

Water Challenges in Central Asia: What Rotary is Doing

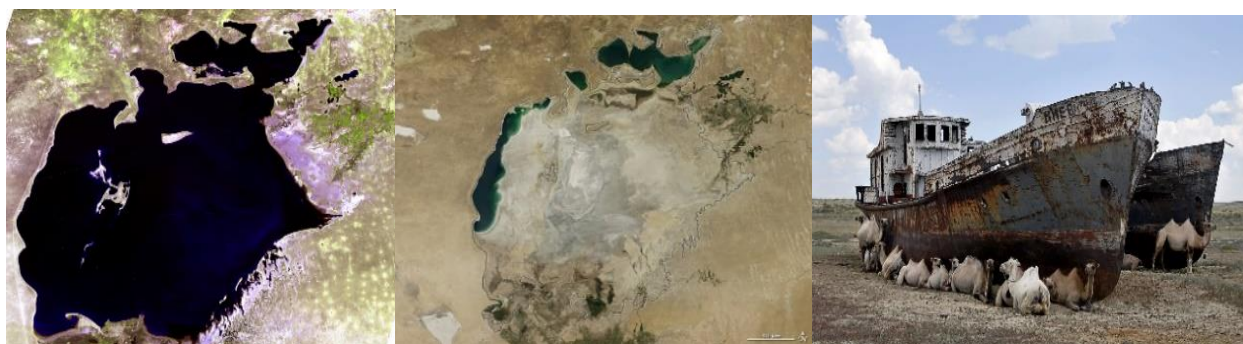
Steve Brown and Pam Russell

Background

In 2011 The Rotary Foundation (TRF) established several partnerships as part of its new grant model. One partner was UNESCO-IHE Delft, (now IHE Delft) a technical university in the Netherlands.¹ IHE Delft specializes in water and sanitation issues for developing countries; it hosts PhD and Master of Science level curricula and degrees. **As will be outlined here, this partnership has evolved. Supported by TRF funds, it addresses water challenges facing countries sharing the Aral Sea Basin centered in Central Asia. Since 2015, two over-arching workshops have been convened, several scholars have successfully completed a special water diplomacy program developed with TRF funds, and this program's alumni are active in the field.**

Steve Brown was a member of the Rotary Committee establishing the partnership. On his 2012 visit, he met with IHE Delft Rector Andras Szollosi and lecturer in law and water diplomacy Zaki Shubber. The Rector focused on the Aral Sea Basin. The Basin has suffered desiccation, unmitigated environmental disaster, and armed conflicts. The potential for significant additional conflict remains.

Seven countries share Central Asia's Aral Sea Basin: five from the former Soviet Union (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan), as well as Afghanistan, and a small part of Iran. The countries are comprised of different ethnic groups who sometimes have conflicts with each other, often over water. Water issues are compounded by years of mismanagement by the former Soviet Union. As a result, the Aral Sea -- once the fourth largest inland body of water in the world -- is unrecognizable as its former self. Its dry seabed stretches for hundreds of square kilometers in an environmental disaster affecting the health of inhabitants for areas well beyond. There are serious competing interests regarding water use between the upstream countries of Afghanistan, Tajikistan and Kyrgyzstan and the downstream countries.



The Aral Sea in the 1970s (far left) and in 2014 (middle and right).

At Rotary's urging, in 2014 UNESCO-IHE Delft hosted the workshop *Preventive Diplomacy for Transboundary Water Management*, inviting representatives of Aral Sea Basin countries. The

¹ It should be noted that the formal partnership between Rotary and IHE Delft no longer exists.

workshop was funded by a TRF Global Grant. All countries but Turkmenistan -- whose government did not provide approval -- sent two professionals to an intensive two-week workshop where interactive discussions addressed world water conflict issues. The discussions did not address Aral Sea Basin issues intentionally, fearing that a direct discussion affecting the national interests of workshop participants could cause the dialogue to quickly deteriorate.



Nonetheless, tension sometimes occurred during discussions. Participants were careful to not make suggestions that might be viewed unfavorably by their own governments. Once outside of the workshops, participants dined together, and formal barriers quickly evaporated. It became clear that additional TRF Global Grants would create technical negotiating and diplomatic skills and would create personal relationships among water professionals in Aral Sea Basin countries.

Joint Program for Water Cooperation and Diplomacy

This first *Preventive Diplomacy for Transboundary Water Management* workshop inspired two further developments. First, the IHE Delft Institute for Water Education partnered with the University for Peace (Costa Rica) and Oregon State University (OSU), creating a Joint University Program for Water Cooperation and Diplomacy (WCD). This Program unites complementary curricula in water conflict management from each of the universities, and confers three degrees and one certificate to each student who successfully completes the entire WCD Program:

- UPEACE: Master of Arts in Water Cooperation and Diplomacy;
- IHE Delft: Master of Science in Water Management, with specialization in Water Cooperation and Diplomacy, and
- OSU: Master of Science in Water Resources Policy and Management and a Graduate Certificate in Water Conflict Management and Transformation



Dr. Aaron Wolf (Professor of Geography, OSU and IHE Delft), recommended that Rotary consider supporting Christina Welch to be an inaugural WCD student. A TRF scholarship was awarded; Christina enrolled in 2015 and graduated in 2017. Rotarians followed her progress with interest to determine the value of further WCD scholarships to students from Aral Sea Basin countries.



Second, in 2016 TRF awarded a Global Grant for a second *Preventive Diplomacy for Transboundary Water Management* workshop, held again in Delft. It convened representatives from all seven Aral Sea Basin countries and representatives from Dutch Government Ministries, World Bank, and a Swedish NGO. Building upon the first workshop,

this event offered a more advanced dialogue.

Christina Welch participated; she was enrolled at IHE Delft at the time. On the workshop's final day, the Government of Uzbekistan announced that it would host a two-hour presentation on regional water challenges. The friendly atmosphere of the workshop immediately dissipated. Participants from several countries advised they did not have their own government's permissions to attend a workshop sponsored by Uzbekistan. They did not participate. Some participants did attend.

Christina's successful completion of the WCD Program proved it to be well-suited for students from Aral Sea Basin countries. Rotarians began outreach for qualified candidates from those countries to be considered for TRF Global Grant scholarships, working with regional contacts to promote the WCD Program to young professionals.

The successful candidate must first gain admission to all three universities in the 17-month WCD Program, which requires an undergraduate degree from an accredited university, a strong academic record, and proven fluency in English. Rotarians then review the eligible candidates' credentials in consideration for Rotary scholarships. That consideration entails review of vitas, essays, letters of recommendation, and conducting in-depth virtual interviews with all potential candidates. And of course, funds need to be raised to support the Global Grants Scholarships to be awarded.



Oregon hosted.



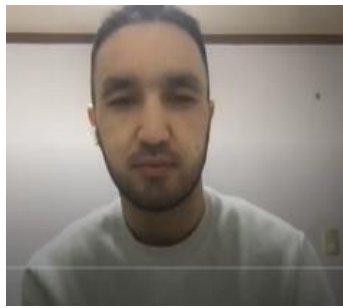
Seven Rotary scholarships were awarded to the first WCD cohort beginning Fall 2018: one each to women from Kazakhstan and Kyrgyzstan, two to women from Turkmenistan, and one each to men from Afghanistan, Tajikistan, and Uzbekistan. In the program phases, Rotarians in Costa Rica, Netherlands, and



In Fall 2019 the second cohort of four students received Rotary scholarships: women from Kyrgyzstan, Tajikistan and Uzbekistan and a man from Afghanistan. Their enrollment was interrupted by the Covid 19 pandemic. After completing coursework in person at IHE Delft, they completed their OSU classes through virtual instruction (Zoom-based) in Delft, including preparation and defense of theses.



The third cohort began their WCD Program in Fall 2021, comprised of four students: women from Kyrgyzstan and Kazakhstan and men from Uzbekistan and Afghanistan. They are currently in transit to OSU for the final phase of their Program.



The fourth cohort of WCD Rotary scholars has just been approved for scholarships. They are a woman from Kyrgyzstan and a man from Uzbekistan. They begin WCD Program enrollment at UPeace in Fall 2022.

From 2015-22, TRF funds for the two *Preventive Diplomacy for Transboundary Water Management* workshops and 18 Rotary Global Grant scholarships total USD \$1,340,000. Scholarships are providing professional training and skills in water conflict management to:

- Kyrgyzstan: four women
- Kazakhstan: two women
- Turkmenistan: two women
- Afghanistan: three men
- Uzbekistan: three men and one woman
- Tajikistan: one woman and one man
- US: one woman (Christina, inaugural scholar in the WCD program)

All significant ethnic groups have been represented in the workshops and scholarships. **Seven Program alumni were immediately employed in pivotal water diplomacy and management positions in their respective countries. Alumni Nataliya Chemayeva and Bota Sharipova also founded the WaterCafé.**



WaterCafé

Bota and Nataliya graduated in the first WCD cohort. They recognized the ongoing need to keep water professionals from Central Asia connected to WCD Alumni and the broader water community. Bota explains: “*The WaterCafé is a fresh wave attempting to bridge the gap of international and local practice in*

water resources management. Understanding the power of the word and human relations, WaterCafé at its core promotes an innovative and sensitive approach to introducing intergenerational and interconceptual exchange of opinions within the vast water experts’ community of Central Asia.

The WaterCafé is developing into a platform to transform international scientific knowledge to simple and comprehensible concepts for the local end-user, translated into Russian. The name WaterCafé stands for an informal, friendly space where all the participants feel free, secure, and relaxed to dream, share and fix things together, with water as the unifying symbol.

The WaterCafé has begun as a social group on Facebook with 329 members. It will boost international knowledge through blog posts, provide online webinars and meetups, and welcome participants for peer-to-peer professional support. The Café invites its members to propose topics, open discussions, and share with their knowledge and experience. [Water Cafe further info](#)

Voices: Scholars' motivational essays, Program feedback, and current activities

Rotarians have remained in communication with the WCD scholars and alumni. Reading their essays and reports provides inspiration and hope. Alumni have provided further reflections on the program and updates on current activities.

Botir from Uzbekistan:



My primary duties include water foreign policy of Uzbekistan. Transboundary water cooperation is not a simple matter in the region. Our national interests are intermingled with geopolitics, personalities, and national policies in all Central Asian countries, most importantly the lack of hydro diplomatic skills to jointly tackle regional issues. I work in the transboundary water cooperation division since I strongly believe that peace and development of the region depend on developing mechanisms of sharing of water resources. The WCD Program advances my career goals.

Zarina from Tajikistan



Central Asian countries make steps for collaboration, however, due to uncoordinated countries water policy, taking priority to the national benefits, it leads to failure. In a such situation water diplomacy comes into the first step and requires a specialist with relevant qualifications.

In our country, the Institute of water problems, hydro energy and ecology, and Academy of Sciences of the Republic of Tajikistan, urgently need experienced bilingual research staff, especially female. Gender equality is a sensitive topic in Tajikistan, since women in have a limited access to education. Thus, I recognize the significant role of females in our society and am employed at the National Resource Management Project.

Dina from Kazakhstan



The WCD Program is most appropriate for my goals and needs in the field. I am passionate about contributing to the improvement of transboundary water resources management in Central Asia that has numerous problems from water shortage to non-transparent decision-making. One of my ambitious plans is to establish a Centre of Water Resources Management in Kazakhstan, to become a central knowledge hub in Central Asia for scientists, specialists, and students planning to do research and contribute to this field. There is a need of high-caliber professionals in water sector in the

region of newly independent states. It would promote interdisciplinary research involving Kazakhstani, Central Asian and international institutions.

Mira from Kyrgyzstan



It was a great experience at UPEACE. I gained theoretical and practical knowledge on the sphere of biodiversity and ecosystem conservation, as well as UN Structure. I have made long-lasting friendships and improved my research and critical thinking skills. We built strong ties with the Central Asian team and were supporting each other on different matters. I believe it is just the beginning of our journey, and even disrupted by COVID, we will try to achieve all our goals. By learning all these new practices, we bring change to our communities. I am very thankful for being part of this program, having such an opportunity to learn from professionals, and expand my knowledge and professional growth.

Jahan from Turkmenistan



I extend my gratitude and appreciation to the Rotary Foundation and specifically to Steve, Pam and Fary for your efforts to better understand hydro-politics in Central Asia. If not for you and the Rotary Foundation, there is almost no interest among donors and experts to invest into youth and nurture professionals in hydro-diplomacy. I thank you again for your investment in students like me and other folks from the Central Asia. I hope my knowledge and aspiration will not be wasted but extended towards my region and beyond to establish friendly international hydro-relations.

Loodin from Afghanistan



During our studies at Oregon State University, I started working on my master thesis. As a religious pluralist, I decided to write my thesis on comparative studies from religious perspective. The aim of the thesis was to assess how the inclusion of Islamic Water Management Principles can contribute to the water conflict and resolution at the trans-boundary level in Islamic-dominated states, e.g., Islamic Republic of Afghanistan and Islamic Republic of Iran.

Alumni reflections

Nargiza from Kyrgyzstan



Since graduation I started to work at the Institute of Water Problem and Hydroenergy in the National Science Academy. My idea is to strengthen the connection between the Government structure and the people of science. This approach I learned during my WCD Program. Later I started to work in the USAID Regional Water and Vulnerable Environment (WAVE) activity. I am the National Policy Engagement Specialist in Kyrgyzstan. The same position exists in All Central Asian countries (WAVE activity, cover all five Central Asian countries). My responsibility is to have close contact with key national partners and promote interests and needs from the national to the regional level, in turn, to help find win-win solutions and strengthen cooperation.

Bota from Kazakhstan



The WCD Master's degree opened a range of job opportunities. Once graduated, I was immediately invited to be a consultant on systemic water education in Central Asia for Swiss Agency for Development and Cooperation (SDC), and to be a consultant on youth mobilization for water in the Aral Sea Basin for the International Secretariat for Water (ISW). I accepted both positions. For one year I assessed the state of water education in the region, as well as in supporting young people from the region in their interest to study and work for water. From September 2020 - February 2021, I was invited to join the Green Central Asia initiative, implemented by the

German-Kazakh University and Potsdam Institute for Climate, as a research fellow for water governance and climate change in Central Asia. My task was to conduct research related to the above-mentioned topics and to publish two scientific papers. I am now currently enrolled in a PhD. program at IHE Delft for Water Cooperation and Diplomacy. I teach part-time at the university.

Aminjon from Tajikistan



I am currently involved in an educational setting with a European Bank Reconstruction & Development-supported project with Finnish and German experts. It infuses sustainability aspects into the curricula and operational activities of educational organizations. There is work on educating water conservation behavior and improving consciousness about environmental sustainability. The project is in Tajikistan so far and there are plans to involve neighboring Central Asian countries (Kyrgyzstan). With the end of pandemic restrictions, the project will start in its

full capacity and involve more countries. My responsibilities include cooperation with international and local experts.

Natalia from Turkmenistan



Since my return, I have been working at the Scientific Information Center of the Interstate Sustainable Development Commission of the International Fund for Saving the Aral Sea. This position offers opportunities to implement short consultancies with international and local organizations. I work with UNDP & USAID, developing recommendations on how to integrate the gender-disaggregated data collection at the local community level to help it adapt to climate change, and with FAO as the National Expert on Drought Risk Management. I'm in the process of writing and revising the Comprehensive Analysis of DRR for the Agricultural Sector of

Turkmenistan.

Future considerations

The three partner universities are seeking sustainable funding for the WCD Program. Thanks to Rotary support, most of the students in this Program have come from Aral Sea Basin countries. But the Program is highly relevant for many other regions of the world where transboundary water challenges exist. As recently as last year, the European Commission's Joint Research Centre noted:

As climate change and population growth make water scarce, it is estimated that there's a 75-90 per cent chance of wars being fought over water within the next century.

Rotary can have a significant role in mitigating the environmental consequences of poor regional planning for transboundary water challenges. Financial support from Rotary districts and clubs for the Joint Program for Water Cooperation and Diplomacy offers a direct intervention for Rotary on these issues and reduces the probability for conflict. We hope to continue this meaningful role in addressing challenges presented to countries sharing the Aral Sea Basin.

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