



Public Policy Review

Bridging Through Water

by Sharon B. Megdal

Since my first professional visit to Israel in 2006, I have endeavored to connect that region and ours through sharing water management challenges and solutions. In late Fall I had the honor of traveling to Israel, the West Bank, and Jordan with the two International Boundary and Water Commission (IBWC) Commissioners, Edward Drusina (U.S.) and Roberto Salmón (Mexico). The IBWC addresses binational Colorado River and Rio Grande-Rio Bravo management, operates binational wastewater treatment plants, and is involved in environmental restoration, water desalination, and reuse efforts. IBWC has coordinated the Transboundary Aquifer Assessment Program, with which I've been involved since its inception. In September 2015, the Commissioners expressed to me their interest in visiting the Middle East to engage in dialogue through sharing experiences and knowledge. When in Israel the very next month to speak at WATEC, the biennial international water expo, I met with Gidon Bromberg, Israel Director for EcoPeace Middle East, a Jordanian, Palestinian, and Israeli environmental organization. At our meeting, we identified the anchor for the Commissioners' visit – their participation as speakers in EcoPeace's November 2016 conference on transborder governance and management of the Lower Jordan River.

With expert staff from the U.S. Embassy in Tel Aviv, Consulate in Jerusalem, and Embassy in Amman, we planned an intensive program of high-level meetings and site visits in Israel, the West Bank, and Jordan, respectively. Preceding these official meetings, we spent November 19 touring the Lower Jordan River with Mira Edelstein of EcoPeace staff. This day provided important background for the conference.

November 20, our day in Israel, included visiting the Yad Hanna Wastewater Treatment Plant, which is located just on the Israel side of the Green Line and wall separating the West Bank and Israel. Treating the wastewater from the West Bank communities of Nablus and Tulkarem and Israel's Emek Hefer region to avoid contamination of the Alexander creek and the surrounding aquifer currently lacks a comprehensive bilateral approach. We then visited Israel's (and the world's) largest reverse osmosis desalination plant, the Sorek plant. The plant's 16 inch vertical membrane design allowed for a much reduced plant footprint in a region where land scarcity is also a challenge. Desalinated water for municipal and industrial purposes, along with large-scale reuse of water for agriculture and continued conservation in all sectors, has enabled Israel to fulfill its master plan for addressing the water demands of the nation. We then met with Senior Deputy Director General Oded Fixler at the Israel Water Authority, the body responsible for water allocations and pricing, who introduced the first phase of the Red-Dead project, discussed below. Finally, we met officials with the national carrier Mekorot, who provided additional information on how Israel manages its national water and wastewater systems.

Our focus on November 21 was West Bank briefings and included meeting U.S. Consul General for Jerusalem Don Blome and Palestinian Water Authority Minister Mazen Ghonaim. Minister Ghonaim explained how water is a political issue. He noted that the Joint Water Committee between Israel and the Palestinian Authority has not officially met for six years, which impedes project approval. He suggested that our region could be of some assistance through special training of technical teams from their region. Our afternoon concluded with a visit to Halhul Reservoir, a large reservoir serving the Hebron area of the West Bank. USAID invested significantly in this project, designed to improve the reliability of the region's water supply.

On November 22, we crossed into Jordan to meet in Amman with His Royal Highness (HRH) Prince El Hassan bin Talal, U.S. Ambassador to Jordan Alice Wells, Minister of Water and Irrigation Hazim El-Nasser and other top Ministry officials, and Minister of Planning Imad Fakhoury. HRH explained the multiple resource challenges Jordan faces and the importance of considering the human and physical environments holistically. HRH spoke to the importance of governance and partnerships and distributed to each of us the report “Cost of Non-Cooperation of Water: Crisis of Survival in the Middle East”. We later visited the Samra Wastewater Treatment Plant, a huge plant south of Amman that processes 70 percent of the wastewater treated in Jordan. The outflows of this modern plant are mixed with surface waters before being delivered to farmers. This plant is the first Build-Operate-Transfer project in Jordan, with USAID among the list of sponsoring partners.

Later on November 22, we arrived at EcoPeace’s conference, “Water Security and Sustainable Development for our Common Future”, which drew over 300 participants. The next morning I had the honor of moderating the panel that featured the Commissioners and representatives of basin organizations from the Balkan Sava River Basin, Southern Africa, and the Rhine. Their presentations focused on the reasons for formation of the transboundary commissions and their accomplishments. It was interesting that disasters and/or major political events were a catalyzing force for collaboration. For the U.S. and Mexico, it was the April 4, 2010 earthquake. For the Rhine River basin, it was a pharmaceutical industry fire. The Sava River Basin became international upon the dissolution of the former Socialist Federal Republic of Yugoslavia. Following the panel, we participated in a discussion with representatives from the Jordan Valley.

Throughout the many dialogues, Commissioners Drusina and Salmón explained how IBWC conducted business and emphasized the importance of good and regular communication. Similarities between the two regions were discussed, including the differential in per capita incomes of the populations sharing borders and waters. I believe those with whom we met were impressed by IBWC’s functionality and accomplishments. Truly significant agreements have emerged from the 1944 Treaty governing the Colorado and Rio Grande-Rio Bravo Rivers. I see opportunities for further interactions, including possible trainings. Our region can learn from how the Middle East has deployed large water projects involving state-of-the art technology and public-private partnerships.

It is encouraging that Israel and Jordan are collaborating on a desalination and water exchange project, something that has been discussed conceptually in the Lower Colorado River Basin. This project entails: (1) desalinating Red Sea water at a plant located in Jordan, with some water sold to Israel for use in the Arava Valley; (2) delivering brine mixed with Red Sea water to the Dead Sea to offset some of the Dead Sea’s water losses, with possible hydroelectric power production that utilizes the elevation differences; and (3) selling freshwater



November 22, 2016 high-level meeting in Amman, Jordan. From left to right, H.E. Minister of Water and Irrigation Dr. Hazim El-Nasser, His Royal Highness Prince El Hassan bin Talal, U.S. Ambassador to Jordan Alice Wells, Commissioner Edward Drusina and Commissioner Roberto Salmón.



Sharon Megdal, Commissioner Drusina, Jerusalem Consul General Donald Blome, and Commissioner Roberto Salmón. November 21, 2016.



November 19, 2016 stop at the southern tip of the Sea of Galilee.

from Israel’s Sea of Galilee to Jordan. An additional component of the project is the sale of water from Israel to the Palestinian Authority for the West Bank. The Red-Dead project is an example of how water management can be a bridge rather than a source of conflict.

Both regions face significant water challenges going forward. I am hopeful that continued dialogue and cooperation within and across the regions can lead to even more bridging through water. 🌊