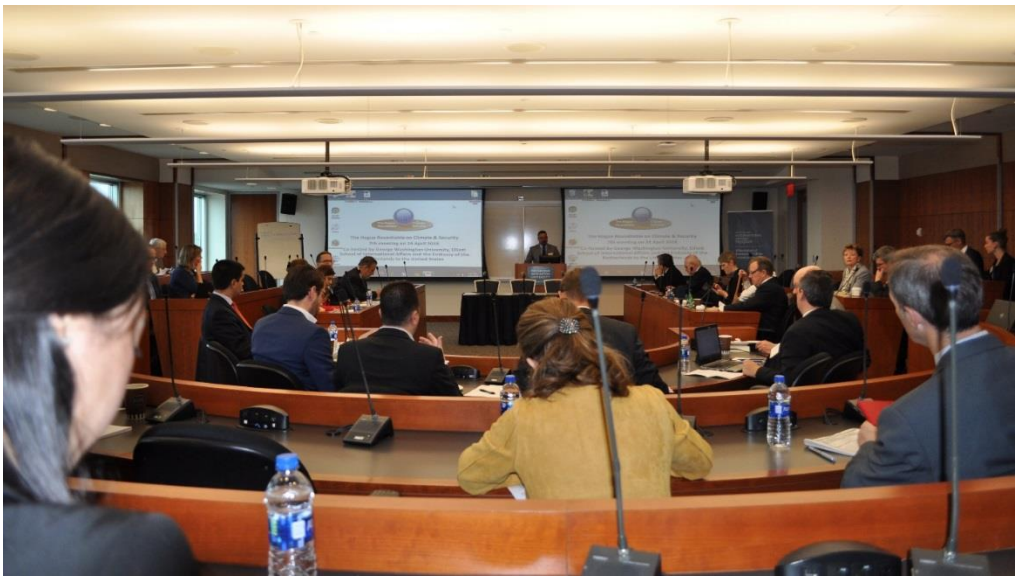
Report: The Hague Roundtable on Climate & Security

7th meeting, co-hosted by George Washington University, Elliott School of International Affairs and the Embassy of the Netherlands to the United States

24 April 2018
at GW Elliott School of International Affairs
On Twitter ***@HagueRoundtable***

Climate Risks and Resilience – Highlighting Initiatives to Face Common Challenges

The 7th meeting of The Hague Roundtable on Climate & Security highlighted international initiatives on climate adaptation and water resources, with focus on risks to stability, conflict, food security and sustainable development. This special meeting outside of the Netherlands featured an interactive session with a Dutch UN Security Council representative, as well as views on climate impacts that affect military forces globally, including their capacity for humanitarian missions. A screening and discussion of the documentary "Tidewater," on sea level rise, coastal military installations and communities, followed Roundtable discussions and networking lunch.



This meeting was co-organized by Matt Luna, Roundtable creator, Shiloh Fetzek of the Center for Climate & Security, and Dr. Marcus King of the GW Elliott School. Russell Shorto, author and specialist on Dutch-American history and relations, acted as moderator. Rear Admiral Ann Phillips (USN-Ret.) led the screening and discussion of "Tidewater." Special recognition goes to Heleen Bakker, Deputy Head of Mission at the Embassy of the Netherlands for support and organizational input.

Organizations and governments represented

- Center for Climate and Security
- Center for Water & Security Cooperation
- City of Charlotte, North Carolina
- College of William and Mary
- Deltares
- Earth Ethic for Environmental Security
- George Mason University Schar School of Policy and Government
- George Washington University Elliott School of International Affairs
- Global Military Advisory Council on Climate Change (GMACCC)
- Global Water 2020
- IHE Delft Inst. for Water Education
- Institute for Environmental Security (IES)
- European External Action Service
- American Security Project (ASP)
- Inside Climate News
- Embassy of Belgium
- Embassy of Germany
- Embassy of the Netherlands
- Embassy of Spain
- Mission of the Netherlands to the UN
- PHB Development
- Red Duke Strategies, LLC
- Russell Shorto, Author & Historian
- SNV U.S.A.
- Stockholm International Peace Research Institute (SIPRI)
- SunGlacier solar-powered water project
- Truman National Security Project
- U.S. Department of State, Oceans and International Environmental and Scientific Affairs
- Washington D.C. Department of Energy and Environment
- Wilson Center
- World Resources Institute (WRI)

Special thanks goes to Dr. Marcus King of the **GW Elliott School of International Affairs** for his generous invitation, and to the following organizations for their support to make this Roundtable possible:

The Embassy of the Netherlands to the United States

Deltares

IHE Delft Institute for Water Education

PHB Development

The MIDES (microbial desalination) project

World Resources Institute

Roundtable Agenda & Presentations, 24 April 2018

– Welcome by **Dr. Marcus King** of the Elliott School and **Matt Luna**, Roundtable creator/organizer

– Remarks by **Ambassador of the Netherlands to the United States H.E. Mr. Henne Schuwer**

– Presentation and discussion on UN Security Council and climate, with focus on March 2018 Dutch UNSC presidency: **Nelaam Melwani**, of the Netherlands Mission to the UN

– Implementing key points of the Planetary Security Initiative's **Hague Declaration on Planetary Security** with **Shiloh Fetzek** of The Center for Climate and Security and **Malin Mobjörk** of SIPRI

– Dutch & European Water expertise for climate resilience:

- Water, Peace & Security Initiative: **Charlie Iceland** of the World Resources Institute, **Ruben Dahm** on behalf of Deltares, and IHE Delft Inst. for Water Education
- Sea level rise and Dutch flood resilience work in the United States and globally, including commentary from **Greg Douquet**, of **SIM-CI in the Netherlands** and **Red Duke Strategies**.
- Innovation in water and environment from Dutch/European organizations

– Role of the military in responding to climate threats to stability: presentation and discussion with **Brig. General Stephen Cheney** (USMC-Ret.) of the American Security Project and GMACCC and **Hon. John Conger** of The Center for Climate and Security; featuring **Sherri Goodman**, Senior Advisor for International Security at the Center for Climate and Security

– **Networking lunch**

– Screening of "Tidewater" with panel discussion, featuring **Rear Admiral Ann Phillips** (USN-Ret.) of The Center for Climate and Security

Online reports on the 24 April Hague Roundtable in Washington

- ***U.S. and Dutch National Security and Business Leaders Talk Climate Risks*:** https://climateandsecurity.org/tag/hague-roundtable/
- ***First International Meeting of The Hague Roundtable on Climate & Security*:** https://www.un-ihe.org/news/first-international-meeting-hague-roundtable-climate-and-security
- ***Water problems don't stop at borders*:** https://www.deltares.nl/en/news/water-problems-dont-stop-borders/
- ***Gen. Stephen Cheney in security discussion at climate roundtable in Washington*:** http://gmaccc.org/gen-steve-cheney-leads-security-discussion-climate-roundtable-washington/
- ***Increasing peace and prosperity amid climate impacts:*** https://www.phbdevelopment.com/increasing-peace-and-prosperity-amid-climate-impacts/

Selected observations, questions and possible action from Roundtable discussions:

- How can politics be removed from climate change resolutions and action? The world needs to speak the same language on this issue – so that it is de-politicized.
- The climate and security community of needs to better establish how to convene larger numbers of political leaders on action-based climate risk data.
- A more closely connected research community is needed. All related factors are rapidly evolving and can be linked with UN Security Council (UNSC). Timing is also essential to this.
- Where are Bangladesh climate migrants going to go? Numbers could easily be in millions.
- The Gulfstream is changing and could open new naval strategic possibilities. Arctic ice is melting and creating new possible transportation, military/conflict zones.
- The convergence of these issues at UNSC, local and other levels – can lead to economic activity with potential to impact general political will.
- Military is normally more insulated from politics on climate debate and can speak out to politicians because military units are the ones experiencing climate impacts on their operations and preparedness, which in turn affects the overall security of nations.
- Are eco peace-keeping missions an option for climate-fragile areas? This could help prevent further rapid deterioration of ecosystems that act as a natural buffer to climate change impacts.
- Connect more cities on smart structures and innovation for climate adaptation.
- How do we identify what are the right innovations in a changing future? What's right today may not be right tomorrow. Look at more application of global water forecasting models.
- How to plan for the completely unknown in a future in which models of past climate and environmental trends are becoming far less relevant? How can universities work with data companies and others?
- How do we convince leaders on data, globally? What are possible benefits from their intervention? What is the possible role and benefit from involvement of the reinsurance sector? Then what can be done in acting on the data?

Key findings from Roundtable listed in the Deltares website article:

Water problems don't stop at borders

1. There is agreement that climate change and water security threats are an important security issue.
2. New technology is providing tools to get a good understanding and advance insight in what is going on and what the implications are. In other words, the basic information we need exists, but requires processing and combining to get information that can support action.
3. Although there is technical knowledge to adapt to and to mitigate climate change and water shocks, countries have different policies regarding investment in prevention or response and rebuilding.
4. Trade-offs are likely needed between different interests, for instance between certain sources of renewable energy (hydro-power, bio-fuels) or expansion of irrigated agriculture on the one hand and ecosystems and livelihoods of people depending on ecosystems on the other hand.
5. The Water Peace and Security Initiative (WPSI) can assist in making trade-offs and scenarios more clear for decision makers and use this information to create political – and stakeholder support for conflict-sensitive adaptation. This may include options to mitigate negative impacts of trade-offs.

Roundtable remarks by Ambassador of the Netherlands H.E. Mr. Henne Schuwer "The Water-Security Nexus"

“Thank you for inviting me here today to talk about the role water plays in international peace and security. This talk comes at a good time. The Netherlands is in the midst of its year-long seat on the UN Security Council, and one of our goals is to shine a light on water as a cause of conflict.

In fact, Sigrid Kaag, our Minister for Foreign Trade and Development Cooperation, spoke to a UN panel about this recently. She explained how we have to make sure everyone has access to clean water. A community that has water to drink can feed its crops and economy, and is less likely cause conflicts. I would add that we also have to help each other prevent floods. We can do this by learning to live with water while keeping our feet dry in a way that does not drown our neighbor. Failure to do so gives water the power to harm, divide, or even destroy communities.

Water Scarcity

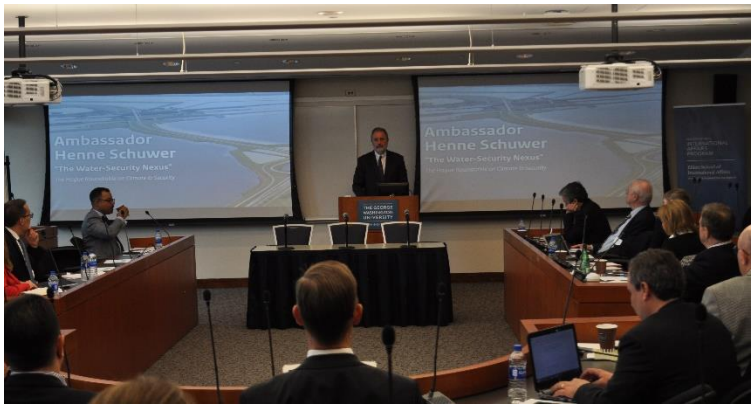
Water scarcity affects the lives and livelihoods of people. We all know this. International organizations have been issuing warnings for quite some time about the impact of the water crises because of:

- increased demand for water as a result of economic growth
- global population growth
- increased urbanization
- climate change
- and bad water management.

UNESCO predicts that by 2025, 1.8 billion people will live in areas with absolute water scarcity. Two-thirds of the world population will deal with periodical water scarcity. It’s a recipe for conflict, but we can prevent it.

The Water, Peace and Security Initiative

To address this growing crisis, the Netherlands Ministry of Foreign Affairs has created the Water, Peace and Security Initiative with several partners, including the World Resources Institute. The goal is to mitigate water-related conflicts timely and effectively while maintaining peace.



The initiative weaves together four pillars:

- **Understand** the connection between water and security
- **Mobilize** effective action
- **Learn** to address vulnerabilities linked to water-based security threats
- Create a **dialogue** for peaceful confliction resolution

Water Management

I mentioned a moment ago bad water management techniques can lead to conflicts. This can happen, for example, in the chaos after a flood or when one community builds up its own flood defenses only to drown another. The Netherlands understands these problems because we've been dealing with water for more than 800 years. Back then we started with simple mounds of dirt to block the water, and built windmills to pump water out of our land so we could farm.

Through the centuries, our flood defenses have grown into technological wonders. Five big movable storm surge barriers and an intricate system of dozens and dozens of smaller, levees, locks, dunes and dikes protect the country from flooding. The Maeslant and Oosterschelde barriers are the two great examples. The Maeslant is one of the largest moving structures on Earth, and protects the Port of Rotterdam, a key economic cog in the wheel of the European economy. And the Oosterschelde is a five-mile long storm-surge barrier that the American Society of Civil Engineers calls one of the modern engineering wonders of the world.

But we don't just block the water. We have learned to live with water.

We are changing the course of 30 rivers to give them room to flood during heavy rains to protect lives and livelihoods. Even creating an artifial island in the river Waal. Big cities like Rotterdam and The Hague use smart design to make water protection an integral part of the cityscape. For example in Den Haag Scheveningen Beach combines a new underground dike with an eye-catching designed seaside resort

Other nations recognize this expertise, and often come to the Dutch to help improve their flood defenses, which will become increasingly important as the seas rise. These two approaches, making sure communities have access to clean water and helping them build up their flood defenses, create the nexus of water security.

The time for action is now, before we find ourselves without water or drowning in it."

Excerpts from presentation by Charles Iceland of the World Resources Institute: Water and Global Security

WRI-Aqueduct's "baseline water stress indicator" reveals that many places throughout the world are experiencing high or extremely high levels of water stress, driven mostly by water demand for irrigated agriculture. In some highly industrialized areas, there is also significant use of water by industry, including for electric power generation. In some cases, large cities compete with agricultural and industrial users for available water. Aqueduct's future scenarios indicate that unless we radically change the way we manage our water, water stress will continue to grow in the coming decades as a result of growing water demand and decreasing water supply in some regions of the world (due to climate change).

Over the years, WRI-Aqueduct researchers have investigated – via numerous case studies – the links between water insecurity and political insecurity. Through these case studies, we have identified three general pathways through which water insecurity leads to political insecurity:

- Diminishing water supply
- Growing water demand
- Excessive water supply

The Water, Peace and Security Initiative is a two-year effort that WRI is undertaking with Deltares, IHE-Delft, The Hague Center for Strategic Studies, and Wetlands International. This effort is actively supported by the Netherlands Ministry of Foreign Affairs. The project has four components:

1. Understand: Develop an online global early warning system for water-related threats, and implement assessments to verify threats, and identify possible interventions
2. Mobilize: Conduct outreach to global "3D" audiences (diplomats, defense and development experts), as well as to national governments of developing countries
3. Learn: Provide training and capacity building to help developing countries cope with current and future crises and avert potential destabilizing conflict and migration;
4. Dialogue: Convene water dialogues among key stakeholders at both international and sub-national levels, to try to diffuse tensions and pave the way for solutions.

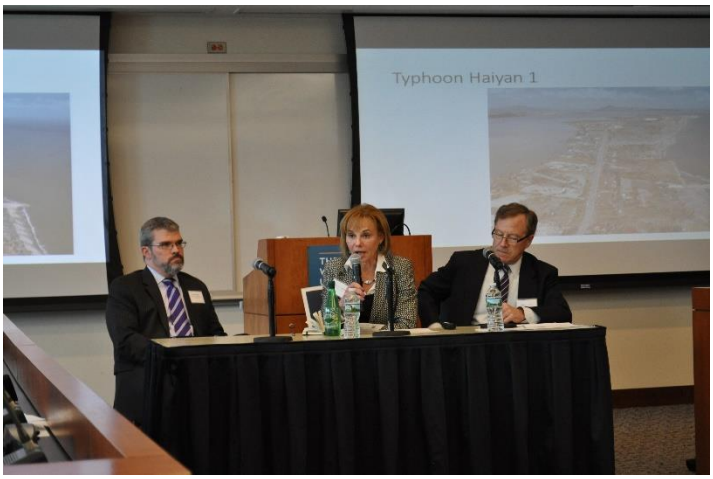
As part of the "Understand" component of the project, WRI will lead the development of a global early warning system for potential water-related threats to human security. This online system will be hosted on WRI's new Resource Watch data platform. Resource Watch combines a number of WRI datasets with hundreds of third party datasets on global natural resources and climate change, as well as social, economic, and political conditions throughout the world.

The early warning system will combine a number of hazard, exposure, and vulnerability datasets to produce a water and security heat map. Yellow areas on the map will indicate places of heightened water and security risk. These risks will need to be verified via on-the-ground follow-up. Once we verify risks, we can begin to identify possible remedies and work with stakeholders on risk mitigation efforts. In developing the early warning system, we'll begin with hazard indicators – such as drought or change in surface water extent. Then we'll add exposure indicators, such as population density and vulnerability indicators, such as Fragile State Index score.

Excerpts from presentation and discussion: Role of the military in responding to climate threats to stability

Brig. General Stephen Cheney (USMC-Ret.) of the American Security Project and GMACCC and **Hon. John Conger** of The Center for Climate and Security; featuring **Sherri Goodman**, Senior Advisor for International Security at the Center for Climate and Security

A decade ago climate and security were rarely mentioned in the same sentence, but now many people have connected water, climate change, resources and related issues to the field of security. There is a convergence between what is happening in advancing climate security, connecting those in the research community with the practitioner community, also with the private sector. On risk assessment process: even if military commanders don't like the politics of climate change, they want to protect their bases and forces, as well as enact plans in such a way as to reduce those risks in the future. Climate change has been politicized in the US, but less so in national security. So it's easier to deliver a message if it has a security aspect. Even in the current U.S. administration, commanders are still taking a more climate-oriented approach.



John Conger (left), Sherri Goodman and Stephen Cheney

The SOS Symposium from The Hague on 18 – 19 April 2018, as presented by Wouter Veening, Chairman of the Institute for Environmental Security

Website: https://sos-symposium.org/
Videos: https://www.youtube.com/playlist?list=PLhG1KzU5vZWxFOopqNvmQRILaP11EXTAT

The symposium gave the scientific contours of a roadmap to protect and restore the health of the planet.

Save Our Skies
The impact of Climate Change and other ecological changes exacerbated by human activity on the atmosphere is well-documented, with a scientific analysis of those impacts.

Save Our Skins
Parts of the Middle East and North Africa will become so hot that human habitability is compromised.

Save Our Seas
Introduction to the Hydrosphere & Save Our Seas, on the state of the earth's seas and oceans

Save Our Shores
Sea level rise is threatening coastal areas. Communities and cities located at the shores are at risk of flooding.

Save Our Streams
Large-scale dams, deforestation, pollution and melting glaciers all impact on crucial streams and river basins.

Save Our Soils
In many parts of the world soils are irreversibly degraded and polluted with risks for ecosystem integrity.

Save Our Space
Debris is increasingly polluting space. A comprehensive overview of how much space junk we are talking about and why we should care about it.

Save Our Species
Due to habitat destruction, pollution, poaching, illegal hunting and fishing, and climate change, species around the world are becoming extinct at an alarming rate.

Save Our Selvas
The relationship between forests and climate change has focused on the amount of carbon stored in forests and the amount of carbon dioxide released when forests are converted in other land uses.

Save Our Seeds
Our crops for food and agriculture were developed from wild plant species through adaptation by humans. This process resulted in crops in which only a subset of the wild genetic diversity was represented.

Save Our Systems/Civilisations
Combination of the "spherical" SOS's from a systems ecology perspective and insights into what the connections are, with implications for civilization.

Save Our Science
In times of fake news and social media, scientific accuracy is at risk of being eroded. However, its importance for painting an accurate picture of where we are at and where we will be going is more important than ever.

Save Our Security
The degradation of the natural environment can cause or exacerbate conflicts, and conflicts in turn can lead to the degradation of the environment, leaving us in a vicious cycle.

Innovative initiatives presented at Roundtable

The Land Life Company is restoring ecosystems and communities around the world with the COCOON planting technology as a low-cost, sustainable and scalable solution to plant trees in arid soils. The innovative COCOON planting technology enables trees and plants to grow in arid conditions.

The MIDES (microbial desalination) project is developing a sustainable low-energy process of producing safe drinking water, using Microbial Desalination Cells (MDC). The first pilot-scale demonstration site of the technology will begin operation in April 2019 in Denia, Spain. The target of this Horizon 2020 project is to produce 150 L/h of drinking water, while treating between 1-3 m^3/day of wastewater, with an extremely low energy consumption of less than 0.5 kWh/m^3.

The SunGlacier Project is generating water from air using only solar power – as a water source for hot, dry parts of the planet, including off-grid settlements. The project was successfully tested in Mali in April 2017.

Film screening and discussion: Led by Rear Admiral Ann Phillips (USN-Ret.)

The documentary film Tidewater: The Hampton Roads area of Virginia is relatively unknown nationwide, but it is the region whose vulnerability to sea level rise most affects military readiness and overall national security. With 14 military installations spread across 17 local jurisdictions, it is the highest concentration of military assets in the country, where 1 in 6 residents are associated with national defence.

Written and produced by Roger Sorkin, in association with the American Resilience Project, the film explores how homes, schools, hospitals, and families are increasingly struggling to keep up with the effects of rising waters, and the military and all the surrounding municipalities are working toward solutions in the name of strengthening national security and enhancing economic prosperity.

Related publications and events on climate, water and security

Europe's Responsibility to Prepare: Managing Climate Security Risks in a Changing World – Shiloh Fetzek of the Center for Climate and Security and Louise van Schaik of the Clingendael Institute: *https://climateandsecurity.org/euresponsibilitytoprepare/*

A Test of Endurance: Addressing migration and security risks by means of landscape restoration in Africa – A Planetary Security Initiative Report https://www.clingendael.org/sites/default/files/2018-06/PSI_Report_A_Test_of_Endurance.pdf

A Watershed Moment for Iraqi Kurdistan: Subnational Hydropolitics and Regional Stability – Dr. Marcus King of the GW Elliott School and Senior Fellow at the Center for Climate and Security: https://www.newsecuritybeat.org/2018/05/watershed-moment-iraqi-kurdistan-subnational-hydropolitics-regional-stability/#disqus_thread

More than infrastructures: water challenges in Iraq – Tobias von Lossow of the Clingendael Sustainability Research Unit: https://www.clingendael.org/sites/default/files/2018-07/PB_PSI_water_challenges_Iraq.pdf

Climate Change and the UN Security Council – Edited by Shirley V. Scott of UNSW Canberra and Charlotte Ku of Texas A&M University https://www.e-elgar.com/shop/climate-change-and-the-un-security-council

Update Magazine – from IHE Delft Institute for Water Education https://www.un-ihe.org/update-magazine

The **Brussels Dialogue on Climate Diplomacy** (BDCD): a series of informal meetings to exchange information and promote cooperation among European institutions and international organisations active in the nexus between climate change and international, national, human and environmental security: https://www.brusselsdialogue.net/about.html

Climate, Peace and Security: The Time for Action – Hosted by High Representative for Foreign Affairs and Security Policy Federica Mogherini on 22 June 2018 focused on the importance of tackling climate risks to security and peace: https://eeas.europa.eu/headquarters/headquarters-Homepage/47165/climate-peace-and-security-time-action_en

4th Annual Planetary Security Conference will be held on 19 – 20 February 2019 in The Hague: https://www.planetarysecurityinitiative.org/news/announcing-2019-planetary-security-conference-doable

The next Roundtable will be held in the 4th quarter of 2018 at a location to be announced. Please feel free to join the initiative by attending and contributing information on possible topics of discussion. The overall goal is to build international cooperation on initiatives to adapt to climate and water issues that are becoming increasingly serious and widespread. We're living on a changing planet; let's see what we can all do together!

Contact Matt Luna, Roundtable creator and organizer, for more information: **mluna@envirosecurity.org**