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# MOVING WATER FROM LAST TO FIRST IN THE MIDDLE EAST PEACE PROCESS

by  
David B. Brooks<sup>1</sup> and Julie Trottier<sup>2</sup>

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## **Abstract**

Differences about fresh water rarely if ever lead to war between neighboring nations. However, lack of agreement about *equitable* water use will sooner or later disrupt water management systems. Similarly, unless fresh water is managed *sustainably* by both nations, their social and economic development will lag with ultimate effects on any peace agreement. This *Viewpoint* describes an existing proposal for joint approaches by Israel and Palestine to managing their transboundary water, as well as current unilateral actions by the two governments that work against equitable and sustainable water management

## **Introduction**

Almost since Israel was created as a formal state, there have been on-again / off-again negotiations toward a final status agreement with Palestine. Apart from the Oslo Process, few of those negotiations have dealt with fresh water, a gap that is remarkable given how badly the two peoples living in a semi-arid area are dependent on water for households and for agriculture. It is equally remarkable with the model of the Israel-Jordan Peace Treaty so evident. Medzini and Wolf (2004, p. 203) call the Treaty's Annex 2, "one of the most creative water treaties on record," and a former director of Jordan's Ministry of Water & Irrigation says it provides a sound framework for sharing the Jordan River (Haddadin 2011). However, Annex 2 says nothing about Palestine, and to that extent leaves the future of the agreement in doubt.

Part of the analysis underlying our recent book on transboundary water issues in Israel, Jordan, and Palestine (Brooks, Trottier and Giordano 2020) reflects an earlier report (Brooks and Trottier 2012; summarized in Brooks, Trottier, and Doliner 2013) that was prepared for EcoPeace Middle East, one of the few non-governmental organizations in the region with three co-equal offices: Amman, Ramallah, and Tel Aviv. That report proposes a model for a water agreement between Israel and Palestine. Our current work brings Jordan into the model and adjusts for recent developments important for water and peace. It also continues past efforts to conceive of water as a flow rather than as a stock (Trottier et al. 2019), and also carefully distinguishes between water use and water consumption. Water use occurs whenever we interact with the flow of water

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for whatever purpose; the water may be changed in temperature and quality, but little of it leaves the system. Water consumption occurs when water leaves the freshwater system by evaporation, transpiration from an animal or a plant, or by flowing into the sea or an inaccessible aquifer. The key point is that water is generally used many times before it is consumed.

### **Water and Recent Efforts for Peace**

Since the 2010s, water is often presented as a technical issue that will be automatically solved once borders are agreed upon. Within this logic, priority lies with a peace settlement. Yet, many water issues are solvable and can be settled before comprehensive agreement is attained. For example, most water analysts in Israel and Palestine already agree that any water settlement will result in a larger proportion of shared water going to the Palestinians (Hadi 2003; Shuval and Dweik 2007; Brooks and Trottier 2012).

If resolution of water issues was possible over a decade ago, it is all the more so today when large-scale desalination has become capable of providing drinking water for most household uses in Israel, and doing so at reasonable prices. Jordan, among the most water-stressed nations on earth, is following Israel's success with reverse osmosis desalination and supplying drinking water to the coastal city of Aqaba. True, most desalination is currently powered by fossil fuels, but, with declining costs for photovoltaic and wind generation and storage, renewably powered desal is not far in the future (Katz and Shafran 2019). Certainly, resolving water issues at this time should be less contentious than doing so as part of a final status agreement that must also deal with borders, refugees, and Israeli settlements.

Throughout history, water has induced far more cooperation than conflict around the globe (Wolf, 2000). At the local level, EcoPeace's Good Water Neighbors program demonstrates that Israeli/Palestinian cooperation to improve water management persists even in times of tension (Sagive *et al.* 2012).

At the national level, the proposal developed for EcoPeace Middle East, as mentioned above, relies upon ongoing and detailed monitoring and mediation to achieve sustainable use of fresh water. From an institutional perspective, it goes beyond the general principles to emphasize equitable rights and equal responsibilities related to joint management of shared water. Equitable rights do not mean that each side will receive an equal volume of water. They do mean that each will have equal standing within the institutions for joint management and equal opportunity to participate in decision-making processes, criteria that indicate that it is not water but water management that is really shared.

At the International level, articles by Aaron Wolf (1999; 2000) show that focusing on the "needs" of the parties involved is more fruitful when negotiating water treaties than focusing on principles or rights. Megdal and her colleagues (2013) emphasize the importance of including all parties, beyond just those traditionally considered as stakeholders. In their words (p. 275), "Institutions that promote inclusiveness can arrive at solutions that otherwise may seem unattainable."

Recent water treaties deploy concepts of fairness and of sustainability even more than economic efficiency (Wolf 2000; Blomquist and Ingram 2003). They become part of a dynamic process that includes advances in other areas. In her review article, Selina Ho states that “managing transboundary river basins is an exercise in foreign policy-making and diplomacy that goes beyond the technical details of river basin management” (2018, p. 621).

### **Current and Mutual Bottlenecks**

The common focus of both Israeli and Palestinian water authorities has led them to secure a stock of water, which then form the basis for their negotiations and preclude options that might have been acceptable with a broader perspective. (The same might have troubled Israel and Jordan had it not been for the geological rift that the Jordan River follows and that blocks most water from flowing across the border between them.) But water quantities are neither static nor stable. They flow through several hands, both Israeli and Palestinian, between source and sink, and serve different uses (Trottier and Brooks 2013). Reformulating their negotiations from a struggle over quantities to one over interactions with a flow is not just possible but desirable (Trottier et al., 2019).

Israeli and Palestinian water management also differs in that the former is mainly top down, and the latter is mainly bottom up. This is not an insuperable barrier, but it is one that requires decision-making that permits each side to accept similar scientific conclusions while applying them in different ways. Wastewater is currently managed to the detriment of all parties. Israel charges the Palestinian Authority (PA) for treating wastewater flowing from the West Bank, even when some of this flow was previously treated and some of it originates from Israeli settlements. Thus, in 2017, Israel billed the PA over US\$31 million (Trottier et al., 2019). Consequently, the PA develops wastewater reuse projects maximising evapotranspiration through irrigation. Fodder, for instance, becomes irrigated on previously rainfed land, which decreases the flow of wastewater into Israel, and thus the resulting bill for the PA. But farmers using licenced wells that have dried up, or rights to springs that no longer flow, don't benefit from this treated wastewater reuse. Neither do ecosystems inside Israel that used to receive the shared water that flowed in wadis or through aquifers. The same logic promotes large infrastructure to convey treated wastewater to the Jordan Valley mainly for intensive medjool date palm plantations. Such plantations produce an export crop that generates foreign currency, but they have detrimental effects both on the environment and on rural Palestinian society (Trottier et al., 2020), including depriving sharecroppers of water they have been using water sustainably for generations.

Resolution of dilemmas over water use always involves issues beyond efficiency and profits, and ignoring those other effects is incompatible within the perspective of a two-state democratic final status agreement. Neglecting “side effects” of top-down changes in traditional uses of water cannot be equitable nor are they likely to be sustainable. With its massive desalination capacity, Israel now enjoys a modest water surplus, and finds itself in an ideal situation from which to reconsider its interaction with Palestine as it already has with Jordan. It is well past time for Israelis, Jordanians, and Palestinians

to begin thinking of their shared waters from a hydrosocial or political ecological perspective (Boelens et al. 2016).

If Israelis and Palestinians can come to agreement over the water they share, there is no reason why a similar process might not apply elsewhere in the world. With nearly half of the world's land area lying within international river basins (McCracken and Wolf 2019), and many places where the transboundary water divides rather than unites communities or states, it is reassuring that there are "growing efforts to help prevent and resolve disputes inherent in managing water that is shared across political boundaries" (*Ibid*, 745).

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### **Disclosure Statement**

No potential conflict of interest was reported by the authors.

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