

**BUILDING CLIMATE-RESILIENT
WATER UTILITIES IN URBAN ASIA**
5-7 October 2016, Dusit Thani Manila,
Philippines
Program of Activities



PRE-CONFERENCE WORKSHOPS, DAY 1:

5 October 2016
Wednesday
2:00 – 5:00 p.m.

SEMINAR

LESSONS LEARNED: Building Climate Resilient Utilities Through Water Operators Partnership (WOP)
Narra-Yakal

Participants will be taken through the Climate Toolkit, prepared by WaterLinks in 2015 and trialed in the Philippines in 2016, to understand the concepts of top-down and bottom-up approaches, appreciate the logic of the step-wise methodology, and determine the applicability of the toolkit to their own water utility environments. The value of vulnerability assessments, emergency response plans, and long-term adaptation plans will be demonstrated with reference, especially, to the Philippine experience of small water districts.

Registration 1:00 – 2:00 p.m.
Welcome Remarks 2:00 – 2:05 p.m. Dani Newcomb Division Director, Office of Environment, Energy and Climate Change U.S. Agency for International Development <i>Brief Overview on the Multiple Climate Change WOP between PAWD-CoP-CC and Florida Water and Climate Alliance</i>
Vulnerability Assessment: Tool for Building Climate-Resilient Utilities in the Philippines 2:05 – 2:35 p.m. Maurice Tobon President, Tobon Engineering Former Director, Engineering Department, Palm Beach County Water Utilities
Challenges in Data Acquisition for Building Climate-Resilient Water Districts 2:35 – 2:55 p.m. Leonardo Rey Vasquez General Manager, Zamboanga City Water District
Cagayan de Oro City Water District's Experience in Vulnerability Assessment Preparation 2:55 – 3:15 p.m. Rachel Beja General Manager, Cagayan de Oro City Water District
Q & A Session 3:15 – 3:25 p.m.
Coffee Break 3:25 – 3:35 p.m.
Climate Resilient Business Planning 3:35 – 4:05 p.m. Christopher Pettit Water Supply Policy and Legislation Manager, Palm Beach County Water Utilities
Challenges of Climate Resilient Business Planning for Water Districts 4:05 – 4:25 p.m. Aleli Almodovar General Manager, Isabela City Water District
The Metro Cotabato Water District Experience 4:25 – 4:45 p.m. Leonora Gaudiano General Manager, Metro Cotabato Water District
Learning from the Experience and Moving Forward: Scaling Up and Replication 4:45 – 4:55 p.m. Joel Baldelovar Technical Coordinator, Philippine Association of Water Districts
Summary of Seminar and Wrap Up: Closing Remarks 4:55 – 5:00 p.m. Elisea Gozun Climate Change Resiliency Team Leader, USAID-Be Secure Program, Philippines

SEMINAR
Megacities, Water, And Climate Change
Sarika

A collaborative venture between WaterLinks and UNESCO-IHP to build an Asian platform to facilitate association of megacities that will jointly assess climate-change impacts on their water services, design responses, and share knowledge and experiences. 50+participants at senior levels from megacity governments, federal government agencies, climate change research and funding agencies, water and wastewater utilities, meteorological departments, multilateral finance institutions, technology developers, and civil society organizations. The seminar will identify issues relating to megacities' capacities to assess current and future climate parameters; analyze impacts on water resources, demands, and supply factors; outline short- and long-term response measures relative to economic growth prospects and social wellbeing; and understand the availability of and access to climate finance. It will also address the mechanics of an Asian partnership and ways in which this can benefit members.

Opening Remarks

2:00 – 2:15 p.m.

Bruno Nguyen, UNESCO-IHP

Vic Aquitania, ICLEI

François Prévot, ARCEAU-IdF

The Problem Statement

2:15 – 2:35 p.m.

Arjun Thapan, Chairman, WaterLinks

The economic and social importance of megacities; the water-energy nexus and its central role in megacity sustainability; the range and scale of climate-change impacts; costs of impacts; options for adapting to the impacts; institutional reform; costs of options and financing

Q & A Session

2:35 – 2:50 p.m.

Vic Aquitania, Bruno Nguyen, François Prévot, Arjun Thapan

Megacities' Perspectives

2:50 – 3:50 p.m.

MANILA'S Perspective

2:50 – 3:00 p.m.

Ramon Alikpala

Senior Technical Advisor, USAID-Be Secure Project

GREATER MUMBAI'S Perspective

3:00 – 3:10 p.m.

B.D. Yamgar

Chief Engineer, Maharashtra Jeevan Pradhikaran

Coffee Break

3:10 – 3:20 PM

PHNOM PENH'S Perspective

3:20 – 3:30 p.m.

H.E. Ek Sonn Chan

Secretary of State, Ministry of Industry and Handicrafts

Former General Director, Phnom Penh Plan Water Supply Authority

JAKARTA'S Perspective

3:30 – 3:40 p.m.

Shabaz Khan

Director & Representative, UNESCO

PARIS' Perspective

3:40 – 3:50 p.m.

Bruno Nguyen

Senior Consultant, UNESCO

Former COO, Eau de Paris

Q & A

3:50 – 4:20 p.m.

Global Alliance Concept and Regional Platforms

4:20 – 4:40 p.m.

Shahbaz Khan, Vic Aquitania, Bruno Nguyen, François Prévot, Arjun Thapan

Next Steps

4:40 – 4:50 p.m.

Bruno Nguyen

Last Words

4:50 – 5:00 p.m.

Arjun Thapan

THE FORUM, DAY 2:
GETTING HOLD OF THE ISSUES
Mayuree Ballroom
 6 October 2016
 Thursday

<p>Registration 7:30 – 9:00 a.m.</p>
<p>Welcome Chatter 9:00 – 9:10 a.m.</p> <p>Arjun Thapan Chair, WaterLinks, Philippines <i>Chair, Expert Advisory Group, UNESCO-IHP (Water & Human Settlements)</i></p>
<p>Words of Wisdom 9:10 – 9:30 a.m.</p> <p>Dr. Susan Brems Mission Director, US Agency for International Development (USAID), Philippines</p> <p>Jim Lynch Deputy Director General, Asian Development Bank (ADB), Philippines</p>
<p>Industry Welcome 9:30 – 9:50 a.m.</p> <p>Ek Sonn Chan Secretary of State, Ministry of Industry and Handicrafts, Cambodia</p> <p><i>Ek Sonn Chan, the distinguished and universally acclaimed former head of the Phnom Penh Water Supply Authority, will welcome participants. As one of Asia's pre-eminent urban water CEOs, Ek Sonn will share his thoughts on the complexity of the climate challenge in Asia's cities, and how we might design some quick wins</i></p>
<p>KEYNOTE ADDRESS Climate's Water Impacts: The Technology Foil 9:50 – 10:20 a.m.</p> <p>Steve Leung Senior Vice President, Xylem Inc., China</p> <p><i>Steve Leung heads one of the world's leading water technology companies. He will set the stage for the technology theme that cuts across all of the Forum's sessions. How real is the technology weapons suite? What do we have that can help us identify impacts precisely? And what's going on in the laboratories that we can use in the next 5-10 years? Will costs be prohibitive, or will these create a new blue economy? Count on Steve to set your minds alight with some cool ideas.</i></p>
<p>Opening of the Trade Exhibition 10:20 – 10:45 a.m.</p>
<p>PLENARY SESSIONS Today: Baseline Asia's Urban Climate Scenario 10:45 – 11:15 a.m.</p> <p>Charles Rodgers Senior Consultant for Climate Change and Disaster Risk Management, Asian Development Bank (ADB), Philippines</p> <p><i>Listen carefully as Charles Rodgers highlights the current climate parameters of Asia's urban centers, including its highly threatened coastal cities, and how these have changed over time. Temperature ranges, rainfall patterns, urban heat island effects, sea level rise, storm surges, saline ingress - they are all here, and they are beginning to have painful impacts on city water and wastewater</i></p>

Tomorrow: Asia's Urban Climate Future

11:15 – 11:45 a.m.

Stuart White

Director, Institute for Sustainable Futures, UTS, Australia

Stuart White's climate future canvas is resplendent with color – warm red for hotter, drier periods; deep blue for heavier and temporally unpredictable rainfall; deep yellow for rising urban heat island effects. Observe the yawning gaps between Charles' climate baseline, and Stuart's forecasts – and draw your own conclusions about how our city lives are going to be radically transformed over the next 30 years.

Moderated Open Discussion

11:45 a.m. – 12:15 p.m.

Moderator: **Ramon Alikpala**

Climate Resiliency Team Leader, USAID Be Secure Project, Philippines

LUNCH

12:15 – 1:30 p.m.

PANEL DISCUSSIONS: Your Afternoon Choices

1:30 – 2:50 p.m.

Parallel Session 1

Surface Water Constraints

Mayuree Ballroom

Chair: **Neeta Pokhrel**

Senior WS Specialist, South Asia Department, Asian Development Bank

Kenneth Kwok

Associate Director, Arup, Hongkong

Leonardo Rey Vasquez

General Manager, Zamboanga Water District, Philippines

Benny Andrianto

President Director, PT Adhya Tirta Batam (ATB), Indonesia

Nandkishor Jagtap

Superintending Engineer, Pune Municipal Corporation, India

Heseti Vaai

Commercial Operations Manager, Samoa Water Authority, Samoa

Hotter and longer summers will mean greater evaporation and higher demand. Add saline ingress in coastal cities, and internal flooding that often overwhelms cities' water infrastructure, and you have a potent cocktail of surface water issues. Use this session to understand the implications of consistent shortages, and some likely solutions.

The Groundwater Challenge

Molave-Narra

Chair: **Arie Istandar**

Board of Trustees, WaterLinks

Melvin Tan

General Manager, Laguna Water, Philippines

Teguh Cahyono

Technical Director, PDAM Kota Malang, Indonesia

Balkrishna Dnyanu Yamgar

Chief Engineer, Maharashtra Jeevan Pradhikaran, Outer Mumbai, India

Bienvenido Batar Jr. (TBC)

Assistant General Manager, Cagayan de Oro Water District, Philippines

Most Asian cities rely on groundwater that is now in short supply. Water tables have fallen, and recharge has become problematic. Saline intrusion, and pollutant contamination, has led to deteriorating water quality. Learn what cities can do to deal with this challenge – and tell us what you would do differently!

Our Afternoon Caffeine Plug

2:50 – 3:10 p.m.

PANEL DISCUSSIONS: Your Afternoon Choices

3:10 – 4:30 p.m.

Parallel Session 2

Sea Level Rise and Salinity

Mayuree Ballroom

Chair: **Tony Kelly**

Former Managing Director, Yarra Valley Water, Australia

K. Alahudeen Ansar

Chairman, National Water Supply Drainage Board, Sri Lanka

Representative

Saigon Water Co., Viet Nam

Cliff Stone

Business Development Director, ACCIONA Agua, Australia

Tevita Mau

Strategic Planning Manager, Fiji Water Authority, Fiji

Amarylis Castro

Senior Manager, Iloilo Water District, Philippines

Asia's coastal cities are already victims of sea level rise, storm surges, and saline ingress. These are likely to get worse. Cities will struggle to protect their water sources, and to meet quality standards. Desalination and treatment technologies, demand management techniques, and insurance arrangements will be the future. See if you agree with the problems and solutions - and throw in a few of your own.

Assets Under Water

Molave-Narra

Chair: **Tom Crouch**

Board of Trustees, WaterLinks

Pastor Homeres

General Manager, Leyte Metro Water District, Philippines

Hanumantha Chary

STEM Water Authority, India

Saimone Helu

CEO, Tonga Water Board, Tonga

Abelardo Basilio

Group Director, Strategic Asset Management, Manila Water, Philippines

Ranil Nedurana

Additional General Manager, National Water Supply Drainage Board, Sri Lanka

Heavy and unseasonal precipitation is projected to play havoc with city infrastructure. Extreme weather events make matters worse. How will Asia's cities cope with flood-prone water assets, what engineering designs will they adopt, and what risk management strategies will be adopted? Take a look at the future of this challenge.

Business Networking

Mayuree Ballroom

4:30 – 6:00 p.m.

Facilitators: Mai Flor, Yolanda Gomez, and Arie Istandar, WaterLinks

Come join this market place of conversations that might lead you into twinning partnerships to build capacities, or collaboration between investor and technology developer, or a deal between a technology company and a water utility. Identify your issues, and check out your prospects – design your tomorrow.

Time to Ease Up: Cocktails, Small Eats, and Small Talk

6:00 p.m. onwards

THE FORUM, DAY 3:
DESIGNING ADAPTATION AND RESPONSE
Mayuree Ballroom
 7 October 2016
 Friday

Day 1 Recap

9:00 – 9:15 a.m.

Mai Flor

Executive Director, WaterLinks, Philippines

A quick roundup of the previous day's discussions, and a platform for Friday's conversations and learning.

KEYNOTE ADDRESS: Climate Finance and Investments

9:15 – 9:40 a.m.

Amy Leung

Deputy Director General, Sustainable Development and Climate Change, ADB

*The world is awash in climate finance. Where does it stand, what's the experience so far, and where are we headed? How easy is it to access this finance, what are the key elements of sustainable financing arrangements, and how can corporate funds be channeled effectively to water and climate adaptation programs? Listen carefully to **Amy Leung's** presentation in the context of your own ideas to scale up investments.*

Some Design Imperatives: Emergency Response Plans and Long-Term Adaptation Projects

9:40 – 10:05 a.m.

Tony Kelly

Managing Director, Tony Kelly Consulting, Australia
 Former Managing Director, Yara Valley Water, Australia

***Tony Kelly** will introduce us to the significance of ERPs in the context of dealing with immediate vulnerabilities of water operators and user groups. He will also talk about process-based approaches that incorporate organic planning methods to design long-term, capital-intensive projects. After all, insurance of this kind is not premium-free – we must ensure that claims are properly covered.*

Moderated Open Discussion

10:05 – 10:15 a.m.

Bebet Gozun

Current Climate Resiliency Team Leader, USAID Be Secure Project, Philippines
 Former Secretary, Department of Environment and Natural Resources

Your Mid-Morning Coffee

10:15 – 10:30 a.m.

PANEL DISCUSSIONS: Your Morning Choices

Technology, Finance and Capacities

10:30 – 11:50 a.m.

Parallel Session 3

Climate Finance: Access and Use

Mayuree Ballroom

Chair: Pradeep Singh

Dean, Indian School of Business, India

Ancha Srinivasan

Principal Climate Change Specialist, Southeast Asia Department,
 Asian Development Bank, Philippines

Noel Verdote

Operations Officer for Sustainability and Climate Business,
 International Finance Corporation, Philippines

Capacities: Training and Structural Change

Molave-Narra

Chair: Yolanda Gomez

Senior Partnership Coordinator, WaterLinks, Philippines

Krishan Murari Lal Mathur

Director, Indian Water Works Association (IWWA), India

Anne Bousquet

Regional Coordinator, Global Water Operators Partnerships
 Alliance, Spain

Paul Lazaro

First Vice President, Financing Infrastructure Environmental Logistics Development Department, Development Bank of the Philippines

Laurence Rogero

President, MetroPac Water Investments Corporation, Philippines

Gerry Parco

Senior Environmental Engineer, World Bank, Philippines

Understand the complex web of available climate finance, access modalities, and the experience so far. Can access and use be more effective? How? Learn of the role played by multilateral development finance institutions, and figure out how you fit in.

Alma Abrasaldo

President, Philippine Association of Water Districts, Philippines

Dwike Riantara

PERPAMSI, Indonesia

Marco Schouten

CEO, Vitens Evides International, The Netherlands

Learn about the diagnostics of gaps in technical, managerial, and finance capabilities in developing-country water operators. Understand the role of knowledge, education, training, research, and reform. Gain insights into how some utilities are strengthening their capacities in critical planning and operational areas, the results that they are obtaining, and how this might benefit you.

Keynote Address

Cutting Edge Solutions: A Peek into the Future of Water Technologies

11:50 a.m. – 12:30 p.m.

Mayuree Ballrom

Dr. Arnold Gmünder

Managing Director, WABAG Water Technology Ltd., Switzerland

Dr. Arnold Gmünder has done over 30 years in the water technology business. He has overseen the incubation of technologies that have altered the water treatment and delivery processes. Hear him carefully as he shares his insights on what's cooking in the world's water laboratories and how it might help us in adapting to climate change impacts in the least painless way.

Lunch

12:30 – 1:30 p.m.

Plenary Session

1:30 – 2:30 p.m.

Mayuree Ballrom

Technology Choices and Industry Partnerships

Chair: **Tatiana Gallego-Lizon**

Director, Water Supply and Urban Development, Southeast Asia Dept, Asian Development Bank

Mark Nicol

Regional Director, Echologics, Singapore

Hugh Chapman

Regional Director - Asia Pacific, PURE Technologies, Canada

Rachel Beja

General Manager, Cagayan de Oro Water District, Philippines

Rafael Lopa

Incoming Water Alliance Secretariat Head, Philippine Business for Social Progress, Philippines

Kum Hoong Lou

Marketing Manager, Borouge Pte Ltd., Singapore

We know that adapting to climate change cannot be founded on "same old, same old". Technology will play a key role in enabling smart applications to counter climate change. And partnerships in the water industry will ebb and flow. This panel will discuss the kinds of technologies that will come in most handy, and the types of partnerships needed among the industry itself, and with the public and private sectors, that will enable the design of a secure water future.

Afternoon Workshops – Roll up your sleeves!

2:30 – 3:45 p.m.

Developing an Emergency Response Plan

Molave-Narra

Maurice Tobon

Former Director of Engineering, Palm Beach Water, USA
President, Tobon Engineering, USA

An ERP is fundamental to meet the immediate water-related climate challenge. In this 90-minute exercise, led by experienced water operators, you will learn about the logic, essentials, and methodology of developing and executing an ERP. See what you need to do to adapt to your own situation.

Drought Abatement In Action!

How to prepare an NRW Reduction Project

Mayuree Ballroom

Roland Liemberger

Miya International, Asia and the Pacific

Reducing water losses is a sure fire supply-side method of reducing your water deficit and insurance against drought. Listen carefully as Roland provides you with the steps needed to shrink your losses, explains the economics of doing so, and gives you a few exercises to apply to your own situations. You will be surprised at how obvious and formidable this drought abatement instrument is.

Your Afternoon Coffee Break

3:45 – 4:00 p.m.

THE CATCH ALL PLENARY SESSION

4:00 – 5:00 p.m.

Mayuree Ballroom

Climate-Resilient Utilities: Design for Tomorrow

Chair: **Arjun Thapan**

Ramon Fernandez

Chief Executive Officer, Maynilad, Philippines

Ek Sonn Chan

Secretary of State, Ministry of Industry and Handicrafts, Cambodia

Amy Leung

Deputy Director General, Sustainable Development and Climate Change Department, Asian Development Bank, Philippines

Marco Schouten

CEO, Vitens Evides International, The Netherlands

Rudie Kusmayadi

Chairman, PERPAMSI, Indonesia

This is your last opportunity to ask that searching question. Or make that critical comment. The interactive panel-participants session will range over the Forum's discussions and draw conclusions that you can take away to either mull on further or, hopefully, get some action on. If urban Asia is to continue to drive economic growth, reduce poverty, and sustain its environment, it must focus on securing its water future. Beating climate-change won't be easy. But you could play a very important part in this historic endeavor to turn the tide.