As we kick on through the first quarter of 2014, IWRA has exciting news to share regarding its activities and publications.

IWRA President, Dogan Altinbilek and various board members have represented IWRA in various high profile events, including the International Water Summit in Abu Dhabi; the World Water Council meeting of the Board of Governors meeting and 2nd Stakeholders Meeting of the 7th World Water Forum in Gyeongju, Republic of Korea; and the Water in the Arab World Conference in Jordan. Prof. Altinbilek also convened a virtual IWRA Board Meeting in early February 2014, to plan and decide on important matters to guide the association through the year.

In the coming months, IWRA shall be present in many international events across multiple continents. I would like to draw your attention in particular to the 3rd Istanbul Water Forum which shall focus on the theme of Water Security and International Water Law. On the margins of this event, IWRA shall convene this year’s second meeting of the Executive Board members. IWRA shall also be organising side sessions on our projects regarding “the Science-Policy Interface” and “Which Water Quality for Which Use?”. The theme of this year’s World Water Day is Water and Energy. Held traditionally on 22 March, the day intends to focus particularly on addressing inequities and the ‘bottom billion’. It also aims to facilitate bridging across sectors to further energy security and sustainable water use in a green economy. This focus on the cross-sectoral nature of water as a global development vector has a strong link to the theme of IWRA’s very own World Water Congress: “Global Water, a resource for development” to be held from 25 to 29 May 2014 in Edinburgh, Scotland. International Scientific Committee member, Prof. Gareth Pender from Edinburgh’s Herriot Watt University discusses these topics on page 2 of this newsletter.

This edition of IWRA Update outlines the January issue of Water International. Keeping true to IWRA’s mantra of a multidisciplinary approach to water management, the newsletter also highlights some excellent publications by our members that cover water policy topics as diverse and varied as water planning and soil defence, policy in Jordan, post-conflict peace building, water security and water resource efficiency.

Now for some breaking news on IWRA publications, I am excited to announce the launch of IWRA’s first edition of a new series of IWRA Policy Briefings, entitled “Can water supply, sanitation and hygiene be a ‘preventive medicine?’” (page 5). Drawing upon content and partners of special issues of our journal, Water International, the policy briefings are the start of a new series of publications aimed at decision makers and policy professionals. I encourage you to look over this inaugural publication, disseminate it widely amongst your policy networks and help us improve it by getting back to us with feedback.

On a final but very important note, the XVth World Water Congress website has been launched (www.worldwatercongress.com), as well as the Call for Papers. IWRA’s members have a long and proud tradition of contributing strongly to the Congress’ success, I invite you to submit papers and join us next year in historic Edinburgh, city of festivals. Help us to make this XVth Congress our most successful ever!

Best wishes,
Tom Soo
Executive Director, IWRA
In celebration of World Water Day, on 22 March 2014, IWRA asked Prof. Gareth Pander to share some perspectives and background on this year’s theme: Water and Energy.

**The inextricable link between water and energy**

Consideration of the Energy-Water nexus is gathering momentum as nations begin to consider the impact of growing world population and a changing climate on energy and water demand. Use of these resources is inextricably linked; energy produced from fossil fuels accounts for almost ninety percent of global primary energy consumption\(^1\). Generating energy from this source requires vast quantities of water at every stage, including extraction, transportation and processing. Conversely, energy is fundamental to powering the water industry in the developed world enabling transportation, treatment and distribution of clean water to serve industries and communities.

It is estimated that globally 580 billion cubic meters of fresh water are used in the process of energy generation each year, equating to 15% of the world’s total water withdrawal\(^2\). Water in energy production is used at every stage, however its greatest use is in cooling processes as heat - a by-product of power generation - is conveyed off site by water. Demand for water by the energy sector alone is expected to rise by one-fifth by 2035, with the amount of water consumed predicted to increase by 85% as illustrated in Figure 1. In parallel, the demand for water for other uses is also increasing from multiple users and stakeholders. World Bank estimates suggest that by 2025, 2.4 billion people will be living in countries without enough water to meet all their needs.\(^3\) The consequences of rising demands and diminishing resources may lead to escalating consumer prices and conflicts based on which need is greater – the demand from the energy sector, or the demand for clean water for public consumption.

Furthermore, as the traditional raw materials for power stations, coal and oil become increasingly difficult and expensive to recover, and natural gas supplies are depleted, non-conventional fuel sources such as fracking, tar sands and oil shale may offer a more economically viable solution to energy security. As with all emerging technologies, costs associated with the recovery process can initially render the technology non-viable but these will decrease over time with investment in research and development, and as the industry grows and establishes itself in the market. However, the recovery process for unconventional fuels is highly water intensive and methods of extracting fuels from these sources rely on injecting large quantities of water, or in some cases, steam underground or for separating constituent materials from each other\(^4\). Extraction of these new sources of fuel may actually create further pressures on the demand for water, when in fact less resource is available. A distinct possibility is that that future energy projects may be constrained not by cost, but by water availability – a consideration that must be factored into our engineering projects, training and development, and companies should be prepared in invest in research and development of technologies for power generation under water-constrained conditions.

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**Figure 1:** Global water use (billions cubic metres) for energy production by fuel and power generation type (International Energy Agency, 2012).
While at a global level, we acknowledge that we must reduce our over-reliance on finite sources of fuel, the real question is how do we ‘fill the gap’ during the transition to more renewable sources of energy. With fossil fuels contributing such a large proportion to our energy mix, and many of our renewable technologies still in the early stages of development there is a very real and immediate need for reliable, sustainable technologies that can meet periods of high consumer demand. It is here that water resources can offer potential pathways to generating a more renewable-rich energy mix, and solutions to long-term energy security. Hydropower is the world’s largest source of renewable energy, accounting for 1/5th of global energy generation. According to the World Bank, hydropower has played a crucial role in the economic growth of countries such as Brazil, Canada, China, Norway, and the United States, and may be the key to enabling the development of other nations, whilst supporting sustainable growth. However, its requirement for large areas for water storage and flowing water, mean that suitable sites for hydropower development can be difficult to find. Indeed the Department for Environment and Climate Change (DECC), suggest this is one of the most prominent reasons that large-scale hydropower development in the UK is unlikely to be viable in the future. Additionally, large scale hydropower is not without impacts on the environment. While the Three Gorges Dam’s capacity to generate 22500 MW is a welcome boost to China’s overall generating capacity, there are significant concerns over its impact on the biodiversity of the region and the social impact from the relocation of 1.24 million people.

Emerging technologies such as tidal power and wave power that generate electricity from the action of ocean waves and tidal flows are being developed to tap into the potential of the world’s water resource. DECC estimate the UK currently has around 50% of Europe’s tidal energy resource and the potential to meet up to 20% of the UK’s current electricity demand. With commercial viability an industry based on wave and tidal power has the potential to contribute to future energy security, and promote economic growth, supplying to a global market predicted to be worth £50 billion by 2050.

In May 2015, and to support its Hydro Nation agenda, Scotland will host the XVth IWRA World Water Congress. Scotland is rich in water as a natural resource. The Scottish Government has recognised that this climatic attribute can be a major contributor to Scotland’s 2020 Route Map for Renewable Energy, a government initiative that sets a national target to meet 100% demand for electricity from renewable energy by 2020. The Route Map considers a wide range of renewables, that offer to contribute sustainable, low-carbon alternatives to the current fossil-fuel-heavy energy mix, including hydro power, off and on-shore wind, wave and tidal energy. In support of the initiative Scottish Water – Scotland’s publically owned water supply company - has embarked on an ambitious hydropower generating scheme that will use the flow in large water supply schemes to generate electricity. The project will reduce power cost to the organisation by 10%. I am looking forward to debating these and other issues at the Congress.

At this time of global change and uncertainty, what we can be sure of is that both water and energy will be in greater demand in future. It is only by ensuring the security and availability of both that we can ensure a safe, equitable and prosperous future for all.

References:
5. http://www.epa.gov/climatechange/ghgemissions/global.html#three
11. http://www.crew.ac.uk/funding/hydro-nation
LAUNCH OF IWRA/WATER INTERNATIONAL THEMATIC POLICY BRIEFINGS

IWRA has launched a new series of policy briefings. They aim to provide high quality analysis and practical recommendations for policy makers on important development issues. The inaugural edition is based on November’s 2013 Water International editorial by V.S. Saravanan and Daphne Gondhalekar, «Water supply and sanitation as preventive medicine: challenges in rapidly growing economies ». This material is accessible on the IWRA website.

http://www.iwra.org/doc/Pbrief%20March%202014%20low.pdf

NEW DATABASE TO DISSEMINATE SCIENTIFIC-TECHNICAL INFORMATION IN CENTRAL ASIA

The Scientific Information Center of the ICWC has developed a Knowledge Base that disseminates knowledge, industrial experience and science in the Central Asian region. This Knowledge Base is part of the CAWater-Info portal (www.cawater-info.net) and is designed for Russian speaking users. The Knowledge Base is designed for water professionals and associated sectors (agriculture, hydropower, nature conservation, climate change, etc.).


WATER SECURITY MSC - UEA SCHOOL OF INTERNATIONAL DEVELOPMENT

The UEA MSc Water Security and International Development provides specialist postgraduate education on water security science and policy in developing country contexts. Situated within the School of International Development, the degree is the flagship of the UEA Water Security Research Centre. The Water Security MSc prepares students for employment across a wide range of regions, topics and employers, including non-governmental organisations, government aid agencies, and multilateral organisations. The teaching is informed through work with organisations such as ICRG, Oxfam, WaterAid, ODI, DFID, SIWI, and strong links with the London Water Research Group and other UK universities.

More information is available at:
www.uea.ac.uk/study/postgraduate/taught-degree/detail/msc-water-security-and-international-development

You can apply online or contact Dr. Mark Zeitoun at: m.zeitoun@uea.ac.uk

COLORADO STATE UNIVERSITY INITIATES CENTER TO STUDY NUTRIENT POLLUTION

Colorado State University has initiated a Center to study sustainable solutions for reducing nutrient pollution, which is a global problem affecting lakes, estuaries, streams, and groundwater. Under a grant from the U.S. Environmental Protection Agency, the Center for Comprehensive, Optimal and Effective Abatement of Nutrients (CLEAN) has a mission to create knowledge, build capacity, and forge collaboration to develop and demonstrate sustainable solutions to reduce nutrient pollution. Key areas of research include: wastewater treatment technologies; water reuse systems; urban stormwater management; agricultural conservation; socioeconomic incentives; nutrient trading; and water rights.

NEW PROJECT OFFICER

IWRA is pleased to welcome Ms. Manoela Salgado as Project Officer at the IWRA Executive Office.

Manoela has a Masters in Business and Media Administration (Institut d’Etudes Politiques de Paris) and postgraduate studies in Water Management (AgroParis-Tech). She has worked in the water sector for more than six years including experience with leading private companies in China and public institutions in France.

To contact Manoela: salgado@iwra.org

NEW INTERN AT THE IWRA EXECUTIVE OFFICE

The IWRA Executive Office is happy to announce that Tom Peyre-Costa has joined the team as an intern until the end of July. Tom is a student at the University of Montpellier II. He already has a Master Degree in Environmental Sciences and will be graduating with a second Master Degree of Political Sciences this year. During his time in the office he will be working on the framework for a Global Compendium on Water Quality Guidelines for Different Uses. This project aims to contribute to ensuring water resources availability in accordance with different water uses and their associated water quality needs.

To contact Tom: office@iwra.org

NEW BOOK REVIEW EDITOR

Water International is happy to welcome its new Review Editor, Remy Kinna. Remy will be publishing book reviews in every issue.
LATEST ACTIVITIES

**International Water Summit**
**ABU DHABI, UNITED ARAB EMIRATES, 20-22 JANUARY 2014**

The International Water Summit is a global platform for promoting water sustainability in arid regions with the overall aim of accelerating the development of new and sustainable strategies and technologies. Held under the patronage of H.H. General Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, hosted by Masdar and organised by Reed Exhibitions. IWRA was represented at the summit by Executive Director Tom Soo. Tom was a moderator in the panel «Water Security and Future Water Sustainability» and a featured speaker in two panel discussions: «Environmental Guidelines for Sustainability» and «Improving Water Quality and Allocation to Ensure Effective Resource Management.»

More information at:
http://iwsabudhabi.com/Portal/about-iws/overview.aspx

**Board Meeting**
The first Executive Board meeting of 2014 was organized using the video conferencing system GoToMeeting. The meeting was held on February the 5th with many important points presented and discussed to orient the activities of the upcoming year.

**Water in the Arab World: Status, Challenges and Opportunities**
**AMMAN, JORDAN, 25-27 FEBRUARY 2014**

IWRA was represented in the conference «Water in the Arab World: Status, Challenges and Opportunities» by James Nickum, Vice-President of IWRA and Editor-in-Chief of Water International. The conference was organized by the University of Jordan and the Arab Universities Association in cooperation with the Ministry of Water and Irrigation. It was an opportunity for water experts and professionals from the Arab World and worldwide to convene and meet to discuss water related issues in the Arab world.

**2nd Stakeholders’ Consultation Meeting, 7th World Water Forum**
**GYEONGJU, REPUBLIC OF KOREA, 27-28 FEBRUARY 2014**

IWRA was represented in this event by its President Dogan Altinbilek, Past President Jun Xia, Directors Patrick Lavarde and Kun-Yeun Han and Executive Director Tom Soo. Participants had the opportunity to delve deeper into the Thematic Framework and its Action Goals and Action Tools. The meeting was also an occasion to develop Implementation Roadmaps for four processes: Thematic, Regional, Politic and Science and Technologies, which are essential tools on the implementation of a Global Action Agenda, to be adopted during the 7th World Water Forum in April 2015.

**Board of Governors Meeting, World Water Council**
**GYEONGJU, REPUBLIC OF KOREA, 27-28 FEBRUARY 2014**

The 51st World Water Council Board of Governors Meeting was held last month on the city of Gyeongju, Korea. Among other important issues dealt with by the Board of Governors, the city of Brasilia was elected by it to host the 8th World Water Forum.

**Meeting and New Book Highlights Water’s Role in Post-Conflict Peacebuilding**

On March 21, and in anticipation of World Water Day 2014, water professionals and researchers met to examine the ways that water management can improve post-conflict recovery and peacebuilding. Hosted by Carl Bruch, the IWRA Secretary-General, the meeting celebrated the launch of «Water and Post-Conflict Peacebuilding», edited by Erika Weinthal, Jessica Troell, and Mikiyasu Nakayama and published by Earthscan.

Follow IWRA on TWITTER & on FACEBOOK!
UPCOMING EVENTS

3rd Istanbul International Water Forum
ISTANBUL, TURKEY, 27-29TH MAY, 2014
The 3rd Istanbul International Water Forum will be held in May 2014, hosted by the Ministry of Forestry and Water Affairs of Turkey. The Forum will primarily focus on the subjects of water security and international water law. Moving from the United Nations Millennium Development Goals to Sustainable Development Goals, the 3rd Istanbul International Water Forum will concentrate on responses to the issues of global water security and discuss the tools and mechanisms to confront related risks and challenges. The above issues will be discussed in eight thematic sessions. Next to the thematic sessions, there will also be side events and a Water Expo, where various water organisations and firms will present their activities, services and products. The Forum will welcome water professionals, academics, scientists, governmental institutions, international organisations, NGOs and the private business sector. Participants will be able to share new and different views, approaches and experiences, network with other players within the water sector, establish collaborations with researchers, experts, government officials, business partners and gain knowledge about new technologies.
More information at: www.iusf.org.tr

CATEC 2014
10-12 APRIL, BAKU, AZERBAIJAN
The 2nd Caspian International Aqua Technologies Exhibition and Conference (CATEC), will take place in Baku, Azerbaijan from 10 to 12 April 2014. IWRA will hold a side session entitled «Water supply and quality: a constraint and opportunity for human development».

Singapore International Water Week 2014
1-5 JUNE SINGAPORE, REPUBLIC OF SINGAPORE
Marking its sixth year in 2014, Singapore International Water Week (SIWW) gathers global water leaders and practitioners from both public and private sectors to engage in discussion and debate, presenting valuable opportunities for participants to network and showcase leading-edge technologies and best practices. This occurs alongside the co-creation of innovative water solutions by identifying practical methodologies to address the world’s most pressing water issues.
More information at: www.siww.com.sg

22nd International Commission on Irrigation and Drainage (ICID) Congress and the 65th IEC Meeting:
14-20 SEPTEMBER, GWANGJU, REPUBLIC OF KOREA
The 22nd ICID Congress and the 65th IEC Meeting will address the theme Securing Water for Food and Rural Community under Climate Change and will be convened at the Kimdaejung Convention Center, Gwangju, Korea.
More information at: www.icid2014.org

Water Security for Policy Makers and Practitioners Short Course
19-23 MAY, INTERNATIONAL DEVELOPMENT UEA, UNIVERSITY OF EAST ANGLIA, NORWICH, UK.
There are still places available on this short course directed by Dr Naho Mirumachi and Dr Mark Zeitoun. The teaching team brings together key strengths in water politics, climate change, agricultural water management and water allocation. Participants will acquire an enviable understanding of this key global issue. The course is consistently highly rated by participants who typically work as policy makers for national governments, for environmental NGOs, in industry and academia. The fee is £1600 including all tuition and bed and breakfast accommodation.
More information at: https://www.uea.ac.uk/international-development/dev-co/professional-training/water-security-for-policy-makers-short-course-2014
UPCOMING EVENTS

International Conference on Data, Information and Knowledge for Water Governance in the Networked Society
9-11 JUNE, SEVILLE, SPAIN
In a context of change and transformation it becomes relevant to reflect upon how particular information and knowledge for natural resources management in general, and water resources in particular, is generated, reproduced and becomes predominant.
The International Conference aims to analyze the current debates and innovations regarding collaborative generation, processing and dissemination of data, information and knowledge. It will focus specifically on the concepts of poly-centricity and collaborative generation of information, quality control, sustainability of the information cycle, public participation, open data generation, and reuse of information. It will also analyze the socio-political implications of the new context.

Symposium on Glaciology in High-Mountain Asia
KATHMANDU, NEPAL, 2-6 MARCH 2015
The International Glaciological Society (IGS) will hold a symposium on 'Glaciology in high-mountain Asia' in Kathmandu, Nepal, between 02 – 06 March 2015, sponsored in part by the International Center for Integrated Mountain Development (ICIMOD). Papers presented at the symposium will focus on the geographical region which includes the Himalayan, Hindu Kush, Karakoram, Pamir, Tien Shan, and Tibetan Plateau mountains, collectively known as “the Third Pole”. Key topics include the hydrology of glacierized catchments, and past, present, and future glacier change. Participants are encouraged to submit manuscripts for publication in a related thematic issue of the Annals of Glaciology.

PUBLICATIONS
WATER INTERNATIONAL
VOLUME 39, ISSUE 1, JANUARY 2014

Articles
- Statistical analysis of Philippine water district characteristics and how these affect water tariffs.
Carlos Primo C. David, Peter Julian A. Cayton, Theresa E. Lorenzo & Eduardo C. Santos - PAGES 1-9
- Situating water in peacebuilding: revisiting the Middle East peace process.
Karin Aggestam & Anna Sundell-Eklund - PAGES 10-22
- Assessment of rural and highly seasonal tourist activity plus drought effects on reservoir operation in a semi-arid region of Greece using the WEAP model.
- Macro, meso, and micro-efficiencies and terminologies in water resources management: a look at urban and agricultural differences.
Naim Haie & Andrew A. Keller - PAGES 35-48
- Roman water law in rural Africa: the unfinished business of colonial dispossession.
Barbara van Koppen, Pieter van der Zaag, Emmanuel Manzungu & Barbara Tapela - PAGES 49-62
- The Cycles and Spirals of Justice in water-allocation decision making.
Marian J. Patrick - PAGES 63-80
- Including cultural water requirements in environmental flow assessment: an example from the upper Ganga River, India.
Chicu Lokgariwar, Ravi Chopra, Vladimir Smakhtin, Luna Bharati & Jay O’Keefe - PAGES 81-96
- From an open-access to a state-controlled resource: the case of groundwater in the Kathmandu Valley, Nepal.
Vishnu Prasad Pandey & Futaba Kazama - PAGES 97-112
Jostein Kevinsen, Robert J. Patrick & Lalita A. Bharadwaj - PAGES 113-127

Corrigendum - PAGE 128
The privatization of water supply and wastewater systems, together with institutional restructuring of governance – through decentralization and the penetration of global firms in local and regional markets – have been promoted as solutions to increase economic efficiency and achieve universal water supply and sanitation coverage. Yet a significant share of service provision and water resources development remains the responsibility of public authorities. The chapters in this book – with case evidence from Argentina, Chile, France, the USA, and other countries – address critical questions that dominate the international agenda on public versus private utilities, service provision, regulations, and resource development.

This book presents varied perspectives – largely complementary but at times contrasting – on public and private governance of water. Public authority in general is being reassessed over service provision, while resource development and investments in infrastructure continue as a mix of public and private initiatives. But more important, increased oversight and regulation of market-based initiatives that until recently were touted as panaceas for water supply and sanitation are increasingly being reconsidered on the basis of social equity, environmental, and public health concerns.

This book was based on the special issue of Water International.

More information at:
http://www.sponpress.com/books/details/9780415713139/

The special issue, titled “Water Resources Planning and Soil Defense," published during the celebration of the 90-years of the Association, aims to contribute to the public discussion on the role of the planning tools to improve the water governance and management and reduce the flood risk in Italy. The issue collects 12 papers (in English and in Italian) covering a large spectrum of topics, including an overview on purposes and strategies of the river basin planning through several international case-studies (Grigg's paper) and two analyses of some key-issues for implementation of EU Water Framework Directives, particularly regarding the climate change adaptation (Quevauviller) and the sustainable development (Cesari).

The strengths and weaknesses of the planning tools in Italian legislation are examined in two papers (Rusconi; Rossi and Alecci), which identify a set of priority actions for a technical integrated approach, institutional coordination, adequate financial resources and people's participation. Some significant experiences of river basin planning in Italian districts are presented with reference to the Southern Appennines (Corbelli) and the Po River Basin (Puma and Poggi). The advancements in the flood defense strategies are discussed in the papers which deal with the methods for the preparation of flood hazard and flood risk mapping (Brath and Dominegnetti) and the implementation of European flood mitigation policy in Italy (Monacelli).

Successful experiences of application of advanced methodologies in River Basin Management Plans are finally presented, such as the assessment of Hydrological Regime Alteration and Morphological Quality (Bussettini et al.), the measures for protecting water quality and achieving a good ecological status (Scanu et al.), and the actions aiming at restoring ecological integrity of rivers (Goltara and Trentini).
MEMBERS PUBLICATIONS

Four contributing authors also spoke at the event—Chizuru Aoki, Mona Funiciello, Laura Jean Palmer-Moloney, and Salman Salman—highlighting the four themes of the book: (1) basic services and human security; (2) livelihoods; (3) peace processes, cooperation, and confidence building; and (4) legal frameworks. They explored the challenges of water management arising before, during, and after violent conflict, examining how water resources play a critical role in restoring livelihoods, supporting economic recovery, and facilitating reconciliation, contributing to peacebuilding in post-conflict situations. For example, Jessica Troell, director of ELI’s International Water Program and co-editor of the book, noted that “Shared water is the natural resource with the greatest potential for promoting international cooperation.”

The book includes 19 cases studies of experiences in managing water in 28 conflict-affected countries and territories in Africa, Asia, Europe, the Americas and the Middle East, and draw on the expertise of 35 researchers and practitioners. “This set of case studies illustrates the ways in which water can be effectively harnessed to contribute to peacebuilding and prevent a return to conflict” says Mikiyasu Nakayama, professor of international studies at the University of Tokyo’s Graduate School of Frontier Sciences and the third co-editor of the book.

The book may be ordered at: www.routledge.com/books/details/9781849712323/
or through: www.amazon.com
More information at: www.environmentalpeacebuilding.org

Water Security: Principles, Perspectives and Practices
Editors: Bruce Lankford, Karen Bakker, Mark Zeitoun, Declan Conway
Routledge, 2013

The purpose of this book is to present an overview of the latest research, policy, practitioner, academic and international thinking on water security—an issue that, like water governance a few years ago, has developed much policy awareness and momentum with a wide range of stakeholders. As a concept it is open to multiple interpretations, and the authors here set out the various approaches to the topic from different perspectives. Key themes addressed include:
- Water security as a foreign policy issue.
- The interconnected variables of water, food, and human security.
- Dimensions other than military and international relations concerns around water security.
- Water security theory and methods, tools and audits.
More information at: www.routledge.com/books/details/9780415828468/

Water Policy in Jordan
By Khaled Alqadi and Lalit Kumar
International Journal of Water Resources Development

The primary problems in water quality and availability in Jordan stem from poor longterm planning. This paper looks at past and current policies related to water management, considers their weaknesses, and suggests means of improving the management and planning aspects and the need for desalination infrastructure. The major water issues in Jordan can be attributed to both policy implementation failure and a lack of on-the-ground application of regulations. This study indicates that desalination of Red Sea water can be a long-term viable option to meet the growing domestic water needs within Jordan.
More information at: http://dx.doi.org/10.1080/07900627.2013.876234

Resource Efficiency: Complexity and the Commons
By Bruce Lankford
Routledge, 2013

The efficient use of natural resources is key to a sustainable economy, and yet the complexities of the physical aspects of resource efficiency are poorly understood. In this challenging book, the author proposes a major advance in our understanding of this topic by analysing resource efficiency and efficiency gains from the perspective of common pool resources, applying this idea particularly to water resources and its use in irrigated agriculture.

The author proposes a novel concept of «the paracommons», through which the savings of increased resource efficiency can be viewed. In effect he asks; «who gets the gain of an efficiency gain?» By reusing, economising and avoiding losses, wastes and wastages, freed up resources are available for further use by four ‘destinations’; the same user, parties directly connected to that user, the wider economy or returned to the common pool. The paracommons is thus a commons of – and competition for – resources salvaged by changes to the efficiency of natural resource systems. The idea can be applied to a range of resources such as water, energy, forests and high-seas fisheries.
More information at: www.routledge.com/books/details/9780415828468/
Ms Renee Martin-Nagle will be a speaker at the annual conference of the American Bar Association’s Section of International Law, on April 3, in New York City. The title of the panel is Water Risks and the Private Sector: Partnerships and Responsibilities. Renee, as a visiting scholar with the Environmental Law Institute in Washington, D.C. has also contributed to the International Water Law Project Blog with an article entitled «Offshore freshwater aquifers: which law will apply?» You can find it at: http://www.internationalwaterlaw.org/blog/2014/01/22/offshore-fresh-water-aquifers-which-law-will-apply/

CALL FOR PAPERS

IWRA XV World Water Congress
EDINBURGH, SCOTLAND, 25 - 29 MAY 2015

«GLOBAL WATER, A RESOURCE FOR DEVELOPMENT: OPPORTUNITIES, CHALLENGES AND CONSTRAINTS»

The Congress website has been launched! Visit us at: www.worldwatercongress.com

The IWRA World Water Congress is very interested in your participation either through the organisation of special sessions, participation through scientific presentations, posters and articles, exhibition spaces, sponsoring and promotion, or side events.

You can find detailed information on the congress’s sub themes at http://worldwatercongress.com/call-for-papers/

We encourage you to register your interest to participate in the Congress and/or the preparatory process by getting in contact info@worldwatercongress.com

Follow the XV World Water Congress on TWITTER ! (@WaterCongressXV)

You can download the Congress brochure here: http://www.iwra.org/doc/IWRA_WWC_Save-the-date.pdf