



# AGWA's Annual Report

## Part 1

Year in Review: September 2015 – August 2016

## Part 2

The Year Ahead: September 2016 – August 2017

## COORDINATOR'S FOREWORD

### AGWA: A NETWORK FOR IMPLEMENTATION & IDEAS

My role in AGWA lets me peer into different projects throughout the network, and the range of issues connected to water and climate change across AGWA grows dramatically each year. In a series of firsts, an epidemiologist working on water supply and treatment infrastructure above the Arctic Circle called me in my role as AGWA Coordinator: Can the network provide support and advice about how to manage water resources in the underserved communities situated on defrosting permafrost? Have people in AGWA worked in the Arctic before?

Not to my knowledge, I said. But we have many people who work or have worked in the high Andes, the Himalayas, and the Tibetan plateau. These regions face very analogous development and adaptation issues. We also have tools to manage financial risks from climate impacts for large investments, develop a shared vision for long-term infrastructure and ecological management and planning goals, and create standards for investors in climate bonds designed to support water-related investments. We can connect you to capacity building programs, evidence-based decision support systems for specific audiences, relevant aid agencies, businesses, and NGOs, and self-teaching resources, as well as the knowledge base of a global 900-strong policy and action network.

The conversation was very satisfying, demonstrating the growth in sophistication in the network. I believe this story also shows how “our” issues are increasingly recognized with new audiences as both systemic and critical — and many of those audiences also recognize that AGWA has a role to play in their work. Particularly over the past 18 months, AGWA has helped catalyze a wealth of water-climate insight, with recognized progress in global policy, knowledge creation and tool development, institutional impacts, and project-level actions. I hope you will read our annual report with satisfaction and pride — and with an eye to new opportunities for engagement and collaboration.

John Matthews — August 2016

## INTRODUCTION

### History & Evolution

Founded in September 2010 during World Water Week with about 30 members, AGWA began as a network to catalyze expert knowledge, practical action, and effective global policy for climate adaptation. That mission continues now with more than 900 members located worldwide and initiatives divided broadly into technical and policy areas. AGWA has expanded to serve as a platform for new perspectives on a wide variety of water and climate change issues, spanning both climate mitigation and climate adaptation. We strive to disseminate knowledge and advocacy on critical technical and policy aspects of water and climate. To date, our technical programs have emphasized connecting thought leaders to develop a coherent set of guiding elements, processes, and methodologies for implementing robust long-term water management. Our policy work has defined a core set of issues, targeted relevant processes and policy frameworks, identified motivated and supportive policy and decision making actors, and developed approaches for communicating these issues.

At an early stage, AGWA members outlined the vision, mission and purpose for AGWA. But we have not been inflexible. Indeed, these have subsequently been revised several times, and last year a third purpose was added during the Annual Meeting to reflect the increasing relevance to highlight connections between climate adaptation and mitigation.

### Mission

**The Alliance for Global Water adaptation (AGWA) is established to provision tools, partnerships, and technical assistance to improve effective decision making, action, governance, and analytical processes in water resources management, focusing on climate adaptation and climate change relevant scales**

### Purpose

- To serve as a member network for sharing knowledge, developing analytical tools, creating methodologies, and coordinating joint actions to assist in resilience building that can be implemented through projects and programs.
- To contribute to water and climate policies and practices to ensure they are integrated to resilient communities.
- To encourage dialogues between individuals and entities working on adaptation and mitigation of climate change respectively, recognizing water resources and their management as a bridge between the two.

### Membership

AGWA seeks to help build resilience for adapting to climate change by closing the gap between existing knowledge and policies and practical application. The members of AGWA are dedicated to supporting efforts within governmental, civil society, research, and private sector institutions to develop knowledge and skills that can address issues of water-based climate change adaptation by closing the gaps between emerging areas of expertise and translating the next generation of best practices into operational reality. AGWA's network mailing list includes more than 900 individuals and an estimated 300 organizations.

### Governance

AGWA is an informal network, defined by a community of practice charter.<sup>1</sup> AGWA is governed by two co-chairs, who also have seats on a steering committee. AGWA is coordinated by John Matthews, who reports to the steering committee (SC). The current co-chairs are Karin Lexén (Stockholm International Water Institute [SIWI]) and Diego Rodriguez (World Bank). The work of the AGWA coordinator and steering community is supported by a small secretariat hosted by SIWI. Major decisions and programs are ratified during an annual meeting, held in conjunction with World Water Week.

---

<sup>1</sup> Details of AGWA's governance and charter are provided at <http://alliance4water.org/About/index.html>.

# Part 1

## Year in Review: September 2015 – August 2016

### Activities since the last annual meeting

The past year saw more than 70 percent growth in newsletter subscriptions (itself following a year with 70 percent growth); the rapid differentiation and expansion of our policy activities; the expansion of our policy capacity and achievement of a number of significant policy goals; the launch of two AGWA spin-off initiatives (#ClimateIsWater and CRIDA); the delivery and adoption of several technical guidances; the award of grants to support AGWA-informed programs and activities; and media coverage around our activities.<sup>2</sup> We have a great deal to be proud of. This section will detail some of the work of the past year.

### POLICY TEAM ACTIVITIES

The Policy group has proven to be a strong global network for joint action to raise the profile of water in the climate change policy discussion. Building on the complementary capacities of its members, efforts have been amplified in collaborative efforts. Realizing how the different processes are intertwined and linked, the Policy group continuously prepared input for global meetings leading up to the COP21.

In the autumn of 2015, the AGWA Policy group worked tenaciously to ensure a role for water in the climate policy discussions. Several activities were organized by members and the Policy group used its strong network to inform and influence decision makers, by involvement and knowledge sharing in global dialogues, through organizing events and through the preparation and distribution of key messages — through short films, policy papers, leaflets, news articles, press conference, among other vehicles.

**World Water Week 2015.** Prior to COP21, the Policy group was very active at the 2015 World Water Week (WWW) in Stockholm. At the SWWW, the Policy group organized *Global Climate Policy and National Water Action: Towards COP21 and Beyond*, which such high-level speakers as the President of the Marshall Islands addressed the linkages between water resources and climate vulnerability.

**United Nations General Assembly (UNGA) 70<sup>th</sup> Session.** During the UNGA70, the UN SDG were formally adopted, while Sweden, France and Peru presented key messages on water and climate in the UN General Assembly. These messages were building on the discussions that took place during the 2015 World Water Week and were linked to the Lima-Paris Action Agenda for global climate resilience.

---

<sup>2</sup> Appendix 2 contains a summary of AGWA media coverage over the past year.

**The Lima Paris Action Agenda (LPAA).** The LPAA is an initiative to broaden the climate negotiations and mobilize cooperative action for efficient implementation by state and non-state actors to create platforms for the exchange of lessons learned, the mobilization of resources, and scaling up successful experiences and good practices to promote climate resilience.

**Resilience and Water Day 2 December 2015.** At COP21, water was very visible: prioritized in the LPAA and through several declarations. Given the Resilience and Water Day at COP21, members of the Policy group mobilized to make a splash for water in the climate negotiations, including activities related to the #ClimatelsWater campaign.

**Contributing to the #ClimatelsWater (#CIW) Campaign.** What began as a series of video interviews by the AGWA secretariat in late 2014 and across 2015 evolved into a large international campaign. #ClimatelsWater began as a way to increase awareness of the importance of water in climate action through interviews with thought leaders and practitioners following Lima COP20, a number of which included French and Spanish versions and with such partners as UNESCO, UNDP, PARA-Agua, the City of Paris, and the University of Natural Resources & Life Sciences, Vienna.<sup>3</sup>

Leading up to COP21, #CIW developed organically into an international campaign involving dozens of NGOs, institutions, and networks involved in water policy and interested in joint and coordinated communications. The main messages promoted by #CIW during COP21 were built up from AGWA's content and expertise over the past years, while a number of major #CIW policy videos were produced by a variety of organizations, including Arup<sup>4</sup> (following up on an excellent video produced for Lima's COP21), SIWI,<sup>5</sup> the French Water Partnership,<sup>6</sup> and the World Water Council. For the Resilience and Water Day at COP21, the coalition hosted a very successful public event with positive messaging and beautiful branding, which was attended by more than 600 individuals and organized on behalf of the coalition by Arup.<sup>7</sup> In addition, a press conference was organized with Ségolène Royal, Minister of Environment and COP21 President.<sup>8</sup> The success of organizing a number of events, within the COP21 zone and outside in the city of Paris, and the effectiveness of #CIW

---

<sup>3</sup> All thirteen videos can be seen at <https://vimeo.com/channels/918234>.

<sup>4</sup> <https://vimeo.com/147110125>

<sup>5</sup> [https://siwi-mediahub.creo.se/thematic-areas/thematic-area-climate-change-and-water/climateiswater-siwis\\_messages\\_to\\_cop21\\_in\\_paris](https://siwi-mediahub.creo.se/thematic-areas/thematic-area-climate-change-and-water/climateiswater-siwis_messages_to_cop21_in_paris)

<sup>6</sup> <https://youtu.be/lwj5TgkwsaQ>

<sup>7</sup> <http://alliance4water.org/resources/AGWA-02-12-2015-Climate-is-Water-Solutions-for-the-future---Leaflet-i3.pdf>

<sup>8</sup> <http://unfccc6.meta-fusion.com/cop21/events/2015-12-02-15-30-siwi>

branding led to the decision to continue the partnership, which is now hosted by the World Water Council.<sup>9</sup> #CIW is actively preparing for COP22 now. Despite its ad hoc beginning, the #ClimatelsWater campaign connected the water community in a new and effective way for COP21. Given this work and complementary efforts such as the Paris Pact on Climate Change and Water,<sup>10</sup> *Circle of Blue* wrote, “Water was discussed with greater depth and detail than at any previous UN climate conference.”<sup>11</sup> Other articles and blogs advanced these messages with grace.<sup>12</sup> AGWA is still heavily involved in #ClimatelsWater, and the AGWA Policy Team serves on its steering committee. #ClimatelsWater has strong leadership, inter-organizational support, and a clear set of campaign goals going forward. Several working groups and events have been structured and organized throughout the year and two of the key events are the support to the International Conference on Water and Climate that took place in Rabat 11-12 July, under the leadership of the Moroccan government and Minister of Water, as well as the upcoming session at World Water Week.

**Support to the Rabat Conference on Water & Climate, July 2016.** At COP21, the Moroccan government announced that they would host a meeting before COP22 to articulate how to engage the water community within and throughout the UNFCCC. With significant support from France, the World Bank, and the World Water Council, this meeting was held in July 2016 in Rabat with some 650 attendees. AGWA’s Policy group provided additional support, including good representation among the speakers and panelists, and we have been active in the follow up around the development of a “Livre Bleu” (Blue Book) articulating the outcomes of the conference. This support and our direct engagement with the Moroccan government should continue. Members of the Policy group summarized their impressions and potential outcomes from the event in an AGWA site blog.<sup>13</sup>

The well-orchestrated series of activities throughout the autumn of 2015 and during COP21 built momentum for water issues, but pushing towards COP22 and after is critical. To ensure the prominence of water issues in the global climate dialogue, the water community must continue to speak with one voice, whereby the AGWA Policy group will serve as a vehicle for collaborative and accelerated action, continuing to convey water practice to climate policy makers.

<sup>9</sup> Learn more at <http://ClimatelsWater.org>.

<sup>10</sup> <http://newsroom.unfccc.int/lpaa/resilience/press-release-lpaa-resilience-1-paris-pact-on-water-and-climate-change-adaptation-announced/>

<sup>11</sup> <http://www.circleofblue.org/2015/world/water-gained-stature-at-paris-climate-talks/>

<sup>12</sup> SIWI: <http://www.siwi.org/water-given-priority-in-climate-talks-at-cop21/>; CIFOR: <http://blog.cifor.org/38885/a-river-runs-through-it-why-water-needs-a-landscape-approach-too?fnl=en>; IUCN: <https://www.iucn.org/content/blog-water-and-climate-change-best-available-science-or-greek-tragedy>; and OoskaNews across two pieces: (1) [https://www.ooskanews.com/story/2015/11/ooskanews-voices-climate-water-solidarit-between-practice-and-policy-paris\\_168897](https://www.ooskanews.com/story/2015/11/ooskanews-voices-climate-water-solidarit-between-practice-and-policy-paris_168897), and (2) <https://www.ooskanews.com/story/2015/12/ooskanews-voices-warming-climate-rising-waters-paris-cop-green-bonds-climateiswater>.

<sup>13</sup> <http://alliance4water.org/blog/files/tag-morocco.php>

### **UNFCCC intersessional policy meetings, Nairobi Work Programme, and other UNFCCC organizations.**

Some members of the AGWA Policy group were present and active at the May 2016 Bonn intersessional meeting. It was a strategic moment to be present in order to seize the coming stakes and next steps for the implementation of the Paris agreement and the other subsidiary bodies. Sofia Widforss and Maggie White commented on this for the blog and newsletter<sup>14</sup> Since the discussion has gone from agreement to implementation, water is now being mentioned in many different contexts, especially agriculture and finance. Most Nationally Determined Contributions (NDCs) that address adaptation section have integrated water elements, so AGWA team feels that now is the time to dialog with climate policy makers, as well as by raising water in the development of the Ad Hoc Working Group on the Paris Agreement (APA), the Adaptation Committee, and with the Five Year Work Plan for Loss & Damage, among others. A policy note has been elaborated by the AGWA Policy group to define key steps to influence the negotiators and other decision makers.

The launch of the Global Climate Action Agenda (formerly the LPAA) and its official positioning within the UNFCCC process and the Paris Agreement are also useful vehicles for water messaging. Three key alliances were launched in at COP21 and have been incorporated into the GCAA: the Paris Pact on Water and Adaptation to the Effects of Climate Change in the Basins of Lakes, Rivers, and Aquifers,<sup>15</sup> the Business Alliance for Water and Climate Change,<sup>16</sup> and the Megacities Alliance on Water under Climate Change.<sup>17</sup> SIWI/AGWA was invited to the launch of the GCAA and followed up with a strong memo sent to COP20, COP21 and COP22 presidencies as well as the two champions of the GCAA in order to secure a strong window for water within the GCAA and promote a Water Day at COP22 with a high level event. Positive feedbacks have come through and World Water Week 2016 will be a key moment to discuss and consolidate specific elements

### **CAPACITY BUILDING PROGRAMS**

Recognizing that AGWA has been very effective in its first five years in developing new knowledge, synergizing disciplines and institutions, and describing effective methodologies for specific audiences, the transition in 2015 of promoting and supporting capacity building efforts around this content seemed natural. Indeed, capacity building in the form of courses, technical communications, workshops, and webinars is an easy extension of much existing work and makes good use of AGWA's publications and technical partnerships. Several outcomes emerged:

---

<sup>14</sup> <http://alliance4water.org/blog/files/tag-bonn.php>

<sup>15</sup> <http://newsroom.unfccc.int/lpaa/resilience/press-release-lpaa-resilience-1-paris-pact-on-water-and-climate-change-adaptation-announced/>

<sup>16</sup> <https://wateractionhub.org/cop21-declaration/>

<sup>17</sup> <http://newsroom.unfccc.int/lpaa/resilience/megacities-alliance-for-water-and-climate/>

**Launch of AGWAGuide.org as a capacity building hub.** In September 2015 AGWA took a launched a sister site to Alliance4Water.org to focus on a growing suite of technical and capacity building work.

AGWAGuide.org is not intended to cover all AGWA-related work, and development to date has been opportunistic as funds and capacity allow (and we certainly encourage new contributions and collaborations to load here). AGWAGuide.org averages around 1200 visits per month and approximately 12,000 hits per month on search engines. The first product of AGWAGuide.org was *The AGWA Guide to Sustainable Water Resources Management: Moving Beyond No Regrets Adaptation*. The text builds upon *Beyond Downscaling*, a prior AGWA publication. The *AGWA Guide* provides more detailed descriptions of current thinking and implementation of bottom-up approaches to climate adaptation and risk assessment. Its content is a mixture of text, videos, and links to other resources such as white papers.

AGWAGuide.org hosts additional content as well:

1. Following up on our work in 2013–15 with the US National Science Foundation / University of Maryland SESYNC research center to develop a methodology to simultaneously assess infrastructure and ecosystem risks to climate impacts, we launched an Eco-Engineering Decision Scaling (EEDS) site in conjunction with the release of our EEDS paper in *Nature Climate Change*. The site explains the novel approach to a broader audience, supported by video compilations and text. The videos have over 37,000 loads this year and have been accessed from over 50 countries.
2. As part of a consortium including Ceres, CDP, the Climate Bonds Initiative (CBI), and the World Resources Institute (WRI), AGWAGuide.org hosted the draft Water Climate Bond Standard for public commentary and application. The site will soon be updated with the final standard criteria. The page provides visitors with an overview of the green / climate bonds market, the need for a Water Standard, and an overview of the process behind its development. More importantly, during the public consultation period the site was the primary mechanism to receive feedback.
3. In early 2016, AGWA-U was added to the AGWAGuide.org site — for more details, see below.
4. Lastly, AGWAGuide.org has served as the public overview of CRIDA. Currently the page provides a brief overview of the project, which will shortly evolve into a capacity building and community of practice hub for those interested in the CRIDA methodology. For instance, we will include a repository of case studies on key aspects of the CRIDA steps.

**AGWA-U** is a new initiative developed to support climate adaptation in higher education and for technical professionals.<sup>18</sup> Through support to universities over the past year, AGWA content has begun to enter graduate-level courses for students and water management professionals interested in learning about the emerging trends in climate adaptation and how it can be relevant to their work. Some of this has occurred informally and incidentally — documented by accident. AGWA-U is intended to make this process more

---

<sup>18</sup> <http://agwaguide.org/agwau/>

formal. To date, AGWA-U has involved collaboration with UNESCO-IHE, TU-Delft, Oregon State University (OSU), and the Asian Institute of Technology (AIT). **Oregon State University** hosted the inaugural AGWA-U course as part of its Natural Resources Leadership Academy. This one-week immersion course was taught by AGWA's Coordinator with guest lectures from AGWA members Mats Eriksson (SIWI), Guillermo Mendoza (USACE), Ivan Arismendi (OSU), Dominique Bachelet (Conservation Biology Institute), and Aleix Serrat Capdevila (World Bank). Nine graduate students and water management professionals attended the course. The course promoted new and emerging water management methodologies.

**Bottom-Up Methodology Workshops.** Workshops tailored for specific institutional settings focused on AGWA's guiding elements have been held in Geneva (UNECE workshop), Beijing, Mexico City, and Washington, DC, among other locations, each sponsored by hosting institutions such as Deltares, SIWI, and the National Adaptation Forum in Mexico City.

### TECHNICAL PROGRAMS & ACTIVITIES

AGWA's technical programs reflect AGWA's early roots: defining needs, gathering existing and new knowledge and methodologies, and finding solutions. Over the past year, specific technical programs can involve hundreds of participants, with diverse funding partners.

**Ongoing: capacity building and technical support for national, intergovernmental, and non-governmental place-based projects.** AGWA maintains a strong commitment to providing local, regional, and national level project support globally. These calls are highly variable in scale, audience, and focus. In general, the Secretariat serves as a way to link partners within the network. Often, these calls involve using the newsletter as a means for reaching out to the membership, as well as AGWA's LinkedIn site and the AGWA blog. Responding to these calls has always been central to AGWA's work and occupies a significant portion of the Coordinator's work, though this is difficult to plan for.

**Transition: Water Climate Bonds Standard, from phase 1 to phase 2.** In September 2014 a group of four AGWA-affiliated NGOs (Ceres and WRI in the US, CDP and CBI in the UK) approached AGWA about supporting the development of a set of criteria for evaluating the resilience for water-related green or climate bonds. This work is now known as phase 1 of the standard, with funding sourced by Ceres. These criteria represent a checklist-based application of the AGWA's guiding elements, and ultimately made use of some 70 or more members of the AGWA network (roughly two-thirds of the extended team on the project), from a wide variety of institutions. These have included technical experts on various aspects of water and climate change, institutions that offer, evaluate, or issue bonds on behalf of other institutions, and public and private institutions that issue or would consider issue climate bonds, such as utilities. The Standard was first applied

to San Francisco Public Utility Commission (SF PUC) in May 2016 (an issuance of ~240 million USD).<sup>19</sup> We expect the formal launch of phase 1 of the standard in late August 2016.

The second phase of work began in February 2016. Led by Climate Bonds Initiative (CBI) and funded by the Rockefeller Foundation, the work explores two areas: criteria for hydropower (especially hydro with reservoirs), and criteria relevant to nature-based solutions (NBS). AGWA is involved in both components, but we are most engaged in the large team for the NBS working group. Supplemental criteria are expected in early 2017 and are described in more detail below.

**Transition: Launching the Collaborative Risk Informed Decision Analysis (CRIDA) publication and community of practice.** Initiated in the fall of 2014, the Collaborative Risk Informed Decision Analysis (CRIDA) has two components: a publication launching in September 2016 (described here in Part 1), and a community of practice (described in Part 2).

The CRIDA guidance is a publication that builds on the insight and experiences of the users of four distinct climate-related approaches: shared vision planning (the US Army Corps of Engineers), decision scaling (developed by Casey Brown and Eugene Stakhiv), adaptation pathways (developed by Marjolijn Haasnoot and with close support of Deltares and the Rijkswaterstaat), and Eco-Engineering Decision Scaling (EEDS, with SESYNC and led by LeRoy Poff and John Matthews). CRIDA takes these four approaches and combines them within a single integrated stepwise methodology that is linked to widespread water resources planning and decision making processes. CRIDA is also inspired by and draws deeply from the insights of the World Bank Decision Tree, which published in August 2015. Support for the development of CRIDA has come from ICIWaRM,<sup>20</sup> Deltares, and SIWI.

Guillermo Mendoza (IWR), Ad Jeuken (Deltares) and John Matthews play central roles in managing this work, but roughly 150 individuals across AGWA have been active in developing this work, including dozens of reviews and four intensive writing workshops among the principals. CRIDA has a steering committee that includes the RWS, IWR, the World Bank, and Pegasys, among others. CRIDA will be launched at World Water Week in 2016 and at the UNECE Workshop on Water and Climate Change in September. CRIDA has been presented many times, including through a UN Water / World Council of Civil Engineers publication,<sup>21</sup> at the European Geophysical Union meeting in 2016, and at the Decision Making Under Uncertainty meeting in the Netherlands in 2015. CRIDA has already had a significant impact even before publication, with the US aid

---

<sup>19</sup> <http://www.ceres.org/press/press-releases/san-francisco-public-utilities-commission-issues-world2019s-first-certified-green-bond-for-water-infrastructure>

<sup>20</sup> <https://iciwarm.sites.usa.gov>

<sup>21</sup> <http://alliance4water.org/blog/files/tag-world-council-of-civil-engineers.php>

agency Millennium Challenge Corporation (MCC), for instance, training a core team and then presenting the CRIDA approach to the full MCC staff in 2016.<sup>22</sup>

**Expansion: Negotiating adaptive tradeoffs between infrastructure and ecosystems.** Although the workshops supported by US National Science Foundation / University of Maryland SESYNC research center ended in 2014,<sup>23</sup> the past year saw the finalization of a major publication based on this work in *Nature Climate Change*,<sup>24</sup> global-level press around this publication,<sup>25</sup> and the launch of the Eco-Engineering Decision Scaling site,<sup>26</sup> which was funded by SESYNC and implemented as a series of original videos and interviews by Alex Mauroner and John Matthews. EEDS has been deeply integrated within the CRIDA approach, and following the National Adaptation Forum in Mexico in April, WWF-MX selected EEDS as a means for analyzing the efficacy of a national environmental flows program called “reservas del agua” from a climate adaptation perspective. The Inter-American Development Bank (IDB) is funding WWF-MX to develop a national set of policy guidelines centered around EEDS (see Part 2). Other organizations such as UNESCO’s Latin American and Caribbean office (OREAL) are developing internal applications of EEDS as well.

**Ongoing: natural infrastructure.** Another major initiative launch last year was the formalization of a natural infrastructure program. In many ways, this work began visibly with a Policy Forum paper that appeared in *Science* in 2015 by key members of this team.<sup>27</sup> EEDS is central to this process, since EEDS can also be used as a mechanism for designing and testing alternative types of natural infrastructure. Work on this program has developing along the following lines:

1. Discussions with World Bank staff around specific projects / investments, as well as exploring the procurement process and how it can influence the comparison of natural infrastructure
2. SIWI-led work on a wastewater treatment with a southeast Asian project, now in development
3. The development of nature-based solutions criteria for the Water Climate Bond Standard
4. Implementation of EEDS through a 2016-funded Horizon2020-funded proposal led by Elena Lopez-Gunn at Universidad Complutense de Madrid, spanning numerous sites and institutions in Europe. Called NAIAD (NAture Insurance value Assessment and Demonstration), this consortium is intended to work with public and private sector entities to define how ecosystems can be formally

---

<sup>22</sup> <https://youtu.be/T5XJgMEuzBQ>

<sup>23</sup> <http://www.sesync.org/news/building-better-dams-starts-with-ecological-insights>

<sup>24</sup> <http://www.nature.com/nclimate/journal/vaop/ncurrent/full/nclimate2765.html?message-global=remove>

<sup>25</sup> [http://www.nytimes.com/2015/12/09/business/energy-environment/heading-off-negative-impacts-of-dam-projects.html?\\_r=0](http://www.nytimes.com/2015/12/09/business/energy-environment/heading-off-negative-impacts-of-dam-projects.html?_r=0)

<sup>26</sup> <http://agwaguide.org/EEDS/>

<sup>27</sup> <http://alliance4water.org/resources/Science-2015-Policy-Forum-584.pdf>

integrated within insurance systems to cope with climate extremes. Expect to hear much more about NAIAD in coming months.

**Technical collaboration with China's hydropower management industry.** Facilitated by Josh Weinberg at SIWI, AGWA has initiated discussions with China's Institute of Water Resources and Hydropower Research (IWRH) and Ministry of Water Resources, resulting in a multiday bottom-up methodology workshop in Beijing in November led by SIWI and Deltares. This work has also been presented directly to the Ministry of Water Resources and promoted as an important component of continued technical exchange between Sweden, the Netherlands and Europe cooperation in the water sector in 2016 and beyond.

**Support for major grant proposals.** Over the past year, AGWA has provided support for a wide variety of water and climate related grant proposals from a diverse array of funding sources. Some have been relatively small, such as support for research from the USGS National Institutes for Water Resources to blend decision scaling and adaptation pathways for resilient water management, the US National Science Foundation for the development of a site to accompany our *Nature Climate Change* article, and from the IDB for WWF-Mexico to implement EEDS to environmental flows within Mexico technical and policy perspectives. Two larger successful proposals awarded in the past year are (1) NAIAD, a European consortium focused on mainstreaming the AGWA guiding elements for nature-based solutions to climate-intensified water disasters for policymakers and the insurance sector<sup>28</sup>; and (2) S-Multistor, an effort led and coordinated by UNESCO-IHE and funded by the Dutch government to develop better technical approaches to storing water sustainably and forge a global community of practice on this issue, particularly around energy-related water storage.<sup>29</sup> Most recently, Mott McDonald has been awarded a contract with the World Bank to work on mainstreaming climate adaptation and bottom-up methodologies within their WASH portfolio; ODI will act as a liaison for the AGWA network. Additional applications over the past year have been made with partners such as Adam Smith International, Foro Nacional Internacional, the Environmental Law Institute, SIWI, Deltares, WWF, and many others — a number of these are still outstanding. We welcome further additions to this list for 2016.

---

<sup>28</sup> For more information please reach out to Elena Lopez-Gunn at the Universidad Complutense de Madrid.

<sup>29</sup> For more information, please reach out to Michael McClain at UNESCO-IHE.

## Part 2

# The Year Ahead: September 2016 – August 2017

### Objectives for AGWA's 2016 – 2017 work

AGWA is a complex organization, with many moving pieces. Functionally, AGWA acts as both a convening, boundary organization that *builds capacity* and *mobilizes* stakeholders and institutions, and as an institution that *develops, organizes, and promotes* new knowledge and policies. AGWA's own capacity in both regards should be expanded across the coming year. As shown in Part 1, we are well advanced with the process of developing an identifiable, coherent, consolidated, and connected set of issues and methodologies for robust water management and refining those for particular policies, processes, instruments, institutions, and sectors.

In contrast to last year, the coming year does not introduce new full programs. Indeed, the capacity to develop new programs — at least with any central coordination — does not exist in AGWA currently. Broadly speaking, the coming year will see existing policy and technical programs deepened / expanded, as well as support for organizations seeking to integrate AGWA's guiding elements into their own programs and proposals. Indeed, in cases such as with EEDS and CRIDA, the newness of the approaches means that these methodologies are still evolving and finding their level.

### Proposed Framework, Activities, Deliverables

The framework, activities and deliverables below are all mutually supportive. Based on work during the past year it is clear that in order to further effective and robust water management in practice and through policy, AGWA must:

- 1) make the role and effects of climate change impacts on water resources more explicit through concrete examples
- 2) identify credible, feasible, and compatible audiences
- 3) tailor / adjust our guiding elements with and for those audiences.

### Framework

AGWA has developed a globally recognized brand around water and climate change, and we have emerged as an identifiable resource and actor globally around issues of infrastructure, institutional governance, synergies between mitigation and adaptation, ecological resilience, and global policies that can reflect the special needs and limits of water resources.

In the next phase we will have to decide how to expand the community of investors, policy makers, and resource managers in need of the methods and processes AGWA members have jointly developed. This

amplification process has already begun within our network organically with some audiences, but we need to apply a strategic approach to reach other relevant audiences, with information they can make use of, and with the opportunity to learn how to integrate AGWA within their institutional context (and vice versa).

From AGWA's beginning, a central reference point has been sustainable water management in the developing world. Certainly AGWA methods, tools, and policy recommendations are relevant to and useful for the developed world, but the economic and ecological challenges, limitations, and capacities around robust water management are especially significant in emerging economies. A number of AGWA's proposed programs and activities for the coming are intended to directly support technical and high-level decision makers in the developing world — exchanging experiences as well as building capacity and tools to support implementation. Within the secretariat, there is also a strong sense that we need to continue to expand our set of partners and collaborators here as well. From a Policy group perspective, a major objective should be to enable national and global policies and finance vehicles to fuel robust, resilient economic development trajectories. The coming year should maintain this momentum and, with care and thought, expand. The secretariat suggests that our goals for 2016 – 2017 should include:

1) **Continue to** translate water knowledge into global, regional, and national policymaking on climate change. Support global policy transitions from agreed frameworks (Paris Agreement, UNFCCC COP 21) into implementation (NDCs), key institutions (GCF, Adaptation Fund)), and operations (national level and multilateral implementation)

- Build on the policy recognition and momentum with other key global actors engaged in articulating international climate policy relevant to water management, emphasizing the UNFCCC but also other policy processes and new climate finance vehicles and institutions
- Foster increased linkages between technical and policy programs. The shift to a focus on INDC implementation and UNFCCC institutions for climate finance, for instance, is directly relevant to work around bottom-up assessment methodologies and finance criteria for resilience.

2) **Continue to** amplify, cross-pollinate, and translate AGWA's guiding elements to specific audiences in public, civil society, and private sectors

- Consolidate remaining gaps between economic, engineering, and scientific approaches to robust water management decision-making processes and policies. One significant area that remains is between economics and the evaluation, comparison, and communication of ecological and engineering based approaches
- Expand our efforts and partnerships that link effective tools with AGWA guiding elements, primarily through supporting new proposals and institutional implementation programs

- Engage with development banks, IFIs, and governments involved in critical mitigation and investment decisions
- Develop a program strategy for engaging with the private sector, including energy and finance

3) **Expand:** Build the capacity building tools necessary to ensure adoption and implementation

- **Amplify** AGWA's guiding elements, methods, and tools through capacity building for investment, design, and resource management audiences, for both professional and student audiences, particularly in the developing world
- **Continue:** Expand and integrate our membership globally – with a special interest in developing world members
- **New:** Launch a mechanism to connect with students interested in water management and climate adaptation issues and practice

4) **Continue:** Develop a systematic decision-making framework for green, gray, and hybrid infrastructure

- Develop a formal program within AGWA that can demonstrate the technical evidence base and operational guidelines necessary for green and hybrid infrastructure for robust water management
- Continue to use the Policy group as a strong vehicle for joint action globally to raise the profile of water within the climate discussions

5) **Develop** AGWA as a vehicle for mobilizing coordinated activities

- Use network resources to support joint fundraising to support collaboration for project scale work, policy engagement, and tool building, supporting secretariat activities as well when possible
- Employ the network as a means for advocacy and awareness raising about coordinated activities

### The Budget year: Sept. 2016 – Aug. 2017

The main costs to keep AGWA running refers to the following budget posts: remuneration of AGWA coordinator; secretariat cost (including SIWI staff time); travel and lodging to participate in conferences and events; logistical costs related to organizing seminars, network activities etc., technical costs related to web sites, printing of info material etc. In addition, a great support to AGWA comes from in-kind contribution of SC members' and AGWA members' time.

### Activities & Deliverables

#### PROPOSED POLICY GROUP ACTIVITIES

##### Development and expanding the Policy Group objectives and activities

Following COP21 and the Paris Agreement, emphasis in the global climate dialogue will henceforth be more on implementation, funding and modalities in contrast to the past years of agreement text focus. This opens up possibilities for the water community, spearheaded by the AGWA Policy group and the #CIW campaign, to showcase how wise water management can support efficiency and coherence in mitigation and adaptation activities. The challenge for the Policy group is to ensure that the best water practice, local and regional experiences through successful projects and programmes, reach climate negotiators, thereby influencing the climate policy dialogue and supporting that informed decisions are made.

The Lima Paris Action Agenda has evolved into the Global Climate Action Agenda, which will serve to continue strive to keep water high in the climate change agenda and to promote concrete solutions to tackle and adapt to climate change. One objective is to share results and experiences to reinforce the water and climate dynamics, scale up ambitions towards COP22 and prepare for the global stock take on climate change foreseen in 2018.

Several parallel work streams have been initiated within the Policy group, with the common objective to continue to illustrate how water resources are key for climate adaptation and mitigation. Building on the momentum from COP =21, the AGWA Policy group will continue to connect stakeholders from within and outside the water and climate communities and will serve as a vehicle and link for the purpose of influencing policy decision makers and climate negotiators. One task for the group is to link up with country delegations to the UNFCCC; by conveying messages on the many benefits of integrating water management in adaptation and mitigation planning, to increase the likelihood of water elements being included in the architecture constructed around the Paris Agreement. AGWA will use its wide network and build a strong case based on research and best practice. For this purpose, AGWA's mission and capacity to bridge between policy and practice is of particular relevance.

Further activities relate to gathering a repository of best practice in various thematic areas. Work is initiated in the area of climate finance, NDCs and the implementation of the Paris agreement. For the latter, an analysis of how water is incorporated into national climate planning processes through the NDCs, showcasing how water resources management could inform implementation of the Paris agreement will be produced in 2016.

The frequent occurrence of water elements in the Nationally Determined Contributions (NDCs)<sup>30</sup> show that water is central to the operative side of the climate agreement. The vast majority of NDCs that mention adaptation include water elements, highlighting how water informs the domestic preparations for countries climate actions supporting the Paris agreement. The relevance of water in climate practice on local level must be further articulated in national planning. In addition, experiences from the National Adaptation Plans (NAPs)

---

<sup>30</sup> [http://unfccc.int/focus/indc\\_portal/items/9240.php](http://unfccc.int/focus/indc_portal/items/9240.php); and <http://bit.ly/1PVw2of>

should support the processes for further enhancement and complementary efforts. With these objectives, the Policy group will engage in key events such as the UNFCCC COP22.

### **Preparation for Marrakesh COP 22.**

The Policy group has made preparation for the COP22 a priority with a two-folded approach: organizing events in the run up to the climate conference on the one hand, and strengthening policy recommendations based on technical work on the other.

The Policy group will bring its support to the Moroccan government in finalizing the “Livre Blue” and disseminating its content and recommendations to the 12th Adaptation Committee (AC) meeting that will take place in Bonn in September. It is also a key moment to push AGWA’s messages to the AC and collaboration with other actors and countries will also be sought. The AGWA Policy group will also bring assistance to support the launch of the Blue Book at COP22 and input the high level sessions around it and the ‘Call for Africa’.<sup>31</sup>

Endeavors to continue promoting a specific window within the GCAA for water will be strong at SWWW through the organization of many official and side events as well as specific meetings. The presence of a strong Moroccan delegation will facilitate this. Contributions to the Climate Change Summit and specifically the Water Forum in Nantes (27-29.09) will also allow to collectively mainstream water within the GCAA.

The Policy group will also continue coordinating the work with other key partners (#CIW, WWC, IWA, UNESCO, GWP, REC) in order to finalize the COP22 side events and its presence at COP22. The Policy group will also look into which events within the upcoming UNFCCC process (2016-2017) are key to mainstream water within the different decision making processes and subsidiary groups.

Presently several side events have been proposed with other partners for the blue and green zones of COP22 in order to address the key issues of water’s role is the implementation of the Paris agreement, in building resilient cities, and knowledge sharing, dissemination and the involvement of the citizens.

### **PROPOSED CAPACITY BUILDING PROGRAMS**

**Expansion: Capacity building / outreach.** The secretariat believes there is an ongoing demand for coordinating and supplying fee-based workshops and capacity building for AGWA-supported projects. For instance, the UNECE has requested a one-day workshop for a winter/spring 2017 event on bottom-up assessment methodologies, probably delivered by Deltares and SIWI. This is an area to expand and perhaps advertise going forward, perhaps creating a dedicated site and advertisement campaign.

---

<sup>31</sup> <http://www.cop22.ma/en/african-ministers-make-call-%E2%80%9Cwater-africa%E2%80%9D-ahead-cop22>

**AGWA-U: Oregon State University** has already requested to reoffer the June 2016 entry-level climate adaptation course again for 2017. **UNESCO-IHE** had planned on a flood risk and climate change course in spring 2016 but had to defer until the fall. IHE also hopes to provide a larger platform to implement and develop AGWA-U content. The ultimate goal is to come up with a greater set of standardized material (general syllabus and workshop method) from which to teach even more AGWA-U courses across the globe for both universities and potentially other institutions as well. The **Asian Institute of Technology** in Bangkok has expressed interest in hosting AGWA-U courses and/or workshops in the future in order to raise the capacity of climate adaptation knowledge and experience among its students. The first such workshop should be in September 2016.

### PROPOSED TECHNICAL PROGRAMS

**An AGWA “methods” meeting.** Most formal AGWA meetings have been either held in the context of a large conference (e.g., World Water Week, World Water Forum) or they have been small invitation-only workshops and consultations. Diego Rodriguez, World Bank AGWA co-chair, has suggested that we plan a separate AGWA “methods” meeting to showcase recent applications, innovations, and approaches to the guiding elements for decision support, publications, and case studies. A planning meeting for this event has been scheduled in DC for November 2016.

**A multi-year CRIDA “program” following the CRIDA methods publication.** Through discussions with the CRIDA steering committee, particularly Deltares, IWR, and the Rijkswaterstaat (Water and Environment Ministry [RWS]), the CRIDA sponsors propose to develop a multi-year program to engage with water managers in the developing world, building a global community of practice.

**EEDS expansion, refinement, implementation.** WWF-MX’s application of EEDS to national level implementation and policy guidelines will be instrumental in defining some of the limits of application for this approach to resource management and conservation contexts. Two reports are planned as outputs over the coming year.

**NAIAD.** The confluence of ecological, engineering, finance, and insurance approaches to adaptation. NAIAD was notified of its penultimate acceptance for Horizon2020 funding, assuming the successful finalization of reporting / financial processing among members groups. A launch meeting has been tentatively scheduled for early 2017 to refine objectives and initiate knowledge sharing and project application. NAIAD represents a real extension of AGWA’s technical audiences and should be an important body of work going forward.

**S-Multistor.** Sustainable water storage processes. S-Multistor received penultimate notification of funding in July 2016 and submitted final processing in August. The project had a launch meeting in Delft in late July, with

a focus on three regional basin-level projects (Africa, South America, South Asia) and four core partners (IHE, TNC, IHA, and AGWA). Both regional and thematic workshops are planned for late 2016 and 2017. AGWA's primary contribution is the application of bottom-up methodologies, with a strong emphasis on ecological performance indicators as described through EEDS.

**Phase 2 criteria for the Water Climate Bond Standard.** The technical working groups for hydropower and nature-based solutions is well advanced, with the active drafting of supplemental criteria in both cases. The network emphasis extends to both projects, but the most active and direct implementation focuses on the nature-based solutions criteria. This work is intended for completion in early 2017, whereupon it will be need to pass public consultation and then be approved by the CBI board. We can expect potential issuances by mid to late 2017.

### Proposed Membership Changes

AGWA's member survey during 2015 revealed that our network consists primarily of water and climate adaptation professionals, often performing catalytic, technical, policy, and/or capacity building roles within their native institutions. Many work at a regional as well as a global scale. In practice, network members are intuitively aware of the rapidly nature of the practice of climate adaptation, tensions with between climate mitigation and adaptation, and the complex interplay between policy and practice. The challenge of mainstreaming novel practices is central to the typical AGWA member's experience, often on a daily or weekly basis. In the past, this member has been idealized as "Luis's engineer": a technical professional who is aware that she or he may be making unresilient, unrobust decisions, and is concerned a better mechanism of including climate adaptation into daily work.<sup>32</sup> The application of Luis's engineer to a policy setting is unclear, but we may be seeing a blending of technical and policy expertise as discussions of adaptation policy become more concrete and sophisticated — we may be near "Luis's policy specialist." In terms of regional distribution, the network continues to expand from western Europe and the Americas to a stronger Asian and African presence. However, much work remains in this area.

In addition to the strong technical group, AGWA has over the years also strengthened its policy network. The AGWA Policy group is a strong core group with important members like GWP, OECD; WaterAid, FWP, GI, UNECE and IWA with SIWI in the lead. This group has proven a strong potential in influence and networking, a strength that is likely to grow over the coming year.

For the Annual Meeting, the definition of membership in relation to funding is relevant. We have to date defined membership in relation to the size of the newsletter base and in terms of the level of participation with

---

<sup>32</sup> Referencing comments made in a 2011 workshop by Luis Garcia, World Bank.

events, programs, and even the size of the LinkedIn group for AGWA — all measures that track on the order of hundreds of individuals, often showing rapid growth over time.

For the coming year, the AGWA co-chairs have proposed that the membership itself be altered so as to support fundraising and core. For the August 2016 Annual Meeting, they suggest a discussion on:

1. Defining two categories of members: individual and institutional
2. All members shall subscribe to AGWA's mission and purpose, as described in its Community of Practice Charter.<sup>33</sup> This can be done via a simple email or equivalent. A person can be a subscriber to the newsletter without being a member.
3. All members shall contribute to AGWA's core work by:
  - a) Individual members, with a small annual membership fee (~20 USD)
  - b) Institutional members, with an annual membership fee (~5000 USD) **or** providing an equivalent sum from "admin" as a percentage on projects **or** in-kind contribution in terms of work hours, *in addition to what is normally expected by a SC member*, if this coincides.

---

<sup>33</sup> [http://alliance4water.org/resources/AGWA-Charter-Revised-221014\\_submitted.pdf](http://alliance4water.org/resources/AGWA-Charter-Revised-221014_submitted.pdf)

## BUDGET

- Secretariat funding covers a variety of programs and staff within SIWI, including senior staff, support staff, and programmatic staff, including travel, salary, and resources. Within that larger pool, the secretariat coordinator (John Matthews) is covered by SIWI at about 5–10 percent time for AGWA administration and networking activities, with the bulk of his salary supplied by the US Army Corps of Engineers and some project-specific funding; this level of funding is confirmed for through 2017. Since 2014, secretariat and core support for other projects (climate bonds standards, UNECE integration with AGWA) have been funded on a per project basis, with approval of SIWI, though the scope and capacity for secretariat work on additional projects is quite limited at this stage. Additional projects risk distracting from secretariat work rather than reinforcing network support though the projects to date have had a strong AGWA connection and integration.
- Expanded secretariat funding (additional SIWI staff related to administration, fundraising, communications, etc.) is still developing. The largest gap in capacity / time appears to be with pursuing additional funds through networking and grantwriting. John has a full-time assistant in the US (Alex Mauroner) to support some secretariat coordinator AGWA work, particularly with the AGWA site, newsletter, and production services, all of which have become an increasingly large component of secretariat functions.
- Some in-kind funding for Secretariat functions is provided, such as travel support for participation in significant events. For instance, Deltares and the UNECE recently subsidized some travel support for Matthews.

Secretariat expenses (Sept 2016 - Aug 2017)	Cost (USD)
Staff costs (internal SIWI staff)	\$ 60,000
Secretariat coordinator costs (Matthews, contributed by SIWI and USACE)	\$ 140,000
Travel (SIWI, various)	\$ 10,000
Conferences, seminars, workshops (SIWI, various)	\$ 5,000
<b>Total</b>	<b>\$ 215,000</b>

**SECRETARIAT FUNDING STATUS**

SIWI Funds	Not funded	Funded by USACE IWR	Funded through network members
------------	------------	---------------------	--------------------------------

Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Secretariat: Central contact point, help desk, fundraising, and representation and coordination role (ongoing)											
Secretariat: Newsletter, steering committee meetings as needed, and general assembly (ongoing)											
Coordinator salary (ongoing, ~90%)											
CRIDA publication, program launch											
Climate bonds phase 2											
NAIAD											
S-MultiStor Program on Sustainable Water Storage & Use											
Water Reserves in Mexico (September through December 2017)											

**FUNDRAISING EFFORTS**

Many in AGWA have been actively engaged in fundraising for AGWA components. These have spanned a number of categories:

**Core support.** Funding for the secretariat has been the most challenging aspect of AGWA to secure dedicated resources. In 2015, funding for the coordinator salary shifted largely from SIWI to UNSACE, which should continue into 2017. Overall, ongoing secretariat core support is a priority for SIWI's hosting responsibilities. This support represents an investment in AGWA and the secretariat functions that enable AGWA as a network.

**Programmatic / activity funding.** In terms of the bulk of resources allocated under an AGWA framework, programmatic and activity funding such as for technical programs has been the most successful and largest source of support, though much of it has been via in-kind funding for staff time, travel support, publication fees, and events logistics. Several grant proposals have been made in this area, and a number have been successful and productive. At any given time, a number of proposals are in process.

**Place-based technical project funding.** Place-based funding has largely occurred within the context of a single organization acting as the AGWA lead, such as the World Bank or UNECE. These projects are not coordinated by the secretariat, though they may receive some networking support from the secretariat.

## APPENDIX 1

### SECRETARIAT AND CORE FUNCTIONS

Secretariat functions have diversified somewhat since the hosting shift last August, with a number of activities:

**Newsletter.** The AGWA newsletter has become more regular and has been a consistently monthly publication, with a circulation that has risen from about 650 to over 920 over the past year (year on year, increases of about 70 percent). According to our mailing list service, about 22 percent of each issue is opened by our members.

**AGWA site.** The AGWA website has expanded and developed considerably in recent months, with consistent site traffic >1000 visits/week. In a recent AGWA survey, about one-third of respondents stated that they visited the site “regularly,” and another third visited “occasionally.” Other sister sites ([climatechangewater.org](http://climatechangewater.org), [SIWI.org](http://SIWI.org)) and a number of close Twitter partners (World Bank, IUCN) also help drive traffic to AGWA.

#### **Communication and outreach.**

AGWA continued to create new videos for the #ClimatelsWater series that began early 2015. After generating another half-dozen episodes, more attention was given to the growing #ClimatelsWater campaign that evolved from these videos and video production has been a lesser priority. Instead, more outreach has gone towards inter-network communication and platform development between the AGWA Policy Team and the #ClimatelsWater campaign. AGWA has made a more concerted effort to utilize the AGWA Blog and Events pages as well as LinkedIn to communicate with members of its network and the general public. This includes working with Apple News (an iOS app) to publish AGWA news to an incredibly large audience of iPhone and iPad users. Additionally, AGWA's LinkedIn group has grown to 260 members that regularly receive updates and posts from the Secretariat and each other. As another way of leveraging social media, AGWA has added social media buttons and icons to all of its web pages so visitors can more easily share information or pages with friends and colleagues. This has driven increased traffic to our sites and more external press.

**AGWA events.** Event coordination has always been an important part of the secretariat. This continued over the past year as AGWA was represented at even more meetings and conferences than the year prior. Perhaps the largest meeting of all was COP21. AGWA was part of several sessions in the Blue Zone and Green Zone. AGWA also helped with coordination and promotion of dozens of #ClimatelsWater events. The Secretariat also helped prepare for the National Adaptation Forum of Mexico, AQUACROSS in Madrid, the International Conference on Water and Climate in Morocco, and several other events. The Secretariat also led much of the

preparation for AGWA's official World Water Week seminars as well as network-specific events such as the Annual Members Meeting, an AGWA dinner, and a networking event.

## APPENDIX 2

### AGWA'S MEDIA PRESENCE

AGWA's influence within and outside of the climate adaptation community has continued to grow over the past year. In addition to internal press from AGWA, SIWI, and the World Bank, AGWA's work and expertise regularly appears in various media sources and publications. Below are a few instances in which AGWA received attention or emphasis in external media outlets since the last Annual Meeting.

#### **AGWA as a Policy Authority:**

*"Without careful thought, we risk tensions between our ability to cope with impacts now - even as we are trying to define commitments to slow future climate change."*

In preparation for the all-important COP21 last fall, Karin Lexén of SIWI and the AGWA Policy Team drafted an article for Government Gazette, a quarterly magazine covering EU policy. The article, "A Blueprint for Climate Policy," outlined the importance of water's potential to act as a connector between mitigation and adaptation policy areas, economic sectors, and nations with shared water resources.

[https://issuu.com/government.gazette/docs/government\\_gazette](https://issuu.com/government.gazette/docs/government_gazette)

*"The White House Water Summit sought to raise awareness of water issues and solutions that can help build a sustainable and secure water future through innovative science and technology."*

On World Water Day (March 22nd), the U.S. White House hosted a Water Summit to promote some of the most innovative programs and approaches being used to solve the problems facing water due to climate change. AGWA was honored to have two of its initiatives featured at this event: the new Water Climate Bonds Standard and the Collaborative Risk Informed Decision Analysis (CRIDA) methodology.

[https://www.ooskanews.com/story/2016/03/agwa-presents-two-new-initiatives-white-house-water-summit\\_170615](https://www.ooskanews.com/story/2016/03/agwa-presents-two-new-initiatives-white-house-water-summit_170615)

*"Low water levels at the Kariba dam on the border of Zambia and Zimbabwe are causing blackouts, and the Hoover Dam in the American southwest, which supplies Las Vegas with water, reached a new all-time low in April 2015. In the face of droughts and changing weather patterns, can these expensive and prestigious projects still be viable?"*

AGWA was featured on a popular NPR (National Public Radio) show as an authority on climate change's effects on infrastructure. During an episode of The Takeaway, AGWA's Secretariat Coordinator John Matthews spoke about what a sustainable dam could look like in light of climate change.

<http://www.wnyc.org/story/drought-sabotages-critical-hydroelectric-dams/>

### **AGWA Leading in Climate Finance:**

*“Knowledge of the water-climate connection will deepen and spread to new areas in 2016. Above all, the financial sector, aware of water's role but often only superficially, will be handed a new tool for evaluating the climate risk of water projects.”*

In 2016 AGWA continued a significant amount of work with developing a climate water bond standard – part of CBI's broader Climate Bond Standard. This article from Circle of Blue outlines the consortium behind the Water Standard (which includes AGWA), the certification process itself, and the increasing interest in "green growth" in the financial sector.

<http://www.circleofblue.org/2016/world/2016-preview-investors-will-see-tighter-connection-between-water-and-climate/>

*“I am often very concerned when issuers or investors appear unaware that they are making an investment in water that requires effective water knowledge, and I fear that many well-intended investments may actually have unintended consequences in terms of economic and ecological impacts if water knowledge is not included.”*

Climate bonds are gaining in popularity, but the Water Climate Bonds Standard that AGWA helped to develop is still a novel idea. This article in Development Finance magazine examines the Water Standard's role in encouraging private investment in water as a part of a low-carbon and climate-resilient economy.

[http://news.devfinance.net/how-to-plug-the-gap-in-water-investments?  
utm\\_source=160613&utm\\_medium=newsletter&utm\\_campaign=devfinance](http://news.devfinance.net/how-to-plug-the-gap-in-water-investments?utm_source=160613&utm_medium=newsletter&utm_campaign=devfinance)

### **AGWA and the Edge of Science:**

*“EEDS holds promise as a powerful framework for operationalizing freshwater sustainability under future hydrological uncertainty...”*

In September 2015, AGWA published a scientific paper in Nature Climate Change entitled “Sustainable water management under future uncertainty with eco-engineering decision scaling.” The paper, led by LeRoy Poff

and Casey Brown, focused on a new approach to co-managing environmental and water infrastructure under uncertainty. Co-authors came from organizations such as Deltares, OECD, the US Army Corps of Engineers, and SESYNC. Eco-Engineering Decision Scaling (EEDS) was the culmination of series of workshops sponsored by the US National Science Foundation and University of Maryland through the National Socio-Environmental Synthesis Center (SESYNC)

<http://www.nature.com/nclimate/journal/vaop/ncurrent/pdf/nclimate2765.pdf>

*“A recent paper in the journal Nature Climate Change suggests a seemingly obvious yet novel approach: Bring in aquatic scientists at the beginning so that engineers can consider ecological principles first, not last.”*

Following the publication of the new EEDS methodology in Nature Climate Change, AGWA’s efforts were featured in a New York Times article. The article “Heading Off Negative Impacts of Dam Projects” was part of a special report on Energy for Tomorrow. Numerous co-authors of the NCC article, all AGWA members, were interviewed.

<http://www.nytimes.com/2015/12/09/business/energy-environment/heading-off-negative-impacts-of-dam-projects.html>