THE  
FAT LADY SINGS

TEXT | KARIN LEXÉN PHOTO | PETER TVÄRBERG AND ISTOCK

**2015 WILL PUT US ALL TO THE TEST. WILL THE DECISION-MAKERS OF THE WORLD DARE TO SET SHORT-SIGHTED INTERESTS ASIDE AND COMMIT TO GOALS THAT ARE NECESSARY FOR A SUSTAINABLE FUTURE?**



Karin Lexén,  
SIWI

progress has been made in reducing poverty and hunger and in providing the world's population with safe water, adequate sanitation and sustainable energy. But – and here are some uncomfortable facts we must face – 1.3 billion people still lack access to electricity, almost 2 billion people don't have access to safe water and over 800 million people are undernourished. Our economies are still largely unsustainable, trespassing planetary boundaries and causing risky climatic change. We are also still acting in silos – the lack of coherence between water and energy policy, planning and implementation being a prime example.

Additional action is needed – and is taken – on all levels and in all sectors. Many of these concrete efforts are local and individual, however in a globalised world we also need global agreements and collaborations. 2015 will put the world to the test. Is there enough political will to commit to and act upon goals and targets that are necessary to achieve sustainable development? Is there enough commitment among us all – as individuals, scientists, civil society organisations and the public and private sectors, to leave short-sighted interest behind and take bold decisions that will contribute to the common good?

2015 is a big year for several reasons. The UN General Assembly (UNGA) is supposed to agree on a set of Sustainable Development Goals to steer the future development agenda.

Since the first UN Conference on Human Environment in Stockholm in 1972, considerable

A new global climate deal is anticipated to be agreed on at the 21st Conference of the Parties to the UN Convention on Climate Change (COP 21) in Paris. Another important and related meeting is the 3rd World Conference on Disaster that is planned to take place in Sendai, Japan, in March.

Water is a key factor for the success of each of these processes. As stated in the outcome document of the Rio+20 conference; “The future we want”; “Water is at the core of sustainable development”. In addition, the clearest impact of climate change on people and the environment manifests in water. And sustainable water use is a prerequisite for building resilience and developing climate friendly energy solutions.

Actors from the water community have engaged in advocating for a dedicated Sustainable Development Goal (SDG) on water and for water

*“The two processes need to be coherently addressed. This is agreed on in principle, but in practice it proves difficult”*

to be integrated and addressed in the new climate agreement.

It is evident that the two processes are closely related and need to be coherently addressed. This is agreed on in principle, but in practice it proves difficult to coordinate different ministries and sectors in national capitals to provide coherence in UN negotiations.

It is also important that we, as a water community, are ready to use a broad and inclusive approach, and put water in a wider perspective. A water goal is not an end in itself but a necessary



tool for human security and healthy ecosystems. We must be careful not to appear as just another self-interested sector, but as a community that strives for sustainability. We offer our knowledge and skills to help solve the challenges of our time. Such an attitude has proven to be much appreciated in the UNFCCC negotiations and in the dialogue between water experts and negotiators, where SIWI has taken active part.

The UN General Assembly will meet again in September 2014 in New York to start negotiations on a new set of development goals, building on the report of the Open Working Group on SDGs. At this point a broadly defined and comprehensive water goal is part of the recommendations. The suggested targets cover a wide spectrum of important water dimensions, including universal access to safe and affordable drinking water and adequate sanitation and hygiene for all, water use efficiency, reducing pollution and the necessity to restore ecosystems. There are, however, few links in the OWG report to water in other suggested goals and therefore, without a real effort to integrate the different goal areas, there is a great risk for a silo approach in the implementation.

The OWG report is just one step towards the final agreement by the UNGA in 2015. Building on the OWG report and the report of the Financial Expert Group, another outcome of the Rio+20 agreement, the UN Secretary General will put forward a synthesis report to UNGA in November 2014. Negotiations between member states will begin early in 2015.

When it comes to the negotiations under the Climate Convention, water was never very prominent in the programmes and mechanisms of the Convention, nor did it have a programme of its own. This is remarkable, given the importance good water resource management has for building resilience and for adapting to climate change, in addition to securing climate friendly energy and carbon storage in plants and soil. However, in recent years, due to active engagement of water experts in the negotiations, the attention to the vital role of water management in dealing with climate change has increased. There is still a long way to go before the global water and climate agendas are well integrated.

Even if there currently is a water SDG on the table, nothing is secured until the negotiations are concluded, when UNGA meets for its annual high level segment in September 2015. In the complex and highly politically sensitive climate negotiations, water is hardly the most prominent issue at hand.

Therefore, the coming months must see a mobilisation across the water community in order to achieve satisfactory results in 2015. With a coherent and strong voice, we need to promote the following:

- A dedicated, broad and comprehensive Sustainable Development Goal on water will provide a unique opportunity to address an array of current and future development challenges in a holistic and sustainable way.



The adoption of a dedicated water SDG will avoid fragmented and incoherent solutions for reducing competition between water users.

- Water needs to be addressed and integrated into other SDGs, such as energy and food security, climate change and health, and these areas must be integrated in a water SDG. There is an urgent need for reciprocity.
- Water is the primary medium through which climate change impacts will be felt by humans and the environment and water is critical for climate change mitigation, as many efforts to reduce carbon emissions rely on water availability for their long-term success. Therefore water must feature prominently in a climate deal.
- Climate change, sustainable development and poverty eradication are interlinked and water is key in addressing and solving these challenges. The Post-2015 development agenda and the negotiations under the Climate Convention must be carried out in a coherent manner, even if specialised in different arenas.

It is only with a determined and united voice from the water community that we can secure a central role for water management in the agreements that will steer our future. And remember, it ain't over till the fat lady sings. ●

## ABOUT THE AUTHOR

Ms. Karin Lexén manages the organisation of World Water Week in Stockholm and the Stockholm Water Prizes as well as SIWI's engagement in global policy processes, such as the Post-2015 Development Agenda and the global climate negotiations. Over the last 25 years she has worked in research, management and policy development on environmental and development issues.

# CARP AND COLLABORATION

TEXT | JEFF OPPERMAN AND QIAOYU GUO, THE NATURE CONSERVANCY PHOTO | RICHARD WETHERELL, SXC

**IN RESPONSE TO THE WORLD'S URGENT DEVELOPMENT NEEDS, DAMS WILL CONTINUE TO BE BUILT. ENVIRONMENTALISTS NEED A BROADER VOCABULARY TO DEAL WITH DAMS THAN JUST THE WORD "NO", ARGUES THE NATURE CONSERVANCY.**



Last June, operators of Three Gorges – the world's largest and certainly one of its most controversial dams – began to steadily increase the amount of water flowing through the giant structure. They were not responding to a spike in energy demand or the need to evacuate flood storage but, rather, something a bit more organic: the reproductive biology of carp that swim in the Yangtze River downstream.

Carp occupy an exalted position in the culture and cuisine of China and, doing the Three Tenors one better, the species of black, grass, bighead and silver carp are collectively known as the “four famous carps.” These fish typically spawn when the Yangtze is rising during the annual spring flood, a synchronicity that evolved to allow juvenile carp to rear in vast and productive inundated fields and wetlands that become accessible during the flood. Already affected by pollution and overfishing, carp populations declined steeply following construction of Three Gorges Dam, in large part because the structure's enormous reservoir captured and muted the reproductively vital annual flood pulse. A fish-monitoring station below Three Gorges reported a drop in juvenile carp from 2.5 billion before construction to less than 400 million after.

The June release of high flows was intended to mimic the Yangtze's flood pulse that promotes carp spawning and marked the fourth straight year that dam operators implemented an environmental flow. This flow restoration programme arose through the collaborative efforts of the Three Gorges Corporation, the Yangtze River Water Resources Commission, the Yangtze Fishery Management Committee, The Nature Conservancy, and WWF.

Initial data support the hypothesis that higher-flow releases in June will increase production of eggs and juvenile carp in the Yangtze.

The biological significance of these flows will take some time to understand, and the Conservancy

will continue to work with Three Gorges to use monitoring data to inform and adaptively manage the environmental flow programme. But the flows are significant on another level because they also provide preliminary support for another hypothesis: that direct engagement with hydropower companies can yield positive environmental results.

Dams have often caused significant negative impacts to environmental and social values and, for that reason, environmentalists have generally opposed dams – particularly large dams. But confronted with a complicated world of urgent development needs and the sheer pace and scope of dam construction, The Nature Conservancy believes environmentalists need a broader vocabulary to deal with dams than just the word “no.” While “no” will continue to be an appropriate response for dams whose negative impacts clearly outweigh their benefits, the Conservancy's organisational DNA leads us to occupy a complementary niche, one characterised by conversation and collaboration. Working directly with dam developers and operators such as the US Army Corps of Engineers, Three Gorges Corporation, and Mexico's Federal Commission for Electricity, we are developing a set of tools and solutions for more sustainable planning and operation of dams. The landscape of dam development is changing rapidly. For example, Chinese developers and/or funders are now involved in the construction of more than half of all large dams worldwide. To be relevant at the global scale, those building a road toward sustainable hydropower clearly must include entrance ramps for the Chinese hydropower sector.

Progress may not always be obvious and, like increases in Yangtze carp, may take years to emerge. Further, collaboration toward specific outcomes does not mean that we will always agree with our partners; ultimately we do have different missions that drive us. But we and other NGOs aspire to impact the global trajectory of hydropower development. And that will require constructive engagement with those whose decisions and actions define that trajectory. ●

# OUTSIDE THE BOX

## HOW ONE ORGANISATION REALISED THE HUMAN RIGHT TO WATER

INTERVIEWED BY | VICTORIA ENGSTRAND-NEACSU PHOTO | ETHEKWINI

**ETHEKWINI WATER AND SANITATION, WINNER OF THE 2014 STOCKHOLM INDUSTRY WATER AWARD, HAS BROUGHT CLEAN PIPED DRINKING WATER TO MILLIONS. BUT THE WORK IS NOT FINISHED. DISCRIMINATION MUST BE REMOVED BETWEEN RICH AND POOR IN SANITATION SERVICES.**

When South Africa enshrined the human right to clean water in its post-apartheid constitution, the country's municipalities were tasked with living up to those words. eThekweni Water and Sanitation, serving the Durban metropolitan area, won the 2014 Stockholm Industry Water Award in part because it has managed to bring the human right to clean water from theory to practice. Stockholm WaterFront caught up with Neil Macleod and asked what the greatest challenges have been for eThekweni Water and Sanitation.

"With the creation of new public sector structures and municipalities in 1996 and a large expansion of our area of operation in 2000, we faced the task of providing affordable water and sanitation services to about one million people who did not have access to piped water or a proper toilet at that time. All of these families were poor, so conventional service provision options were not sustainable and new service level options had to be introduced.

In expanding the coverage to areas without services we attracted large numbers of families into our area of operation and as a result, we have had to meet the demand for the provision of these services to more than 1,3 million people. The continued inward migration of families makes this a never-ending task."

### ***What achievement are you most proud of?***

Since 2000, we have connected 1,3 million people to piped water and provided 700 000 people with access to toilets that provide safe disposal of human excrement.

This has been done using solutions such as electronic bailiff units (EBU's), more than 400 community ablution blocks in shack areas and more than 80,000 urine diverting toilets in rural areas.

We provide these services to poor families using a rights based approach; access to the basic service is provided at no cost to poor families, but higher levels of service and consumption, in excess of the basic amount necessary to sustain life, are charged on a full cost recovery basis. As a result, our revenue collection for both water and sanitation services exceeds 98 per cent.

### ***What is the next step for eThekweni Water and Sanitation?***

We are able to provide safe piped water to all our customers, but we still have differentiated sanitation levels of



**NEIL MACLEOD**  
eThekweni

Neil Macleod will speak at the Founders Business Seminar during World Water Week in Stockholm on Tuesday, September 2, at 14:00. For those unable to attend, the seminar will be live streamed on [www.siwi.org/video](http://www.siwi.org/video)

*"Continued inward migration of families makes this a never-ending task"*

service between low and high income communities.

To improve our ability to process faecal sludge into safe plant fertilizer and recover the energy in human waste and at the same time reduce our per capita water consumption, we believe it will be necessary to use dry or virtually dry toilet solutions that replace the flushing toilet in high income communities and the pit toilet in low income communities. This will enable us to remove any discrimination between rich and poor when it comes to the toilet and make it possible for all toilets to be installed inside houses and so make the toilet safe for women and children to use at night. ●



# A BIG DAY FOR GLOBAL WATER COOPERATION

TEXT | ANNA FORSLUND PHOTO | CWLPS

**THIS AUGUST, THE UN WATERCOURSES CONVENTION COMES INTO FORCE. A POTENTIALLY EXCELLENT TOOL FOR COOPERATION BETWEEN STATES, ITS RELEVANCE AND SUCCESS WILL DEPEND ON HOW THE PARTIES CHOOSE TO USE IT.**

On May 19, 2014, Vietnam became the 35th contracting state to the Convention on the Law of the Non-Navigational Uses of International Watercourses, also known as the UN Watercourses Convention (UNWC).

This keystone global legal instrument, developed and adopted over 15 years ago, entered into force as the minimum number of countries had joined the Convention. It is a historical and important

step for the improved governance of internationally shared water resources.

Around 60 per cent of the world's international river basins today lack any type

of cooperative management framework. And many of the existing agreements fail on important issues such as environmental protection or equitable use of the shared resources and therefore provide a weak mechanism for the sustainable management of shared water resources. The Convention was adopted by the UN General Assembly in 1997 with an overwhelming majority of States and is a global overarching framework governing

the rights and duties of states sharing freshwater systems. However it has not been in force until now.

With almost 276 transboundary river basins globally crossing the borders of 148 states, the Convention provides an important framework for the sustainable and equitable use of these rivers. It also provides an important measure to promote collaboration between states to jointly find solutions for better water management.

Stockholm WaterFront asked two experts in water law to comment on the UN Watercourses Convention. ●

**FLAVIA ROCHA LOURES** INTERNATIONAL WATER LAW & POLICY EXPERT



***What does the UN Watercourses Convention mean for the world?***

International water law is a key tool for facilitating collaboration/dialogue between riparian states. Yet, significant weaknesses, fragmentation and unhelpful overlapping still taint the legal governance of transboundary waters. In essence, we are a long way from having

all transboundary basins fully covered by adequate, coherent agreements. So how can we enhance the ability of international law to promote the sustainable management of international freshwaters?

This is where global and regional framework conventions come into play. They operate as integral components of the legal governance of shared freshwaters, laying out basic standards that ensure some coherence across the entire international legal system, while supplementing and reinforcing basin-specific agreements. In this context, the UNWC offers a clear, stable global framework for cooperation and is thus a crucial element of the multi-level legal governance of transboundary waters.

The UNWC's entry into force represents a milestone in the successful

codification and progressive development of customary law, as called for in its Preamble. Its Parties now have at their disposal a commonly agreed legal basis that is binding upon them all, has political and some legal persuasive force on non-parties, and which sediments the relevant norms and the direction in which such norms are evolving.

Practically speaking, the UNWC is likely to receive much greater political attention once in force – a welcome development towards better levels of awareness and knowledge thereof. Entry into force should also contribute to accelerating the ratification process.

So what does the UNWC mean for the world? The Convention provides for legal and thus political stability, which then contributes to enhanced cooperation. The Convention does so

***What does the UN Watercourses Convention mean for the world?***

For many international watercourses either no governance arrangements are in place, existing agreements are inadequate, or not all states within the basin are parties to existing agreements. Without such arrangements, it will be difficult if not impossible, for watercourse states to cope cooperatively with existing and future threats from human pressure and environmental change. The UN Watercourses Convention, together with the UNECE Water Convention, offers a catalyst by which to supplement the existing treaty architecture at a regional and basin level and foster the equitable and sustainable sharing of these waters.

***Would you like to highlight any aspect of it?***

Much of the Watercourses Convention reflects what is customary in international law and therefore already binding upon states. However, widespread support by states provides a strong signal that they are committed to

transboundary water cooperation. Building upon the momentum of entry into force will therefore be important, and hopefully more states will join in the near future!

Having in place arrangements that support the further promotion and implementation of the UN Watercourses Convention, in coordination with the UNECE Water Convention, will be critical.

***Will any particular region or people benefit specifically from the Convention entering into force? Why?***

The UN Watercourses Convention was negotiated and adopted by UN Member States within the General Assembly. It is a global instrument that seeks to incorporate the interests of a wide and diverse range of states. Entry into force should therefore benefit all states across the world that believe in the equitable and sustainable management of international watercourses. Having said that, the Convention is likely to be of most benefit to the states that are already party to it. The existing 35 now have an opportunity to shape the future



direction of the Convention, and decide upon what measures might be put in place to support its further promotion and implementation. Joining the Convention sooner rather than later may therefore be of benefit!

In terms of people, one shortcoming of the Convention is that its text is very 'state-centric'. This is symptomatic of the period in which the text of the convention was drafted. However, its effective implementation will still require meaningful engagement with a range of non-state actors. For instance, while not explicitly stated, the obligation upon states to 'take all appropriate measures' to prevent significant harm (Article 7) will undoubtedly require consultation with users that may be affected by a potentially harm causing activity.

by ensuring greater clarity of what the relevant norms are; and because rising ratification levels mean an increasingly broad-based support for the validity of such norms and their progressive development.

***Would you like to highlight any aspect of it?***

With entry into force, let's highlight the question of implementation, and the unique, urgent window of opportunity to plan and debate. Bearing in mind that the UNWC lacks provisions on governing bodies (e.g., meeting of parties; secretariat) and the adoption of amendments/protocols, three messages merit attention:

- Integrating the UNWC into the broader 'transboundary water management' architecture: This means, e.g., formally incorporating the UNWC into the programmatic strategy of existing institutions already working in this area at various levels, with the necessary funds set aside and internal capacities developed accordingly.
- Implementing the UNWC/UNECE Water Convention in a coordinated, mutually supportive manner: UNWC parties should build on guidance developed under the latter; as well as take into account the experience of the parties to that Convention with their governance framework when deciding whether to revisit the UNWC's original design in this respect.
- Establishing some "light" informal institutional structure for support/coordination: Experience with the ratification process indicates that the lack of an 'institutional home' for the UNWC might pose a challenge to its effectiveness. Such an informal structure could be as simple as identifying an institutional entry point for UNWC-related matters (e.g., periodical meetings; inter-sessional informal arrangements). Parties should also track/engage with relevant stakeholder-led initiatives; as well as tap on the legacy of the UNWC Global Initiative. If UNWC parties so desired, informal arrangements could eventually evolve into a formal, fully developed governance structure.

# *“The fear of doing the wrong thing must not be paralysing”*

TEXT | ERIK BRANDSMA PHOTO SWEDISH ENERGY AGENCY



Water and energy have much in common. They both represent development and growth. With access to clean water and clean energy, you have the fundamentals to build a life, make an income, and improve your quality of life. By keeping water and energy clean, the same opportunities can be passed along to the next generation.

We know that water and energy are key to solving many of the challenges facing the world today, e.g. poverty and the challenges that come with climate change. We also know that Earth has all the water and energy necessary to meet our needs, but that the lack of these is most often a result of limitations in access, distribution and quality.

Water and energy are interdependent in many cases. Water is used to transport, store, cool, grow

(bioenergy), or extract energy. And energy is needed to transport, purify and desalinate water. Lately, I have seen a stronger focus on the broader perspective in governance. The water–energy nexus issue is becoming increasingly relevant, and even more urgent. We need to take some steps right now, and we need to take those steps across borders and work together in the different sectors.

Thus, I can conclude that water and energy are the foundations for sustainable development. Energy is no longer an issue only for engineers, but an important issue for the whole society. This also applies for Sweden where we need new perspectives. It is almost like a perfect storm building up. Both water and energy are in a transition phase. I see two interesting drivers behind the current development, besides climate change.

- There are some real game changers coming up in cleantech, e.g. new battery technology, new business models and big data.
- With a growing middle class one can see higher demands on sustainability and quality of life. Citizens want to breathe clean air, eat healthy food and use clean energy. In China, families are moving away from the big cities to give their children an opportunity to grow up in an environment with blue skies and fresh air.

To attract and also keep the middle class families, cities have to invest in sustainability and quality of life. This will become a factor of competition for cities, municipalities and different regions. It is a matter of branding.

As in many other cases, this is also a development driven by leadership – both in the public sector and in business. Today’s leaders must give the directions, set goals and create a framework that enables sustainable development. The fear of doing the wrong thing must not be paralysing. We need an active leadership and full commitment from all parts of society. ●

**Erik Brandsma is the Director General of the Swedish Energy Agency.**



# CALENDAR

**SEPTEMBER 15-19**

## **37th WEDC International Conference**

At this year's event, 'Sustainable Water and Sanitation for All in a Fast Changing World', WaterAid will host a one day Capacity Development event on Violence, Gender and WASH. Participants will receive a copy of the Gender and Violence Toolkit co published with SIWI and other actors. Venue: National University for Civil Engineering, Hanoi, Viet Nam. [www.wedcconference.co.uk](http://www.wedcconference.co.uk)

**SEPTEMBER 16-OCTOBER 1**

## **69th Session of the UN General Assembly (UNGA 69)**

UNGA 69 will convene at UN Headquarters on Tuesday, September 16, 2014. The General Debate will open on Wednesday, 24 September 2014. Venue: UN Headquarters, New York City, US. [www.un.org/ga](http://www.un.org/ga)

## **Join the Guardian Global Development Professionals Network**

The Guardian Global Development Professionals Network offers commentary and insight from development experts across the world. Whatever your professional interest in global development, you'll find it an invaluable source of knowledge and contacts. <https://register.theguardian.com/global-development>

**SEPTEMBER 21-26**

## **IWA World Water Congress and Exhibition**

The event will offer opportunities to engage on several thematic tracks, including: cities, utilities and industries leading change; re-charting the course of water resources; enabling progress with good governance, sustainable finance and ICT; water quality, safety and human health; and water and wastewater processes and treatments. Venue: Lisbon, Portugal. [www.iwa2014lisbon.org](http://www.iwa2014lisbon.org)

**NOVEMBER 6**

## **World Water Summit**

The Economist hosts this inaugural one day conference exploring the fundamental issue of future of access to water for individuals, governments, companies and ecosystems. Venue: The Crystal, London, UK. [www.worldwater.economist.com](http://www.worldwater.economist.com)



## **AUGUST 31-SEPTEMBER 5 2014 WORLD WATER WEEK**

This year, you will be able to watch many of the seminars, award ceremonies and plenary sessions LIVE through the SIWI Video Hub.

All videos will also be available to view after the conference. [www.siwivideohub.com](http://www.siwivideohub.com)

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## 2014 STOCKHOLM WATER PRIZE: PROF. JOHN BRISCOE

A valid nominee for the Stockholm Water Prize should have made outstanding achievements of lasting significance in developed or developing countries. The work should have great potential or proven impact and provided stimulation for further important work. The Laureate should come from one of the following three categories:

1. Outreach and Awareness Raising
2. Policy and Practices
3. Research

**DEADLINE: SEPTEMBER 25, 2014**



## 2014 STOCKHOLM INDUSTRY WATER AWARD: ETHEKWINI WATER AND SANITATION

Both external and self-nominations are welcome. Nominations are evaluated by an international, independent jury of water professionals and scientists. They seek answers to several key questions: Has the achievements changed the business community's policies and practice in a positive way? Are the achievements innovative and effective? Are the policies, products or practices replicable in other parts of the world? How significant are the achievements for improved water management on local or regional scales? Have or will the achievements inspire other companies to improve their performance? Does the candidate have a strong record of social and environmental responsibility?

**DEADLINE: NOVEMBER 15, 2014**



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**THE STOCKHOLM INDUSTRY WATER AWARD** was established by the Stockholm International Water Institute (SIWI) in collaboration with the Royal Swedish Academy of Engineering Sciences (IVA) and the World Business Council for Sustainable Development (WBCSD). The Award is also supported by International Water Association (IWA).