

Women in Water Science Diplomacy Day: A Special Experience Exchange Event to Mark Women in Diplomacy Day 2024

After Action Report¹
June 24, 2024 | Online

Summary

On June 24, 2024, the Permanent Forum of Binational Waters and the Women in Water Diplomacy Network, with partners at the Environmental Law Institute, the Stockholm International Water Institute and the Central Arizona Project hosted a special online event bringing our communities together to discuss and elevate the importance of Science Diplomacy in transboundary water cooperation and management. The special event was attended by 80+ expert participants from more than 18 countries and Tribal Nations with a strong representation from the Americas – particularly the United States and Mexico. Participant evaluations pointed to the session's strong relevance and application to various professional pathways of water diplomacy. A near plurality of responding participants indicated that their participation in the session they gained an *'enhanced feeling of community and shared mission.'* Additional details from the evaluation are included below. The full recording of this session is available here: <https://www.eli.org/events/women-water-science-diplomacy-day-special-experience-exchange-event-mark-women-diplomacy-day>.

The session was opened by **Elizabeth A. Koch**, Women in Water Diplomacy Network Process Support Team Lead and Senior Manager, Environmental Law Institute, who warmly welcomed participants to the celebration of the second annual Women in Diplomacy Day. She emphasized the importance of focusing on women's roles in water diplomacy before summarizing the Women in Water Diplomacy Network's Global Strategy and highlighting the recent launch of the Network's North American chapter. Following this introduction, **Dr. Rosario Sanchez**, Director, Permanent Forum of Binational Waters, explained the Forum's mission to disseminate scientific knowledge about binational waters and enhance collaborative efforts along the Mexico/United States border. The Forum, Rosario explained, aims to leverage the expertise of over 250 professionals, prioritizing the inclusion of women and minorities to address representation gaps. It strives to "socialize science," making it accessible and relevant to communities, and amplify the contributions of women and young scientists in transboundary water issues through initiatives like science talks and the Women in Science Initiative.

The welcome remarks were followed by an interactive online participant exercise facilitated by **Jesse Ferraioli**, Research Associate, Environmental Law Institute and **Montserrat Santibanez**, Women in Science Initiative Coordinator, Permanent Forum of Binational Waters. The exercise revealed a diverse group of attending participants, including consultants, researchers, negotiators, policy decision-makers, program officers, communications experts, professors, regional coordinators, corporate advisors, and intergovernmental relations specialists. The participants represented a balanced mix of early-career and seasoned professionals in the field of water diplomacy.

¹ This Women in Water Diplomacy Network After Action Report was authored by Jesse Ferraioli, Research Associate at the Environmental Law Institute (ELI) and Elizabeth A. Koch, Senior Manager for International Programs at ELI and the Process Support Team Lead for the Women in Water Diplomacy Network.

Following the interactive exercise, **Dr. Elia M. Tapia**, faculty professor at Universidad de Sonora in Hermosillo, Mexico facilitated an experience exchange with an esteemed panel, focusing on the role of science in water diplomacy.

Dr. América Lutz Ley, Professor, El Colegio de Sonora, Mexico emphasized the importance of transboundary collaboration in water diplomacy, underscoring that water knows no political boundaries. She highlighted key challenges, such as increasing female representation in binational collaboration, addressing cross-border asymmetries, and prioritizing interdisciplinary collaboration. América concluded by emphasizing the need to leverage collaborative networks to overcome these challenges.

Dr. Florence Grace Adongo, Executive Director, Nile Basin Initiative, Uganda described her direct involvement in facilitating transboundary cooperation and promoting inter-basin dialogue and information sharing through platforms such as the Triannual Nile Basin Development Forum. She emphasized that practical experience and interdisciplinary engagement are essential for translating science into policy. Florence also underscored the importance of forums for stakeholder engagement and peer-to-peer learning opportunities to foster sustainable water management.

Dr. Sarah Kapnick, Chief Scientist, National Oceanic and Atmospheric Administration, United States highlighted the importance of bridging science and policy through robust communication channels, ensuring data accessibility and integration, and fostering community participation. She explained that NOAA employs prediction methods for short-term weather forecasts and projection methods for long-term risk analysis, both essential for preparing for future climate events and communicating risk to the public. Sarah emphasized the crucial role of citizen science in data collection and resiliency planning and stressed that open data sharing is key to effective water data diplomacy.

Suray Charyyeva, Junior Researcher, Leibniz Institute for Agricultural Development in Countries in Transition, Turkmenistan described the age and gender biases she has faced as a young professional in the field of water science diplomacy. Several participants sympathized with her experiences. Suray advised being able to clearly communicate research in language that policymakers understand and emphasized the importance of networking to maximize engagement and impact and overcome biases.

Dr. Yolanda Lopez-Maldonado, Indigenous Mayan science diplomat, Mexico, described the importance of incorporating Indigenous knowledge and Indigenous Earth observations into policymaking. She emphasized that this knowledge is as valid and precise as Western science, offering over a millennium of insights into local hydrologic processes and cultural significance often overlooked by policymakers. Yolanda highlighted the challenges of influencing policy from an Indigenous perspective, stressing the need to bridge Indigenous knowledge with Western science while also affirming that Indigenous knowledge stands as a legitimate and independent source of knowledge.

Brenda Burman, General Manager, Central Arizona Project provided concluding remarks, emphasizing that science fosters trust, which, in turn, bridges gaps and enables relationship building across physical boundaries. Reflecting on Dr. Adongo's earlier remarks on capacity building, she underscored the importance of open access of information, identifying both data and stakeholder gaps, and building relationships to enable better management of shared water resources. Brenda concluded the session by suggesting future discussions on both small and large-scale victories in this area.

Session evaluation summary:

Monitoring and evaluation are critical aspects of all Women in Water Diplomacy Network engagements and Network reports often feature a full run-out of participant responses. The inclusion of this extensive information serves to encourage co-creation of Network engagements and spotlight participant reflections in their own words. As part of the Women in (Water Science) Diplomacy online event, anonymous participant reflections and responses were collected via a short online survey at the close of program. All respondents were made aware that aggregate response data as well as individual statements may be quoted anonymously in external communications and activity reports such as this After-Action Report. Eighteen (18) unique responses were submitted. This represents about 20% of the session's participants highlighting a need to find more engaging methods for capturing input on Women in Water Diplomacy Network activities. The evaluation was provided in English with translation enabled to allow participants to read and respond in a variety of languages.

Age Distribution of Participants:

35 years old and younger	5
36-45 years old	5
46-55 years old	7
56-65 years old	0
66 years old or wiser	1



Today's session was relevant and applicable to my professional work?

Strongly Agree	14
Agree	3
Neutral	1
Disagree	0
Strongly disagree	0



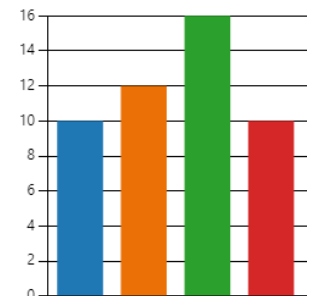
During today's session I had the opportunity to:

Increase my professional knowledge (blue)

Gain new ideas for elevating women in transboundary water cooperation (orange)

Gain enhanced feeling of community and shared mission (green)

Gain positive energy and enthusiasm (red)



Some participants elaborated on the value of the session:

- 'I have a stronger international outlook on transboundary water.'
- 'I really loved how all aspects of various sectors come together into water diplomacy towards achieving SDGs in an inclusive manner.'
- 'Very good substantive information from experts.'
- 'Expanded my professional network'

- *'It was amazing to learn about combining indigenous knowledge and science to achieve water diplomacy.'*

The event's agenda provided sufficient space and opportunity to raise questions and comment on the sessions' content:

● Strongly agree	7
● Agree	9
● Neutral	2
● Disagree	0
● Strongly disagree	0



The event's agenda provided sufficient space and opportunity to share my views, experience and knowledge:

● Strongly agree	4
● Agree	9
● Neutral	5
● Disagree	0
● Strongly disagree	0



Would you be interested in participating in future events jointly convened by Women in Water Diplomacy and partners including the Permanent Forum for Binational Waters?





● Yes	17
● No	0
● Maybe	1



Additional Comments from participants:

- *'Very interesting session.'*
- *'Awesome!'*
- *'I missed the first hour because the time zones were confusing on the original agenda. Making sure this is clear in the future would be much appreciated :)'*
- *'How can I take part in this network?'*
- *'Just congratulations to you all for your excellent work. I admire them.'*
- *'I would like to know how to get more involved.'*
- *'The time was too short.'*

Program

TIME (CST)	MONDAY, JUNE 24, 2024 AGENDA
9:45-10:00	<p>Virtual Coffee Break: <i>Before the meeting officially starts, the online meeting space will be opened early for participants to check their online connections and have informal discussions before the official start time. Please join us!</i></p> 
10:00 - 10:15	<p>Welcome to this special Women in (Water Science) Diplomacy Day joint community event! Dr. Rosario Sanchez, Director, Permanent Forum of Binational Waters; and Elizabeth A. Koch, Women in Water Diplomacy Network Process Support Team Lead and Senior Manager, Environmental Law Institute</p> 
10:15-10:25	<p>Who is in the room? – interactive online participant exercise: Facilitated by Jesse Ferraioli, Research Associate, Environmental Law Institute and Montserrat Santibanez, Permanent Forum of Binational Waters</p> 
10:25-11:00	<p>Experience Exchange: The Role of Water Science in Water Diplomacy Facilitated by Dr. Elia M. Tapia, faculty professor at Universidad de Sonora in Hermosillo, Mexico</p> <p>Invited Expert Reflections from:</p> <ul style="list-style-type: none"> • Dr. América Lutz Ley, Professor, El Colegio de Sonora, Mexico • Dr. Florence Grace Adongo, Executive Director, Nile Basin Initiative, Uganda • Dr. Sarah Kapnick, Chief Scientist, National Oceanic and Atmospheric Administration, United States • Suray Charyyeva, Junior Researcher, Leibniz Institute for Agricultural Development in Countries in Transition, Turkmenistan • Dr. Yolanda Lopez-Maldonado, Indigenous Mayan science diplomat, Mexico 
11:00-11:15	<p>Open Q&A – Session participants are welcome join in the discussion!</p>
11:15-11:20	<p>Group Screenshot/Picture: No meeting is complete without one!</p>
11:20 - 11:25	<p>Closing Reflection Brenda Burman, General Manager, Central Arizona Project</p>
11:25-11:30	<p>Exit Poll</p>

Resources for further details on the co-convening partners:

- The Permanent Forum of Binational Waters Landing page: <https://www.binationalwaters.org>
- The Women in Science Initiative: <https://www.binationalwaters.org/category/programs-and-initiatives/women-in-science/>
- [The Women in Water Diplomacy Network's Global Strategy 'A Path Forward for Women, Water, Peace and Security'](#)
- Women in Water Diplomacy LinkedIn page here: <https://www.linkedin.com/company/women-in-water-diplomacy-network>
- North American Women in Water Diplomacy Network resources: <https://www.eli.org/women-water-diplomacy-network>.
- [After Action Report from the 2023 UN Water Conference](#) including highlights of the participation of IJC and IBWC among others.
- [After Action Report from the North American Women in Water Diplomacy Network launch event](#)

Additional Resources Shared During Event

- Lopez-Maldonado, Yolanda, and Fikret Berkes. "[Restoring the environment, revitalizing the culture.](#)" *Ecology and Society* 22.4 (2017).
- Dialogic science-policy networks for water security governance in the arid Americas
- Lutz-Ley, América N., et al. "[Dialogic science-policy networks for water security governance in the arid Americas.](#)" *Environmental Development* 38 (2021): 100568.
- UNCCD Latin America and the Caribbean Community Stream. [Link to join community.](#)

Speaker Short Biographies: *alphabetical order by first name*

Dr. América Lutz Ley (Mexico) is the General Academic Director and Professor-Researcher at El Colegio de Sonora, in Hermosillo, Mexico. She holds a PhD in Arid Lands Resource Sciences with a minor in global change from the University of Arizona, and a Master's degree in social sciences with concentration in public affairs from El Colegio de Sonora. She is also a member of the National Researchers' System in Mexico (SNI), as well as a recognized professor by the Mexican Ministry of Education's Professors Professional Development Program in Higher Education. Her research focuses on the dynamics of human adaptation to climate change; water security management; and mining and agrarian extractivism. She analyzes these aspects from socio-ecological systems approaches, political ecology, feminist political ecology, and institutions and public management. She has published more than 35 indexed and peer-reviewed articles and chapters in English and Spanish and currently participates in two projects financed by the Council of Humanities, Sciences, and Technologies in Mexico (CONAHCYT) on these topics.



Brenda Burman (United States) joined Central Arizona Project in 2021 and has been the general manager since January 2023. Burman has more than 25 years of experience working on Western water and natural resource issues, where she has been committed to finding collaborative solutions to secure reliable water supplies for communities, farms, tribes and the environment. Before joining CAP, Burman was the Commissioner of the Bureau of Reclamation and the first woman to hold that position. Burman has served in many other areas of the water community: in private legal practice; as the water and energy counsel for U.S. Senator Jon Kyl; as senior water advisor to an environmental organization; and in senior positions for water districts. Burman holds a Juris Doctor degree from the University of Arizona College of Law and is licensed to practice law in Arizona, Colorado, and Wyoming.



Elia M. Tapia (Mexico) is a faculty professor at Universidad de Sonora in Hermosillo, Mexico. She holds a Ph.D. in Arid Lands Resource Sciences and a Minor Degree in Hydrology from the University of Arizona. Elia has thirteen years of experience in applied hydrology, hydrogeology, climate change studies, and disaster risk assessment. She has been contributing to the United States-Mexico efforts on the Transboundary Aquifer Assessment Program (TAAP) for over 12 years, among many other projects for private and public institutions in the United States, Latin America, and the Caribbean. Elia has been recently involved in projects for the Inter-American Development Bank (IDB) and IDB Invest, including the Transboundary Regional Plan for Drinking Water, Basic Sanitation and Solid Waste Management for the Amazon Cooperation Treaty Organization. Her areas of interest involve water governance, climate change, stakeholder engagement, and water resources management, particularly in transboundary settings.



Elizabeth A. Koch (United States) serves as the Senior Manager for International Programs at the Environmental Law Institute (ELI) and leads the Women in Water Diplomacy Network's Process Support Team, supporting the Network's development since inception. Elizabeth has over 15 years of experience supporting water diplomacy engagements in conflict sensitive basins on behalf of ELI, SIWI's Shared Waters Partnership programme, the UNESCO Category II International Centre for Water Cooperation, and EcoPeace Middle East. Elizabeth holds a MA in Government, Diplomacy and Strategy and BA in International Relations.



Dr. Florence Grace (Uganda) is the Executive Director of the Nile Basin Initiative and serves as the current President of the Africa Network of Basins Organisation (ANBO). She is an accomplished water and environment resources management professional with an experience of 37 years in the public sector (30 years spent in the water domain and 7 in the field of higher education). Among the positions held in the water domain in Uganda are: Director, Water Resource Management, Commissioner of Water Quality Management Department and Assistant Commissioner in the same Department. She was also the Principal Technical Advisory Committee member for Uganda on two main Nile Basin Initiative Governance Bodies; Nile and Nile Equatorial Lakes Technical Advisory Committees (2015-2023). Dr. Adongo also served as the Vice-Chair for the Uganda Public Service Directors, Commissioners and Under Secretaries Forum by the time of her appointment to her current position. She holds a Master's of Science in Water and Environmental Resources Management from IHE-Delft Institute of Water Education, Netherlands, a Masters in Business Administration (Executive) from Eastern and



Southern East African Institute in Arusha, Tanzania, and a Doctorate in Business Administration, majoring in water optimization from the Atlantic International University, U.S.A.

Jesse Ferraioli (United States) is a Research Associate at the Environmental Law Institute (ELI). She holds a BA in Environmental Studies and Philosophy from Dartmouth College. At ELI, she assists Elizabeth with the Women in Water Diplomacy Network and has worked on projects spanning from the use of natural infrastructure in hazard mitigation to the evaluation of California's Tribal consultation policies. For her senior thesis, Jesse researched the role of the U.S. Forest Service in safeguarding groundwater and cultural resources from uranium contamination in northern Arizona.



Montserrat Santibanez (United States) is the new Coordinator of the Women in Science Initiative at the Permanent Forum of Binational Waters. She holds a B.A. in International Relations and Global Studies, a B.A. in Theatre and Dance, a Bridging Disciplines Program Certificate in Human Rights and Social Justice, and a Portuguese Flagship Program Certificate from the University of Texas in Austin (UT - Austin). At UT - Austin she worked alongside Dr. David Eaton, the Texas Commission of Environmental Quality, and the Secretaría de Medio Ambiente de Coahuila on the initial phases of the Programa Ríos Vivos in Coahuila, Mexico



Dr. Rosario Sanchez (United States) is a Senior Research Scientist at the Texas Water Resources and Associate Graduate Faculty of the Water Management and Hydrological Sciences Program at Texas A&M University. She is Co-Chair of the Transboundary Aquifers Commission of the International Association of Hydrogeologists and, Founder and Director of the Permanent Forum of Binational Waters. She is the PI of the Transboundary Aquifer Assessment Act Program (TAAP) for the state of Texas, founder of the Transboundary Water Portal and leader of the transboundary groundwater research team. She published the first complete map of transboundary aquifers between Mexico and the United States in 2021 and coined the term “transboundariness” that defines the strategic value of an aquifer that happens to be located at the border between two or more countries. She has 25 years of academic and work experience on transboundary issues between Mexico and the United States both in the academia and the public sector. She is Associate Editor of the Journal of the American Water Resources Association, the Journal of Environmental Management and the Texas Water Journal. She has served at international panels and committees at UNESCO, International Groundwater Resources Assessment Center (IGRAC) and the International Water Resources Association (IWRA). She has a bachelor’s degree in International Relations from Monterrey Tech, a Master’s degree in Diplomacy from the Institute of Diplomatic Studies Matias Romero (Foreign Service Academy), and a PhD in Water Management and Hydrological Sciences from Texas A&M University.



Dr. Sarah Kapnick (United States) is chief scientist for the National Oceanic and Atmospheric Administration (NOAA). In this role, Dr. Kapnick is responsible for advancing policy and program direction for NOAA’s science and technology priorities. Dr. Kapnick has extensive experience at the intersection of climate science and economics. Most recently, she served as a managing director at J.P. Morgan in the role of senior climate scientist and sustainability strategist for asset and wealth management. While at J.P. Morgan, she supported sustainability and climate action efforts and served as an advisor on new business and investment opportunities and risks. Previously, Dr. Kapnick was a physical scientist and deputy division leader on seasonal to decadal variability and predictability at NOAA’s Geophysical Fluid Dynamics Laboratory (GFDL). At GFDL, her work spanned seasonal climate prediction, mountain snowpack, extreme storms, water security and climate impacts. She was an expert and reviewer for NOAA’s Small Business Innovation Research Program, a member of its Eastern Region Climate Team, a science panelist for Climate.gov and the NOAA team lead for the NASA High Mountain Asia Team. Dr. Kapnick is a member of the American Geophysical Union, American Meteorological Society and American Association for the Advancement of Science. Prior to her graduate studies, she spent two years as an investment banking analyst with Goldman Sachs covering financial institutions. She received a Ph.D. in atmospheric and oceanic sciences with a certificate in leaders in sustainability from UCLA, and an A.B in mathematics with a certificate in finance from Princeton University.



Suray Charyyeva (Turkmenistan) is a Junior researcher at the Leibniz Institute for Agricultural Development in Countries in Transition, specialising in sustainable agricultural practices in Central Asia. She is actively involved in the Central Asia Research Group, studying topics such as gender dynamics, crop diversification, water management, agricultural trade, etc. In addition, Suray cooperates with Turkmen institutions, offering expertise in agricultural economics at the Dakhsoguz Agricultural Institute. She also mentors female students at the International University of Humanities and Development in an effort to empower the next generation of leaders. Through her diverse activities, Suray demonstrates a commitment to sustainable development and inclusiveness in Central Asia's agricultural sector.



Dr. Yolanda Lopez-Maldonado (Mexico) is an Indigenous Maya woman from Mexico and science diplomat, working on the social dimensions of water conservation. Her career has spanned several topics from both natural & social sciences pertaining to the science-society-policy interphase. She has worked for academic/non-academic organizations and achieved high-level results in diplomatic environments at different levels in social issues and science fields including UNESCO, UNPFII, CBD, ICCROM, IPBES, IUCN, fostering debates about how science (Western and Indigenous) can build trust between nations & support foreign policies. Her fields of expertise include in-depth knowledge of theories, frameworks, methods, and analytical techniques to investigate complex systems undergoing global change. A Young Scholar from the Beijer Institute of Ecological Economics, The Royal Swedish Academy of Sciences, and fellow of the International Institute for Applied Systems Analysis (IIASA), Dr. Lopez-Maldonado received a PhD degree in Human Geography from the Ludwig-Maximilians-Universität München, Germany.

