# The Water Component of the Peace Process Between the Israelis and the Palestinians

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## Introduction

Water has a mind of its own. One of its characteristics is that it doesn't follow the rules of modern nation-states. When the globe was being carved up into states during the 19th and 20th centuries resulting from the breakup of great empires, the world's watersheds left an indelible link among newly formed political entities. Under this new global structure, water has often been managed haphazardly according to the politics of states. The history of the politics of the Jordan watershed illustrates this well. The Middle East, with its recent history of conflict, is usually pointed to as the region most likely to explode over water. At first glance, this depiction may seem reasonable. The Six Day War in 1967 was preceded by two years of gunfire between headwaters (1).

A closer look at the history of hydropolitics reveals a much different potential. Although there have been conflicts over water in modern history, what is less well known is that more than 3,600 treaties have been signed over various aspects of international waters (2). Rather than being a source of conflict between states, water has frequently been a source of peace. The efforts between the Israelis and the Palestinians over the past nine years to find a way to manage their shared water resources as part of the Middle East peace process provide a rich case study in both international negotiation and joint water resource management.

This thesis will focus on the period from the beginning of the Middle East peace process initiated at the Madrid Conference in 1991 up to the present and will be divided into four chapters. The first chapter introduces the history of the of the Jordan watershed, starting with the events which precipitated from the fall of the Ottoman Empire during World War I. This will provide the background for understanding the current relationships between humans, land and water between Israel and its neighbors and sets the context of the current peace process.

Chapter two focuses on the role of the Multilateral Working Group on Water Resources in the Middle East peace process. The two track negotiation structure of the peace process enabled parties to meet each other in an environment which focused on the hard political issues in the bilateral negotiations, and in a more technical environment in the multilateral negotiations which aimed to foster trust based on mutual concern over regional issues. By changing the perspective toward regional water issues, the working group on water has promoted trust between Israelis and the Palestinians and created an avenue to mitigate the power imbalance that exists between the two groups.

The third chapter examines the implementation of the water accords set out in the Israeli-Palestinian interim agreement of 1995. Over the past five years, these parties have come together for the first time through an interim institutional arrangement to jointly manage their shared water resources. This chapter examines the successes and the ongoing problems of implementing the water accords.

Finally, the fourth chapter looks at three events relating to the implementation of the Israeli-Jordanian water agreement. By identifying strengths and weakness in the Israeli-Jordanian agreement, the aim is to find lessons learned for a permanent water agreement between Israel and the Palestinians.

The Middle East peace process broke new ground in the relations between Israel and the Palestinians over the issue of water. By providing an inclusive forum to discuss regional water issues while

emphasizing the technical rather than the political aspects of water, the Multilateral Working Group on Water Resources has been able to promote trust and better working relationships between Israel and the Palestinians. The various water projects instigated in the working group have continued with ongoing support and participation. The implementation of Article 40 of the Israeli-Palestinian interim agreement has had some successes as well as its share of problems. One of the main problems is that the current joint water management structure reinforces the power imbalance between the Israelis and the Palestinians. The final status agreement must find a way to address this power imbalance. Finally, the Israeli-Jordanian water agreement offers valuable lessons for a future Israeli-Palestinian water agreement. Issues such as provisions for water emergency situations, and clear language over water allocations and cost allocations can cause further dispute if they are not properly addressed in an agreement.

# **Chapter One: Politics of the Jordan Watershed**

When World War I broke out in 1914, the territory of what was to become Palestine Syria and Egypt had been under the control of the Ottomans for four centuries. [1] The Ottoman Empire entered the side of Germany during war, a decision that proved to be fatal. As it became clear that the empire was crumbling, the British and the French began to stake out their territorial claims over the region in order to define their spheres of influence. The French began to work with the Christians of Lebanon and the Syrians, while the British sought out the Arabs and the Jews of Palestine. In 1916, the British and the French signed the secret Sykes-Picot agreement, which divided the Middle East into two regions. The status of Palestine was left unclear. [2]

During this time, the modern political Zionist movement, which was seeking a Jewish state in Palestine, was voicing concern to Britain over the future of Palestine. Modern Zionism had already become a well-established movement emerging at the end of the 19th Century, with the first Zionist Congress held in Basle in 1897. At this conference, Theodore Herzl, a journalist and playwright from Austria, who is considered the father of modern Zionism, articulated the desire for the creation of a Jewish state in Palestine. From the beginning, the Zionist movement focused on historical, strategic and economic considerations to determine a suitable territory for Israel. [3] In a region that is mostly desert (Jordan is 85%, Israel and the West Bank is 60%) and is subject to infrequent rain, access to water was recognized from the outset by the Zionists as being both strategically and economically important for the viability of their new state.

In November 1917, the British Cabinet approved the Balfour Declaration which stated, "His Majesty's Government views with favour the establishment in Palestine of a national home for the Jewish people, and will use their best endeavours to facilitate the achievement of this object...." [4] Although the Balfour Declaration didn't explicitly call for Palestine to be turned into an Israeli state, the Zionists interpreted it as a promise. The ambiguous language used in the declaration sowed the seeds of conflicting claims to Palestine from both Zionists and Arabs. By the end of World War I, a series of negotiations were instigated in 1918 about the fate of the conquered areas, which would give rise to the creation of the mandate system. This system would divide the conquered areas of the former Turkish and German empires among the so-called "advanced nations," which included Britain and France, who would act as guardians on behalf of the newly formed League of Nations. [5] Jewish immigration had

been underway in Palestine since the turn of the century, and Zionist leaders worked on a strategy for their boundary proposal at the Paris Peace Conference. The leading figure on this issue was Aaron Aaronsohn, an agriculturalist who early on identified the importance of water supply in negotiating boundaries.

Aaronsohn's recommendations were brought to the Paris Peace Conference by the official Zionist delegate, Chaim Weizmann. Their proposal sought boundaries for Palestine which included the headwaters of the Jordan River, the lower Litani River which began in Lebanon, and the Yarmuk River. [6] In 1923, after years of negotiations, the French and the British came to an agreement upon the boundaries delineating their mandates. The British-Palestine mandate was built upon the Balfour declaration and in doing so was the first international official recognition of a historical connection between the Jewish people with the territory of Palestine. [7] However, the agreement was regarded as a disappointment to the Zionists. Both Weizmann and Aaronsohn had strongly believed that access to the water resources of the Litani River were essential for the economic independence of Palestine. [8] Although the agreement created boundaries for Palestine containing the majority of the Upper Jordan in Palestine, the boundaries excluded the headwaters of the Litani and the Hasbani Rivers. [9]

During the following years, Jewish immigration into Palestine continued creating severe tensions between the Jews and the Arabs. The British responded to this situation by handing out a series of White Papers (a formal policy statement) which were intended to provide an interpretation of the Balfour Declaration. The first White Paper known as the Churchill White Paper discussed numerical limitations on future immigration based on "economic capacity of the country." [10] Continued skirmishes between Arabs and Jewish immigrants led to a second White Paper in 1930 known as the Passfield White Paper. The Passfield White Paper concluded that little land was available for immigrants and called for a more clearly defined Jewish immigration policy. This paper was strongly criticized by the Zionists who argued that the paper did not take into consideration a hydrological analysis of the region or the possibility for transferring water. [11]

The rise of the Nationalist Socialists in Germany led by Adolph Hitler in 1933 spurred European Jewish immigration to Palestine. In Hitler's first year of power, one quarter of the immigrants coming to Palestine was from Germany. Tensions continued to mount between the two groups and in 1936, a strike organized by the Arab Higher Committee protesting Jewish immigration turned into a rebellion which left over 300 people dead. [12] During this time, a number of plans were put forward which addressed the water resource component of the absorptive capacity issue for Palestine. The Ionides Plan commissioned by the British government in 1939 claimed that Palestine did not have the water resource's necessary for continued Jewish immigration. The main components of the plan included the recommendation that the Jordan River be used to irrigate the area within the watershed and that stormwater from the Yarmuk River be diverted and stored in the Lake Tiberias. [13] Five years later, as World War II was coming to an end, the realization of the evils inflicted upon the European Jewish population by the Nazis lead to open resistance by the Zionists to British immigration policies. In contrast to the Ionides Plan, the Zionists looked to a plan published by Walter Clay Lowdermilk, the director of the US Soil Conservation Service, who claimed that the water resources of the region, if properly managed, could accommodate an additional four million Jewish refugees and 1.8 million Arabs. [14] The Lowdermilk management plan, which was modeled from the Tennessee Valley Authority, called for diverting unused water from the Yarmuk River to irrigate the Jordan Valley and the Negev, and building a Mediterranean Sea-Dead Sea Canal. [15] The plan was largely based on ideology rather than engineering, but was highly influential to Israel's future water resource development planning. [16]

The devastation of World War II on the Jewish population set the stage for the creation of the Israeli State. Millions of Jews had been killed in the war and a massive refugee problem had been created in Europe. The Zionist movement was resolute in its desire for a Jewish state. In February 1947, unable to resolve the conflict between the Zionists and the Arabs, Great Britain turned over the problem of the future of Palestine to the newly formed United Nations. A special UN committee called UNSCOP was formed to address the Palestinian problem. UNSCOP recommended that Palestine be divided into two states and for Jerusalem to come under international control. In November, the partition plan was passed in the United Nations General Assembly. As Britain made preparations to depart Palestine, fighting between Jews and Arabs ensued. On May 15, 1948, Israel declared independence, igniting war between the new state and its Arab neighbors. [17]

The 1948 war carved up the Jordan watershed such that it now spread across four countries: Lebanon, Syria, Jordan and Israel. At this time, the Middle East was in the midst of a serious refugee crisis producing massive population shifts. Hundreds of thousands of Jews from Europe and Arab countries were immigrating to Israel. At the same time, Palestinian refugees from Israel were immigrating to Jordan. [18] The overtly hostile political environment between the Arab states and the new Israeli state meant that joint efforts to manage the Jordan watershed were not possible, marking a phase of unilateral efforts to develop the water resources of the Jordan River.

#### Unilateral Development of the Jordan

Beginning in the early 1950s, Arabs and Israelis embarked upon unilateral plans to develop the Jordan watershed. In 1951, Jordan announced a plan to divert water from the Yarmuk River in order to irrigate the East Ghor of the Jordan Valley. This prompted Israel to begin draining the Lake Huleh and swamps, which ended up creating tensions between Israel and Syria because the swamps crossed over into demilitarized zones separating the two countries. [19] Two years later, Israel started construction of its National Water Carrier that would bring water to the coastal plain and the Negev Desert. The initial construction of the intake site at a demilitarized zone north of Lake Tiberias triggered the deployment of Syrian armed forces along the border. Shots were fired at the construction site prompting the Israelis to move the intake site to Eshed Kinrot, located on the northwest shore of Lake Tiberias. Israel defused the tensions by moving the intake of its National Water Carrier, but it had done so at a price. The water from the second intake site was more saline, and it had to be pumped up 250 meters from the intake location before it could head southward. [20]

# The Johnston Negotiations

With unilateral plans for the Jordan watershed proliferating and creating tensions in an already strained political environment, it became strikingly clear that a regional solution to managing the Jordan watershed was necessary. These unilateral development plans along with pressure by Congress to address the Palestinian refugee problem, compelled President Eisenhower to send special envoy Eric

Johnston to the Middle East in October 1953 to try to ease the tensions among the river's riparian states. Over the next two years, Johnston worked to design a comprehensive development plan for the Jordan River, with the hope that such a settlement would bring stability to the region. [21]

Johnston's primary goal in developing a plan for the Jordan River was equitable allocation of the annual flow between its riparian states. At the beginning of the negotiations, Johnston put forth a plan produced by Charles Main and the Tennessee Valley Authority that used a regional approach for determining water allocations and ignored political factors. The "Main Plan" focused only on in-basin use of the Jordan River water and did not include the Litani River. These exceptions were unacceptable to the Israelis, who desired a plan that included the Litani River and took into consideration their irrigation needs in the Negev Desert. Israel consulted an American engineer, John Cotton, and submitted an alternative plan in February 1954. The "Cotton Plan" allotted Israel half of the flow of the Litani River, allowed for out-of basin transfer of the Jordan and recommended that the Sea of Galilee be used as the main storage facility. In response to both plans, Lebanon, Syria, Jordan and Egypt established a Technical Committee, which came up with an "Arab Plan." This plan excluded out-of-basin use of the Jordan River, excluded the Litani River and rejected the Israeli proposal to use Lake Tiberias as a storage facility. Table 1 lists the water allocations proposed by the three plans as well as the final "Unified Plan."

Johnston attempted to reconcile these proposals in order to come up with a compromise that would be acceptable to all parties. In the fall of 1955, he produced the "Unified Plan," later referred to as the Johnston Plan. The Johnston Plan gave concessions and forced compromises to both the Arabs and the Israelis. Most significantly, Israel was forced to drop its demand to include the Litani River and the Arabs agreed to allow out-of-basin transfers from the Jordan River as well as to permit storage at the Sea of Galilee and at the unbuilt Maqarin Dam. The United States provided a carrot to encourage all parties to accept the plan by offering to finance future water development projects. In the end, the Arab League was unwilling to accept an arrangement that would acknowledge Israel, and returned the plan to the Technical Committee, effectively ending the negotiations. Although the Johnston Plan was never ratified, the allocations it laid out have been used as a reference up until the present. Specifically, Israel and Jordan have met quietly every year up until the present at the confluence of the Jordan and Yarmuk rivers so-called "Picnic Table" talks to discuss allocations.

In retrospect, a number of serious problems can be identified in the Johnston negotiations. [22] To begin with, the watershed was not looked at as a whole. Although groundwater is the main source of water for both the Israelis and the Palestinians, the negotiations and the plan ignored groundwater altogether and instead only addressed the surface water. The question of groundwater allocation and control has been the principle source of conflict between the Israelis and the Palestinians ever since.

A second fundamental problem is that the Palestinians as well as other groups with a vested interest in managing the Jordan watershed were left out of the negotiating process. Given the level of political tensions and the precarious stage of Israel's existence at the time, it is understandable that the negotiations focused on Israel and the recognized states that use water from the Jordan River. However, the importance of including the Palestinians at the negotiating table is simply a prerequisite to finding a

solution for the Arab-Israeli conflict, which took many years for the international community and for Israel to accept.

Finally, related to the previous point, not enough attention was paid to the political dimensions of the negotiations. As Wolf notes, the Johnston Plan was primarily a rational watershed plan. [23] In the end, it was the political aspect of the negotiations that brought them to a halt. The Arabs were unwilling to accept a plan allocating water to Israel because that would have been a de facto move legitimizing Israel's right to exist. Without provisions for the parties to meet face to face in these negotiations or mechanisms for promoting trust and confidence, it comes as no surprise that the political tensions, which had not been addressed, kept the plan from being implemented.

In spite of the limited headway made between the Israelis and the Jordanians as a result of the Johnston negotiations, the following decade led to continued unilateral water resource development and was a period of intense conflict between the Palestinians and the Israelis. Israel's construction of its National Water Carrier, which would divert water from the Jordan watershed to the Negev desert, sparked outrage from President Nasser of Egypt who called the first Arab Summit in 1964 to discuss a plan for water management. The following year, a second summit was held in which Arab states decided to embark upon their own diversion plan which would cut off water to the National Water Carrier. One year after Israel began diverting water through its National Water Carrier, the Arab states began their Headwaters Diversion Plan. [24] Both water plans incited conflict. The new Palestinian Liberation Organization attacked the National Water Carrier in December 1964. A few months later, Israel's army attacked the Arab diversion plan in Syria. Low intensity conflict continued over the next two years without resolution leading to war.

1967: The Six Day War

In June 1967, Israel attacked Egypt, Syria, Jordan and Iraq and within six days it had captured the territory of the Golan Heights from Syria, Gaza and the Sinai Peninsula from Egypt and the West Bank from Jordan. The war radically altered Israel's boundaries and in doing it became the dominant player controlling the majority of the water resources of the Jordan watershed. [25] Israel now had in its territory all but one of the headwaters of the Jordan River, and through its acquisition of the West Bank, had gained access to the three main aquifers of the region commonly known as Central Highland Aquifer or the Mountain Aquifer.

The occupation of the West Bank and Gaza and the nationalization process of the water resources of these regions mark the beginning of the present conflict between Israelis and Palestinians over the water resources they share. Under Israeli law, water is the property of the state. [26] To protect the Central Highland from overpumping, Israel set up strict limits on the amount of water that could be withdrawn from existing wells. Permits for new wells were granted for domestic use for Israelis and Palestinians, however restrictions were placed on Palestinian use of wells for agricultural purposes. [27] While Palestinian agricultural water usage has been capped at 1968 levels, new wells have been dug for Israeli settlements. [28] In the Gaza Strip, the situation is quite different. Less restrictions on the use of the water resources in the Gaza Strip has led to severe overpumpage of the aquifer. This dispute over the pattern of water allocation in the West Bank and Gaza continues up to the present and has been

cited as a sovereignty issue for both Israelis and Palestinians, which will be addressed in the next section. [29]

In the years following the 1967 war, relations between the Israelis and the Palestinians continued to be tumultuous. A new group called the Palestinian Liberation Organization (PLO) had been created in 1964 with the single mission of liberating Palestine. Advocating the used of armed struggle as a means to this goal, the PLO adopted a charter which stated that the partitioning of Palestine and the establishment of Israel were illegal. [30] Palestinians living in the West Bank and Gaza Strip protested the control of the Israeli military government and its policies. In the late 1960s, the PLO and the Israelis were embroiled in military confrontation over settlements in the Jordan Valley. [31] The Gaza Strip had become a shelter for guerilla fighters to attack Israeli patrol.

The PLO began to shift its tactics toward a negotiation strategy and changed its goal by 1977 from reclaiming Palestine to the "right to establish an independent national state on their own land." [32] The invasion of Lebanon by Israel in 1982 severely weakened the national movement, forcing the PLO to move its offices from Beirut to Tunis . Physically cut off from the majority of the Palestinian people and with little support from its Arab neighbors, the PLO became politically fragmented and demoralized. As the PLO's position began moving away from violence toward political options for achieving its aims, the Israelis were cracking down on expressions of Palestinian nationalism. While the PLO searched for diplomatic avenues to pursue its interests, the seeds of a new kind of rebellion were about to take root.

## The Intifada and the end of the Cold War

When the Intifada or uprising erupted, not only were the Israelis caught off guard, the PLO was too. On December 8, 1987, four Palestinians were killed in a car accident involving an Israeli army transport. The accident turned out to be the lever that opened the flood gaits triggering demonstrations against Israeli occupation, which spread throughout the West Bank and Gaza Strip. [33] Unlike previous protests, which were led by the urban elite, these protests were organized through grassroots networks. Using a strategy of civil disobedience, participants of the intifada threw stones, staged demonstrations and were encouraged to boycott Israeli goods. The anonymity of the intifada's leaders made it difficult for Israel to stop the uprising. Israel's attempts to crackdown on the protests included implementing long curfews, using tear gas and rubber-coated bullets, and resorting to mass arrests. The PLO took advantage of the intifada by calling for an independent Palestinian state alongside Israel. In November 1988, the Palestinian National Council, the main political institution of the PLO, proclaimed the state of Palestine and declared that it was willing to negotiate with Israel based on the United Nations Security Council Resolutions 242 and 338. [34] Shortly thereafter, PLO executive Yasser Arafat renounced terrorism and recognized the state of Israel.

The effects of trying to contain the intifada became demoralizing for the Israelis, who had been the subject of heavy criticism from international media coverage of its tactics. Faced with both conscientious objectors and extreme nationalism from its own population, Israeli Prime Minister Yitzhak Shamir put forth a peace plan in 1989. The plan called for an end to the intifada and for elections to be held so that a Palestinian delegation could be established to negotiate with the Israelis during an interim period with the ultimate aim of self-rule in the West Bank and Gaza Strip. Although the peace plan was initially

supported by the United States, the plan fell through due to lack of support from the Palestinians and the subsequent decision by the United States to push for its own land for peace plan. [35]

While Israel struggled to find a solution to the intifada, two events were on the horizon that would change world politics and drastically alter the context of the Arab-Israeli conflict. In 1989, the Soviet Union collapsed bringing an end to the Cold War and the bipolar politics that had dominated the international system for over forty years. On a tangible level, Israel felt the end of the Cold War when it began to experience an influx of Russian Jewish immigrants. Less tangible but even more significant were the geostrategic implications of the collapse of the Soviet Union, which were felt throughout the region. Countries who had at one time been Soviet clients would have to realign themselves while U.S. allies would have to reexamine the future of their strategic importance to a country that was now the only superpower. [36]

A year after the world order evolved from a bipolar power structure to a unipolar power structure, war broke out in the Middle East. Iraq, drowning from economic and financial ruin from an eight-year war with Iran, invaded tiny Kuwait on August 2, 1990. [37] The war divided the Arab world into those countries who supported Saddam Hussein or were ambivalent, namely Libya, Sudan, Yemen and Jordan, and those who supported the coalition led by the United States, who were Egypt, Saudi Arabia, Syria, Kuwait, Bahrain, Qatar, Morocco, Oman and the United Arab Emirates. The Palestinians sided with Saddam, who during the war called for the withdrawal of Israel from the Occupied Territories. The United Nations passed several resolutions calling on Iraq to withdraw from Kuwait with no avail. The day after the deadline for Iraqi withdrawal from Kuwait, on January 19, 1991, the coalition launched operation Desert Storm. In response, Saddam attacked Israel and Saudi Arabia with Scud missiles. Israel did not retaliate and the coalition was able to liberate Kuwait by the end of February.

Coming off the heels of the Soviet breakup, the Gulf War revealed that the Middle East was dangerously unstable. At of the heart of this instability lied the Israeli-Palestinian conflict. The situation was ripe for a new chapter in the Middle East peace process, one that would lead to unprecedented face to face negotiations with long time enemies. Water, an issue that had been a source of great tension and the subject of several military skirmishes between Israel and its neighbors since the 1940s, would now be singled out as one of five regional issues which had the potential to build trust and regional cooperation for the Middle East.

- [1] Ann Lesch and Dan Tschirgi, Origins and Development of the Arab-Israeli Conflict (Westport: CT: Greenwood Press, 1998), xvii.
- [2] Kirsten Schulze, The Arab-Israeli Conflict (Edinburgh: Addison Wesley Longman Limited, 1999), 5.
- [3] Aaron Wolf, Hydropolitics, 19.
- [4] Schulze, 98.

- [5] Lloyd Ambrosius, Woodrow Wilson and the American Diplomatic Tradition (Cambridge: Cambridge University Press, 1987), 68.
- [6] Stephen Lonergan and David Brooks, Watershed: The Role of Fresh Water in the Israeli-Palestinian Conflict (Ottawa: International Development Research Centre, 1994), 203.
- [7] Ibid, 160.
- [8] Lonergan and Brooks, 204, Wolf, 21.
- [9] Wolf, 26.
- [10] Wolf, 32.
- [11] Lonergan and Brooks, 162.
- [12] Wolf, 37.
- [13] Wolf, 40, Lonergan and Brooks, 162.
- [14] Wolf, 41.
- [15] Lonergan and Brooks, 163.
- [16] Arnon Soffer, Rivers of Fire: The Conflict Over Water in the Middle East (Lanham, MD: Rowman and Littlefield Publishers, 1999), 156.
- [17] Schulze, 13.
- [18] Wolf, 44.
- [19] Henri Xavier Farinelli, "Freshwater conflicts in the Jordan River Basin." Green Cross International web site, Http://www4.gve.ch/gci/water/gcwater/jordan.html. 3 March 1999 .
- [20] Wolf, 45, Lonergan and Brooks, 167. The original site of Gesher B'not Ya'akov the water would have been able to flow southward by gravity alone. The second site was much more expensive than the first.
- [21] Marcia Drezon-Tepler, "Contested Waters and the Prospects for Arab-Israeli Peace," Middle Eastern Studies 30 (April 1994): 286. For a thorough description of the negotiation, see Aaron Wolf's case study, "Johnston Negotiations, 1953-55" from the Transboundary Freshwater Dispute Database, http://www.transboundarywaters.orst.edu/.
- [22] Wolf, Johnston Negotiations, 9.

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[23] Wolf, Johnston Negotiations, 9.
[24] Wolf, Hydropolitics, 50.
[25] Wolf, 52.
[26] Sharif Elmusa, Negotiating Water: Israel and the Palestinians (Washington, DC: Institute for
Palestine Studies, 1996) 12.
[27] Wolf 60, Lonergan and Brooks, 130.
[28] Wolf, 60, Elmusa, 12.
[29] Ines Dombrowsky, "The Jordan River Basin: Prospects for Cooperation Within the Middle East Peace
Process"" in Water in the Middle East, ed. Waltina Scheumann and Manuel Schiffler (Berlin: Springer,
1998), 98. See also Lonergan and Brooks, 131.
[30] Schulze, 34.
[31] Wolf, 54.
[32] Lesch and Tschirgi, 79.
[33] Schulze, 75.
[34] Schulze, 78.
[35] Ibid., 79.
[36] Schulze, 75.
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# Chapter Two: Water Negotiations between Israel and the Palestinians

[37] Lesch and Tschirgi, 33.

The Gulf War revealed stark realities about the landscape of the Middle East in the Post-Cold War. While massive global political changes had taken place from a bipolar world power structure to a unipolar power structure, relations were not improving among Middle Eastern states. Rather, the potential for regional competition and instability was still great, and it had become clear that what was at the core of the Arab-Israeli conflict was the Israeli-Palestinian conflict. [1]

With the United States able to join forces and work on the same side with the Soviet Union for the first time in decades, and an unprecedented alignment of Arab countries working on the same side as Israel to reverse Iraq's attack on Kuwait, the United States took advantage of the historic shifts both globally and regionally to restart Middle East peace talks. Speaking to the Subcommittee of Foreign Operations

of the House Appropriations Committee in May 1991, U.S. Secretary of State James Baker said, "...the Gulf War may have created some new possibilities for peace-making in the region and the United States has a unique obligation to help explore them." [2] In the meeting, Secretary of State Baker discussed a broad framework for a future peace process that would include both bilateral and multilateral negotiation groups and a mechanism for ensuring Palestinian representation in the negotiations. The objective was to begin direct negotiations between Israel and its Arab neighbors using a peace conference to launch the process. Face to face negotiations he believed could offer the only way to make any progress. Five months later, on October 30, 1991, the Madrid Middle East Peace Conference under the co-sponsorship of the United States and Russia began a new chapter in Arab-Israeli relations.

#### The Madrid Conference

The Madrid Conference for the first time brought Israel face to face with Syria, Lebanon and Jordan and its other Arab neighbors. "Peace in the Middle East need not be a dream. Peace is a possibility," said President George Bush at the opening day of the Conference. [3] President Bush went on to describe several principles that he envisioned would guide the process. These included the following:

Peace in the Middle East required direct negotiations.

Negotiations would be based on United Nations Security Council Resolutions 242 and 338.

The bilateral negotiations would have two tracks, one for Israel and the Arab states and one for Israel and the Palestinians.

A related multilateral track would focus on regional issues including water resources, the environment, refugees, arms control and regional security and economic development.

For Israel and the Palestinians, the negotiations would be conducted in phases, with the first phase to focus on interim self-government. This would help allay fears about setting a precedent on compromise. The solution should be guided by the principles of justice and compromise.

One of the touchiest issues for the Madrid Conference was the problem of how to create a means for Palestinian representation. On the one hand, the cosponsors recognized that Palestinian representation was imperative. However, any official PLO inclusion, at least at the outset, was clearly unacceptable. To address this potentially derailing problem, a formula was developed by the United States and Russia which called for a joint Jordanian-Palestinian delegation to the conference whose Palestinian members would be from the West Bank or the Gaza Strip but could not have any formal affiliation with the PLO. This agreement proved to be a satisfactory solution for the early stages of the negotiations.

After three days of discussion, a framework for further negotiations was constructed which called for bilateral and multilateral negotiations to begin immediately. After much disagreement among the parties over a location for future meetings, the United States proposed that the bilateral peace talks would convene in Washington, DC in December. The multilateral talks were to follow a month later in Moscow. The Madrid Conference had launched a new era of relations in the Middle East and had done so by putting the resolution of the Israeli-Palestinian conflict front and center as the key to achieving a durable peace in the region. At the heart of this conflict were two core issues: security and territory. Secretary of State Baker acknowledged the sentiments of the parties and their concerns for a negotiated settlement at the end of the conference saying, "The parties have made it clear that peace by itself is unachievable without a territorial solution and security." [4] One of the key subjects with regard to

these two issues would be the future of control over and management of the shared water resources between Israel and the Palestinians.

# Water, Sovereignty and Power

While the collapse of the Soviet Union and the Gulf War enabled Israel and its neighbors to come together, recent natural events in the region would highlight the importance of water in the ensuing peace talks. Three years of below average rainfall had forced all the riparians of the Jordan watershed to cut back their water consumption. [5] In light of the past tensions and military skirmishes between Israel and its neighbors resulting from the ad-hoc management of the Jordan watershed, the current drought was a reminder that an agreement over water would be an integral component of a final settlement.

For both the Israelis and the Palestinians, access to water has been inextricably tied to the notion of sovereignty. Each group has claimed that control over water resources is necessary to ensure their economic growth and security. From its beginnings, the Zionist movement recognized the importance of control over water resources to ensure economic growth and self-sufficiency for their new homeland. Recall that Chaim Weizmann, who became the first President of Israel, made pleas with the British after the end of World War I to include the Litani and the Upper Jordan within the boundaries of Palestine in order to preserve economic independence. [6] Likewise, Palestinians argue that Israel's regulations on wells in the West Bank since the war of 1967 have severely hampered their economic growth, which in turn has hindered the Palestinian people as a whole. These claims not only highlight the similarity with which each side regards the importance of access to and control over water resources, they also illustrate the stark difference in the bargaining positions each side holds with respect to the other.

What is unique about the relationship between the Israelis and the Palestinians in the peace process, including the discussions over water resources, is the power differential which exists as a result of their different political status. From the outset, this power asymmetry led each group to come to the negotiating table with sharply contrasting and adversarial positions and unequal bargaining leverage. By the end of the Gulf War, Israel's economy was robust, it had control over the water resources that were under dispute and it would be going into the peace process with skilled negotiators and well documented information about the issues. By contrast, the Palestinians, who had sided with Iraq in the war, had been experiencing political fragmentation and less funding from Arab countries, which had lead to a financial crisis for the PLO. Inexperience with international negotiation and less knowledge about the water issues further added to this asymmetry. [7] As the two sides began the negotiating process, their positions were wide apart and separated by a sea of distrust.

With this history of distrust marked by bloodshed, the multilateral component of the peace talks it was hoped would provide a sorely needed avenue to move away from the old problems of the past toward building a new understanding of shared needs and regional cooperation. President Bush said of the multilaterals at the beginning of the Madrid Conference, "Progress in these fora are not intended as a substitute for what must be decided in the bilateral talks; progress in the multilateral issues can help create an atmosphere in which long-standing disputes can more easily be settled." [8] Although it was regarded by some as naïve at the time, by focusing on issues of regional concerns like water, refugees, arms control, economic development and the environment, and leaving the more contentious political

issues to the bilaterals, the multilaterals were intended to be a new forum for cooperation which could enable the search for mutually acceptable solutions.

Source of Dispute: Groundwater

Coming into the peace talks in 1991, the principle water in dispute between the two parties is the groundwater underneath the West Bank and the Gaza Strip. The three aquifers that make up the Central Highland Aquifer (the Western Aquifer, the Northern Aquifer and the Eastern Aquifer) account for about 40 percent of the water used for Israel. Of these three sources of groundwater, the Western and Northern Aquifers are located on both sides of the green line, which separates Israel from the West Bank. [9] The Eastern Aquifer has the smallest amount of water and is totally within the boundaries of the West Bank. The West Bank has other sources of water, namely surface runoff and streamflow, but groundwater is the principal water source. The Gaza Strip has no other sources of water than from the Coastal Aquifer beneath it, except for negligible amounts of rainfall. [10] This aquifer is much shallower than the aquifers making up the Central Highland Aquifer, and consequently it is more easily overpumped. Because it is unconfined, the aquifer has become seriously contaminated from salt water intrusion, pesticides, and sewage. These two underground water sources, the Coastal Aquifer and the Central Highland Aquifer, have been under the control of Israel since the 1967 war. Although Israel has regulated these aquifers differently, the underlying source of dispute between Israel and the Palestinians centers around who will manage and control them.

Palestinian position: water rights first

The Palestinians from the outset of the negotiations emphasized the need to discuss water rights and the control over water resources in the West Bank and the Gaza Strip. Palestinian academics and policy makers have long pointed out the vast gap in water consumption that has existed between Israel and the Palestinians both for domestic and commercial purposes since the Israelis took control over the West Bank and the Gaza Strip. [11] Many facts and figures exist on this subject of unequal water consumption. Cecilia Albin notes that from 1967 to 1987, the Palestinian population increased by 84% but water supply for domestic use increased only 20% and water for irrigation purposes was frozen. [12] Because the Palestinian economy is primarily agricultural, this freeze in water supply Albin argues has severely hindered the development of the Palestinian economy. In the West Bank, water use and development have been tightly controlled by the Israeli military. In what is seen by the Palestinians as outright discrimination and hypocrisy, Jewish settlements in the West Bank have received large water subsidies to promote agriculture, while Palestinians have been denied permission to drill wells for agricultural purposes. Under a policy which recognizes only existing use of water, Palestinian water allocation in the West Bank has been frozen at the 1968 level with only a small amount of growth. [13] With this history of unequal water consumption, the issue of water rights for the Palestinians has been paramount as the means of ensuring guarantees to manage and control their own water resources in the West Bank and Gaza Strip.

Israel's position: focus on management of water resources

Whereas the Palestinians initially focused on the imperative for recognition of their water rights, Israel emphasized the practical and technical aspects of water resource management pointing out the urgent need to address protecting and managing the water resources of the West Bank and the Gaza Strip. Comparing the situation in the Gaza Strip to the West Bank illustrates these concerns. Israel's strict regulations on water use and development in the West Bank was not extended to the Gaza Strip. Instead, an old Jordanian law on soil and water has been used by the Israeli military authorities. [14] With much less regulation, the water situation of the Gaza Strip has become a disaster both in terms of water quantity and water quality. Over 2000 wells pump groundwater from the Coastal Aquifer located underneath the Gaza Strip along with hundreds of illegal wells which have created severe overpumping and led to contamination of the aquifer from saltwater intrusion from the coast as well as from fertilizer and pesticide use. This in turn has created a public health problem with high incidents of childhood dysentery and parasitic infection. [15] The novelist Ghassan Kanafani described Palestine as the land of sad oranges. The water crisis in Gaza truly reflects this despair.

The situation in the Gaza Strip from the Israeli perspective was positive proof of their need to retain control over Palestinian water sources. Israel's initial position going into the peace process was that they would not negotiate water rights during the interim phase. Rather, discussion should center around the technical aspects of managing water resources in the West Bank and Gaza Strip and finding options for increasing more access to water resources. [16] It wasn't until two years into the peace talks after the Likud government was replaced by a Labor government headed by Yitzhak Rabin in 1992, when Israel began to soften its position towards joint management of shared water resources, and later to address the issue of water rights.

# The Multilateral Working Group on Water Resources

Two months after bilateral negotiations between Israel and its neighbors were initiated in Madrid on November 3, 1991, the multilateral working groups convened in Moscow to begin work on regional issues. [17] The multilaterals opened up the Middle East peace process to a wide range of interested parties by including along with the immediate parties in the talks eleven Arab states and 27 other states and international agencies. [18] With the United States as gavel holder, the Multilateral Working Group on Water Resources (working group on water) was one of the five working groups to convene at Madrid and played an influential role throughout the peace process by providing a forum to discuss options to regional water problems. [19]

This section analyzes the role of the Multilateral Working Group on Water Resources within the negotiation structure of the Middle East peace process. Stephan Libiszewski, a political scientist and research scholar at the Center for Security Studies and Conflict Research in Zurich, has suggested that the twin track "formula" of the Middle East negotiations, with the bilateral negotiations focusing on "high" politics and the multilateral negotiations focusing on regional issues and technical issues or "low" politics, could be an effective procedural model for other complicated disputes around the world involving multiple stakeholders. [20] Regarding Libiszewski's analysis of the negotiations structure, I argue that the division of political and technical matters was not as neatly split with the multilateral negotiations only dealing with technical matters and the bilateral negotiations only addressing political matters. Rather, I conclude that the working group on water, by focusing on regional water issues and

emphasizing the technical aspects of water, was able to create a less contentious environment to discuss water issues and in doing so promoted a greater level of trust between the Israelis and the Palestinians. Through its activities and projects, the working group facilitated the ability to make headway in the "high politics" of the bilateral negotiations. Beside providing an avenue for building trust, the working group on water provided a valuable component to the peace process in two principle ways. First, the working group through its regional and technical focus was able to address a broad range of water related issues promoting a more integrated approach to watershed management. Second, by bringing together all interested parties to discuss regional water issues and particularly by including a mechanism for the Palestinians to participate, the working group created an avenue to address the power imbalance which exists between the Israelis and the Palestinians. In light of the Israeli-Palestinian interim agreement which was signed in 1995, the two-part structure of the peace process should be judged as a success.

According to a recent report from the Multilateral Working Group on Water Resources which was presented at the Second Annual World Water Forum in The Hague, the multilateral track of the peace process is premised on the idea of "creating synergies through awareness of common problems, such as water." [21] Although the model for the peace talks was open-ended from the beginning, a central theme of creating a positive dynamic guided the process. Several policies were adopted from the outset with the hope of promoting regional cooperation. [22] These included the following:

Goals were to come from regional participants and should focus on technical issues.

Commitment of the international community to a long-term solution for Middle East water problems. Consensus based decision-making.

High-level participants.

Informal atmosphere.

Project flexibility to allow for the ability to include additional participants.

Public/Private sector cooperation.

Through these guidelines, the working group on water was able to pursue its goal of regional cooperation creatively while using commonly agreed upon principles.

Over the course of eight official meetings, the working group on water brought conflicting parties together face to face to discuss future plans about their shared water resources. [23] This section provides a summary of the events that took place in the working group over the course of three and a half years and its relationship to the larger peace process.

The first two rounds of the working group on water were highly contentious. The Palestinians, at first part of a joint delegation with the Jordanians, immediately raised the issue of water rights, arguing that no progress could be made until this issue was addressed. The Israelis were adamant in their position that water rights were a subject for bilateral negotiations and that the working group should focus on the issue of management of water resources and options for developing new water resources. With all decisions made by consensus, nothing was agreed upon accept to meet again and continue the working group. As one participant wrote, "an achievement in and of itself." [24]

Four months later, the working group on water convened in Washington, DC for their third round of talks. This meeting was more productive than the first two rounds. A consensus was reached among the participants about the four main areas of focus for the group. These were enhancement of water data, water management practices, enhancement of water supply and concepts for regional cooperation and management. The relationship between the multilateral and the bilateral tracks was also defined. The bilateral negotiations would deal with political issues while the multilateral negotiations would handle regional more technical issues. [25] By focusing on planning and leaving the politics of implementation to the bilaterals, it was hoped that the working group would provide a forum for building trust and generating options that would spill over into the bilaterals.

Frustrations resurfaced in the fourth round of the working group on water in Geneva as the issue of water rights was raised again by the Palestinians. The meeting was initially planned to work out the more mundane details around organizing a series of intersessional activities. These were intended to promote interactions among the participants of the working group and educate them about global water issues. However, the Palestinians brought up the issue of water rights and threatened to boycott the upcoming intersessional activities. With help from the Jordanians before a meeting of the working group on refugees in Oslo, the problem was resolved the following month. An agreement was reached to instigate an Israeli-Palestinian working group on water rights in the bilateral negotiations. This satisfied the Palestinians who agreed to withdraw their boycott and to participate in the intersessional activities. [26]

Two months later in July, the intersessional activities began. In the effort to foster trust and knowledge about global water issues, the working group on water developed a series of training courses and activities for its participants and other professionals from around the region. Twenty intersessional activities were organized, including a tour of the Colorado Basin and seminars on semi-arid lands. Fourteen training courses were also designed with topics ranging from basic overviews of integrated water resource planning and water quality management, to more specialized topics on groundwater modeling and the development of efficient irrigation systems. [27] These activities and courses provided a basic framework for understanding the issues of regional water planning, while creating multiple avenues for the parties to interact with each other.

The 1993 Declaration of Principles and the Oslo secret negotiations

On September 15, 1993, the Palestinians signed the Declaration of Principles on Interim Self-Government. This agreement defined Palestinian autonomy and called for the creation of a Palestinian Water Administration Authority. The first line in Annex III of the agreement calls for "cooperation in the field of water...to include proposals for studies and plans on water rights of each party, as well as on the equitable utilization of joint water resources for implementation in and beyond the interim period." [28] The Declaration of Principles was a milestone in that it addressed both the Palestinians' interests on water rights and the Israelis' interests about management of scarce water resources. It also marked a turning point for the Palestinians in the negotiations as they separated from the Jordanians and the PLO became their official representative to the talks.

The breakthrough of the Declaration of Principles was the result of secret negotiations, which began in January 1993 in Oslo, Norway. The secret Oslo talks sprang from a research project commissioned by the Norwegian Institute for Applied Social Science (FAFO) for the Working Group on Refugees several months earlier, which was going to study the living conditions in the occupied territories. [29] Through this project, the director general of FAFO, Terje Larsen, the study's primary author Marianne Heiberg, and her husband, the Norwegian Foreign Minister Johan Jorgen, came into contact with Yossi Beilin, who was an opposition member of the Knesset. [30] From these relationships a series of secret meetings developed over the course of eight months between the Israelis, the Palestinians and the Norwegians.

Completely away from the media and public opinion, the Oslo negotiations succeeded in moving the Israeli-Palestinian negotiations forward. By providing a neutral diplomatic space, both sides could hold candid discussions without the concern of outside opinion or the influence of a powerful third party mediator. Even though the US government knew of the secret talks taking place in Oslo, it was not recognized the extent of the decisions taking place. For this reason, the Declaration of Principles came as somewhat of a surprise to Secretary of State Warren Christopher, who was briefed of the impending agreement by Israeli Foreign Minister Shimon Peres. Despite the surprise, the United States gave full support of the Declaration of Principles which was signed on the White House lawn. [31]

The fifth round of the working group on water in Beijing made substantial progress in each of the four topics agreed upon at the start of the negotiations. Recognizing the lack of water data especially for the Palestinians, the parties agreed on the need for regional databanks. The databanks would be established with funding help from the United States, Australia, Canada, the European Union, The Netherlands and France. [32] Finally, seminars focusing on water management and regional cooperation were organized. This included a seminar run by Austria about water technologies in arid and semi-arid regions, and a seminar planned by the United Nations on models for regional cooperation and a workshop on weather forecasting. [33]

After a seven-month hiatus, the working group on water broke new ground by holding their first meeting in an Arab country. Held in Muscat, Oman in April 1994, the sixth round of the working group started off on a tense note when it became known that the Palestinians were going to announce the creation of the new Palestinian Water Authority. Although this was planned for in the Declaration of Principles, there were some that questioned the appropriateness of the announcement at the working group. In the end, the Palestinian Water Authority was well received and the working group on water continued to make plans for regional water projects. The working group on water endorsed several proposals including one by Oman to create a desalination research and technology center in Muscat, and another from the United States to build small scale wastewater treatment facilities. [34]

The last two rounds of the working group on water were marked by strong financial support for the working group's activities from the international community. Several of the delegations put forth new initiatives and offered to finance the working group's projects. The United States and Oman offered to provide \$3 million towards the establishment of the Middle East Desalination Research Center. Luxembourg, Sweden and the Netherlands laid out their projects to assist the Palestinians in water resource management. Progress on the regional data banks project continued, and a new project financed by France was proposed to help assist in managing water crises. [35]

The Multilateral Working Group on Water Resources: Analysis

Compared to the Johnston negotiations, the working group on water made some important improvements to the negotiations about water in the region. Recall that the Johnston negotiations focused exclusively on the technical aspects of the conflict over water, they only dealt with surface water, and the Palestinians were excluded. By contrast, the two track structure (bilateral and multilateral) of the Madrid peace process, through the working group on water, opened a forum to address regional water issues and the technical considerations about water, which created the ability to address simultaneously both the political and technical aspects of the conflict over water. Furthermore, by facilitating various water-related activities, the working group on water has been able to promote broad aspects of watershed management. Finally, the working group on water worked to include all the major stakeholders, most importantly the Palestinians, whose participation is essential to the peace process.

The working group on water has been a crucial component in the effort to resolve the conflict over control and use of the water resources of the West Bank and the Gaza Strip for the Palestinians and the Israelis. By focusing on regional water issues, the working group has been able to foster better relations and trust among its participants, which has had a positive influence in the bilateral negotiations. Furthermore, the ability to address technical aspects of water alongside the contentious political negotiations, and the inclusion of the Palestinians and other key stakeholders has allowed the working group on water to not only broaden the spectrum of issues toward a more integrated approach toward watershed management, it has also been instrumental in changing the dialog from a zero sum water problem toward mutual problem solving about water. In doing so, the working group on water has helped to create a more level playing field and, consequently has worked to mitigate the power imbalance between the Israelis and the Palestinians.

By providing an informal environment in which to discuss regional water issues, and building support and securing financing for regional water research and development projects, the working group on water provided a forum to promote trust and cooperation over water. It is difficult to put a measure on the development of trust. To get a sense of how far the Israelis and the Palestinians have come from the beginnings of the working group on water up to the present, one needs only to look at look how their interactions have changed. At the start of the negotiations in Vienna, the parties would only meet in formal sessions. According to one participant at this meeting, any interaction was stilted and the parties did not interact outside the big group. Now, Israelis and Palestinians are routinely working together in smaller groups focusing on substantive issues. Even though the working group on water has not held a formal meeting since 1996, participants have engaged in various activities quite frequently. It is also telling that during the times when the negotiations in the bilaterals have hit an impasse, the projects instigated in the working group on water have continued to operate and expand. [36]

In an indirect way, the effects of these confidence-building measures have spilled over into the bilateral negotiations. The creation of regional water data banks is one example of how the Israeli-Palestinian bilateral track has benefited from the multilateral track. One of the issues that the Palestinians had brought up in the working group on water was the lack of sufficient water data. In order to enhance

data availability, regional water data banks were created. These data banks have not only assisted the Palestinians with more water data, as an official from the State Department remarked, the information from the data banks has increased technical capacity for all participants including those in the bilateral negotiations.

Through courses and seminars on a wide range of water topics and with the implementation of water projects to improve data availability, management practices, water supply and regional cooperation, the technical focus of the working group on water has broadened the scope and knowledge of water-related issues for its participants. The training courses were a particularly innovative element of the working group on water. These courses have helped provide the "institutional bridge" or common language for all participants in the negotiations. By addressing a wide range of issues, including water quality management, groundwater modeling and international water law, they have fostered an integrative approach to managing the Jordan watershed. The water projects have been a natural outgrowth of this process. Along with the regional data banks project which has helped to increase technical capacity, the new Middle East Desalination Research Center (MEDRC) in Oman will provide a location for regional cooperation through research and training in a technology which has the potential to greatly alleviate water stress in the Middle East. [37]

One of the most important components of the working group on water has been its inclusion of the Palestinians and generally its overall inclusive atmosphere. The forum included over thirty participants from all over the world. Although the Palestinians did not initially have their own voice in the negotiations, they were included from the beginning and eventually became a separate negotiating party from the Jordanians. Massive changes had taken place since the Johnston negotiations in the mid-1950s when the thought of including the Palestinians would have been impossible. After a decade which included the intifada, the Gulf War and the end of the Cold War, it had become clear to all parties involved in the peace process, including the Israelis, that the Palestinians' interests and participation in the talks were imperative.

By bringing together all interested participants to discuss regional water issues, the working group on water provided a new channel which was more power neutral than the bilateral negotiations. In doing so, it helped to mitigate the political imbalance that existed between the Israelis and the Palestinians over access and control over water resources.

One way that the working group on water mitigated the power imbalance is by acting as a release valve for contentious political topics. This occurred in both directions. In one direction, it allowed a space for the parties to spend time together in a relatively safe environment where sensitive political issues could be postponed if necessary. [38] In the other direction, it also unwittingly allowed for political issues to be brought up. For example, this occurred when the Palestinians used the working group on water to announce their new Palestinian Water Authority. In a forum dedicated to nonpolitical aspects of regional water issues, this was a highly symbolic political announcement.

A further example relates to the events which took place at the sixth round of the working group on water in 1994. In this meeting, the head of Israel's delegation to the working group on water, Avraham Katz-Oz, agreed to discuss the issue of Palestinian water rights. At the time, the head of the Israeli

bilateral team, Noah Kinarti, attempted to ignore this development in the working group. [39] However, Foreign Minister Shimon Peres had given Katz-Oz expanding leeway in the multilaterals. Katz-Oz's decision to discuss Palestinian water rights has since been attributed with being the rationale for Israel's decision to recognize Palestinians water rights. In August 1995, the new head of Israel's bilateral water team, Gideon Tsur, who replaced Noah Kinarti, met with the head Palestinian water negotiator, Ahmed Qurei, and signed an agreement formally recognizing Palestinian water rights in the West Bank. [40] Shortly before Oslo II was signed, journalist Steve Rodan wrote, "The ramification of that decision to discuss water rights appeared in last month's Israeli recognition of Palestinian water rights in Judea and Samaria. Senior Israeli officials, including minister Tsur justified their decision, saying that Katz-Oz had already set the precedent." [41] Whether intended or not, in this instance the working group on water played a pivotal political role in the negotiations over recognition of Palestinian water rights.

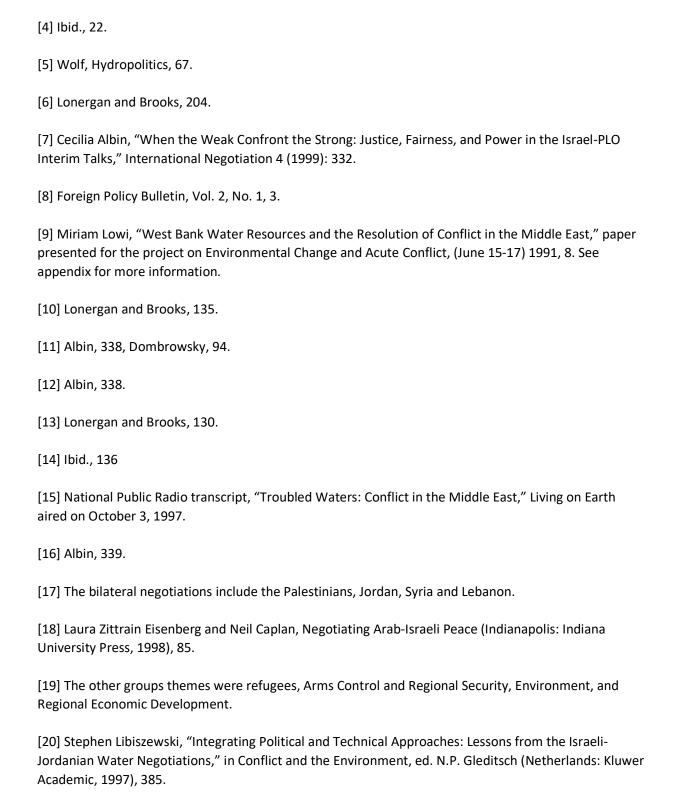
A second way that the working group on water has been able to mitigate the power imbalance between the Israelis and the Palestinians is through its explicit regional focus and technical capacity building. In a forum which discusses water in technical and geographically larger terms than the specific water in dispute, the Israelis and the Palestinians were exposed to a broader perspective of the issue at hand. By enlarging the field of vision and providing technical tools to better understand the portion which is under dispute, the working group on water provided the space and the tools to look at the conflict over water as a joint problem rather than a zero sum game.

With the Middle East peace process back on track last fall after a long hiatus, efforts to resume the multilateral working group negotiations are underway. In February, the first meeting of the Steering Group, the umbrella group which oversees the activities of the working groups, resulted in an agreement for the working groups to meet by the first part of the year. [42] The ongoing activities of the working group on water which have continued in the absence of formal meetings have clearly resulted in better working relations and more understanding of the water related decisions that lie ahead for the Palestinians and the Israelis.

Along with these positive developments, the working group on water in this new round of meetings faces an important challenge: the participation of Syria and Lebanon. Although both countries are officially part of the process, in the past they have chosen not to participate in the multilaterals until more progress has been made in the bilaterals. A peace agreement between Israel and the Palestinians could be made without the participation of Syria and Lebanon in the multilaterals. However, an agreement over water between Israel and Syria could significantly impact negotiations over water between Israel and the Palestinians. If the two countries decide to participate in future meetings of the working group on water, the format of the meetings and the ongoing projects were intentionally created to be inclusive and would enable them to be part of the process.

[1] Foreign Policy Bulletin: Documentary Record of the US Foreign Policy (Cambridge: Kluwer Law International, 1991) Vol 2. No. 1, 85.

[2] Ibid., 85.



[3] Foreign Policy Bulletin, Vol. 2, No. 3, 2.

- [21] Multilateral Working Group on Water Resources, "From Contention to Cooperation, A Case Study of the Middle East Multilateral Working Group on Water Resources," presented at the Second Annual World Water Forum, March 17-22, 2000.
- [22] From Contention to Cooperation, 5.
- [23] Aaron Wolf, "Multilateral Working Group Case Study," received from author as part of the Transboundary Fresh Water Dispute Database, http://www.transboundarywaters.orst.edu/. See also Wolf, "International Water Dispute Resolution: The Middle East Multilateral Working Group on Water Resources," Water International 20 (September 1995).
- [24] Wolf, Multilateral, 5.
- [25] Ibid., 5.
- [26] Joel Peters, Building Bridges: The Arab-Israeli Multilateral Talks (London: Royal Institute of International Affairs: 1994), 13.
- [27] Wolf, Multilateral, 7.
- [28] Ibid., 8.
- [29] Robert Bookmiller and Kirsten Bookmiller, "Behind the Headlines: The Multilateral Middle East Talks," Current History 95 (January 1996), 34.
- [30] Eisenberg and Caplan, 109.
- [31] Ibid, 110.
- [32] From Contention to Cooperation, 10.
- [33] Wolf, Multilateral, 10.
- [34] Ibid., 10.
- [35] "Multilateral Working Groups on Water Resources Press Statements for June 22, 1995 and May 16, 1996" The Jewish Student Online Research Center. Http://www.us-israel.org/jsource/Peace/multiwater95.html on 5 May 1999.
- [36] Wolf, Multilateral, 7 and 16.
- [37] Ibid., 13.
- [38] Interview with Aaron Wolf, April 14, 2000.

[39] Albin, 340.

[40] Albin, 341.

[41] Steve Rodan, "Divided Waters – Part 1," The Jerusalem Post, 1 September 1995.

[42] Peters, 7.

# **Chapter Three: The Israeli-Palestinian Water Accords**

The negotiations set out in the Madrid peace conference have been remarkably successful in bringing the parties together face to face for the first time to try to resolve the Arab-Israeli conflict. Up until this point, no other negotiation structure had brought the Palestinians and the Israelis together in such a way as to work on the political issues of the conflict through bilateral negotiations, while also working to promote trust by specifically focusing on regional issues and their accompanying technical aspects through a multilateral negotiation track. With the help of international support both as facilitators of the peace talks and through financial aid, four years of negotiations had led to unprecedented contact between these two groups, and ultimately to a series of agreements laying out a framework for Palestinian self-government while ensuring Israel 's security concerns.

By 1995, the peace talks had moved the Israelis and the Palestinians closer together in their positions over water than ever before. On August 24th, the Israelis formally recognized Palestinian water rights in the West Bank [1] Faced with media coverage of the unequal distribution of water in the West Bank , Israel increased water allocation to the Palestinians and also expressed its commitment to help find new sources of water for them. These developments were a breakthrough in the process of moving towards common ground over the issue of water. Israeli Water Commissioner Gideon Tsur remarked at this time, "...a year and a half ago, nobody dreamed of giving them [Palestinians] what we are prepared to give them today. When we started the talks, we thought that to discuss water rights was out of the question." [2] With new pressure by both the Rabin government and the Clinton administration to move forward to the next stage of the peace process, and after much delay and many missed deadlines, both sides signed the Oslo II agreement in Taba on September 28, 1995 .

Building off the Declaration of Principles signed two years earlier, the Oslo II agreement marked a major step towards Palestinian self-government. According to the agreement, Israel would withdraw from 456 Palestinian cities while administrative authority for six main West Bank towns would be transferred to the Palestinians through an election process. The Palestinian Authority in turn would act to stop all anti-Israeli violence from its own population and the PLO would change their covenant which had called the establishment of Israel illegal and for the liberation of Palestine . [3]

The water component of Oslo II is elaborated in Article 40. With the Madrid conference marking a milestone for moving the Middle East peace process into a new phase, Article 40 of the Israeli-Palestinian interim agreement is equally groundbreaking in its interim solution for managing the shared water resources between the Palestinians and the Israelis. Both the water principles and the

institutional mechanisms created to manage West Bank water resources in the water accords illustrate a monumental step by both parties towards cooperation over their shared water resources. The 16 pages making up the water accords have been the roadmap for relations between the Palestinians and Israelis on how to work together over water up until the present. This chapter focuses on the implementation process of the water accords by examining what aspects of the agreement have worked and what aspects have posed difficulties. Certain elements of the water accords have proved to be successful, namely the Palestinian Water Authority, the Joint Supervision and Enforcement Teams and the support of the international community through Foreign Aid. However, one of the principle problems is that the joint water management structure has continued to reinforce the power imbalance between Israel and the Palestinians. The final status agreement must find a way to mitigate this power imbalance. With the permanent status talks between Israel and the Palestinians currently on track, finding an acceptable permanent institutional water management structure which will satisfy the needs and concerns of both parties will be an integral part of the broader peace process.

# Principles of the Water Accords

The single most significant element of the water accords is the first line in the document, which states that "Israel recognizes the Palestinian water rights in the West Bank." [4] The issue of water rights had been a continual source of conflict from the outset of the peace talks. For several years, the Israeli position had been adamantly against discussing the issue of Palestinian water rights during the interim agreement talks. The issue nearly caused the Palestinians to boycott the intersessional activities sponsored by the working group on water. With the taboo of discussing water rights broken by Avraham Katz-Oz in the working group on water the year before, and compelled by the desire for a peace agreement both by Rabin and Clinton, Israel conceded in its position to discuss and ultimately recognize Palestinian water rights with the stipulation that the details would be negotiated in the permanent status talks. By acknowledging Palestinian water rights while putting off a final definition of these rights to a later stage of the peace process, the agreement served the interests of both parties.

The water accords made a major step towards greater Palestinian self-government by handing over the responsibility of water resources of nearly all of the Gaza Strip and parts of the West Bank from Israel to the Palestinians. Building off the Declaration of Principles two years earlier, which provided Palestinian rule in Gaza and Jericho, and the Cairo agreement eight months earlier, which granted Palestinians the authority to manage the development of water resources for both regions, the water accords called for complete transfer of the water and sewage systems in the Gaza Strip to the Palestinians. The sole exception is for water to the Israeli settlements and a military installation area which will continue to be the responsibility of Israel. [5] Similar to the provisions about Palestinian water rights, the water accords called for the Palestinians to assume responsibility for their own sewage and water resources in the West Bank, with the issue of ownership of the related infrastructure to be negotiated in the permanent status talks. In this way, the agreement created a compromise by handing over complete control of water resources to the Palestinians in one area (Gaza Strip) and ceding partial control but not ownership of water resources in a second area (West Bank).

Lastly, the water accords created an important foundation by setting out principles for managing water resources, defining the existing extractions of the Eastern, Northeastern and Western aquifers, and

delineating the responsibilities and the commitments of each party to provide additional water to the Palestinians in the West Bank. [6] Although a discussion of the principles of customary international water law is beyond the scope of this paper, it should be pointed out that the water accords embraced the principle of commitment to prevent harm of water resources, which is one of the main principles in the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourse adopted by the General Assembly in 1997. [7] A second principle in the water accords, sustainable use of water resources, draws from the principle of equitable utilization, which is part of the UN convention and the Helsinki Principles on the Use of Waters of International Rivers adopted by the International Law Association in 1966. By adopting generally recognized water management principles from international water law, agreeing on the amount of water available from the Central Highland Aquifer, and setting out a detailed commitment for both parties to provide additional water to the Palestinians, the agreement provided a platform from which to build the institutional structure for managing the water resources between Israel and the Palestinians in the West Bank.

# Institutions created by the Water Accords

To implement the principles described above, Article 40 broke new ground through its creation of joint water management mechanisms. This section will look at the two principle institutional structures created by the water accords, the Joint Water Committee (JWC) and the Joints Supervisions and Enforcement Mechanisms (JSETs). The main function of the JWC is to handle all water and sewage related issues in the West Bank. The JWC is to be composed of an equal number of representatives from Israel and the Palestinian Authority with agreement to be reached by consensus on all matters. Its primary responsibilities include coordinated management of water resources, exchange of information relating to water and sewage laws, resolution of water disputes, and arrangement for water supply from one side to another. Specifically, all development of new water resources, including licensing and drilling of new wells, must first be approved by the JWC.

The second institutional structure created in the water accords is the Joint Supervision and Enforcement Teams (JSETs) for the West Bank. The JSETs are to be composed of 5 teams with at least two representatives from each side to monitor, supervise and enforce the implementation of Article 40. Its responsibilities include monitoring connections to the supply systems, the drilling of new wells, development of new water supply projects and prevention of contamination of water resources. In a sense, the JSETs are the equivalent of "water enforcers" roving the area to make sure that the new water accords are being followed by both Israel and the Palestinian Authority.

The water accords set out in Article 40 are the first real step towards institutionalizing a system for the two groups to work together over water. By creating a joint management institution, the accords ushered in a new structure of relations between the Israelis and the Palestinians and also with the international community. Not only have both sides agreed to try work peacefully together rather than pursue unilateral objectives to manage their water, the interim agreement created the institutional structure which could be engaged by the international community for financial and diplomatic support.

Implementation of the Water Accords

One of the most important developments growing out of the water accords is the creation of the Palestinian Water Authority (PWA). Formally established shortly before the signing of the interim agreement in April of 1995, the PWA is responsible for the development and management of all Palestinian water resources including the implementation of water projects with the help of foreign assistance. [8] In the process of moving closer toward self-rule, the Palestinians literally created an institution where none existed before. It is the principle institution working with Israel to implement Article 40 of the interim agreement.

The PWA's top priority is to implement as many water-development projects as it can get approved by the JWC in order to increase the water supply to the Palestinian people. [9] To facilitate this goal, it has developed a water policy which has as its guiding rule that water is public property. Water rights in the future Palestinian State, according to Fadil Qawash, the deputy chairman of the PWA, will refer to the rights to use but not to own water. [10] In such a water scarce region, the PWA has embraced the concept of water as an economic good that is to be regulated by the state. Although the relatively new institution is still building up its institutional capacity, it has emerged as a main Palestinian link for water issues both with the Israeli government through the JWC and with international governments and agencies who have provided technical and financial assistance for water resource development projects.

One aspect of the water accords that has proved to work relatively well has been the Joint Supervision and Enforcement Teams. The JSETs are in charge of daily inspections of water levels in wells, water quantity and monitoring the amount of water extractions. At first, the joint inspection teams got off to a shaky start. The Israeli inspection team, for example, refused to go on inspection tours with their Palestinian counterparts without the accompaniment of Israeli soldiers. [11] Over time, the two sides were able to work together, and by 1998 the joint inspections were running smoothly. The JSETs demonstrate that both parties are capable of working together to manage their shared water resources.

Along with the positive developments of implementing Article 40, there have been several challenges. The Joint Water Committee in particular has proved to be a great source of frustration. As the umbrella institution for implementing the joint management structure for the water resources in the West Bank created by Article 40, one of the responsibilities of the JWC is to go over proposals for water projects and to issue permits for those projects that are approved. One of the main problems is that this process has become well known for being slow and overly complex. Permits are issued for each stage of individual projects and the process almost always takes several months. Rouyer notes, "...once a permit is issued to drill a well, others will then be needed to construct the road to get the equipment to the site, and for a building to house the workers drilling the well." [12] The cumbersome permit process has hindered the ability to implement water resource development projects.

Related to the permit process, a principle complaint from the Palestinians about the JWC is that its structure has maintained a power imbalance. Ironically, the consensus based decision making process of the JWC laid out in the agreement has effectively given Israel "veto" power over Palestinian water projects. In theory, both sides have this same veto power for all projects coming before the JWC. However, since the water structure is already in place for Israeli settlements, almost all the water project proposals coming before the JWC are from the Palestinians. [13] Another functional impediment for the JWC has been the larger political process between the Israelis and the Palestinians. One member

of the Palestinian Water Authority claimed that when things were going badly in the larger political process, meetings for the JWC would sometimes be postponed. Though, as of fall 1999, the situation had improved. [14] If the JWC or a similar structure is envisioned for a final peace treaty between the Israelis and the Palestinians, this structural component should be altered to provide a more equitable mechanism for making decisions about water projects in the West Bank.

Other incidents suggest that both sides are having difficulties working together to manage water and that trust between the two group is still shaky. The water shortage in Jenin is one example of these difficulties. In the agreement, Israel committed to drill an additional well for the Jenin area which would provide 1.4 mcm/year of water. During the period of transferring Jenin from Israel to the Palestinian Authority, dozens of illegal wells were dug by city residents. Israel discovered these wells through surveillance and they were then destroyed by the PA. Ultimately, the illegal wells were taken care of but this mishap started the transfer of Jenin and the subsequent water commitments off on the wrong foot. By 1996, Israel had dug a new well according to its commitments in Article 40. However, it did not supply pumps or pipeline for the well, making it unusable. With the help of USAID and UNDP, pipelines from the well to Jenin and surrounding villages were constructed. The well was now usable, but it still did not provide the amount of water it was intended to provide. A proposal for a second well was then put to the JWC but the Israelis rejected the offer. [15] In spite of the strong steps forward both in the development of the Palestinian Water Authority and the success implementing the JSETs, the situation in Jenin is a sign that both parties are still struggling to cooperate together over water resources.

A second example has been the heated dispute over untreated wastewater in the West Bank. What is not in dispute is the fact that untreated sewage from both Palestinian and Jewish settlements has been seeping into the aquifer. However, both Israelis and Palestinians have accused each other of deliberately polluting the Central Highland or Mountain Aquifer. Israel's Minister of National Infrastructure, Ariel Sharon, in 1997 claimed that the Palestinians were deliberately trying to obstruct the water accords, referring to the pollution from the Palestinian municipalities as "sewage intifada." [16] The Palestinian Authority countered that Jewish settlements are just as guilty of polluting the water supply as the Israelis. Just as the nature of the problem is politicized, so is the solution. Stressing economic efficiency, Israeli planners have suggested using joint wastewater treatment plants to solve the problem. Toward this end, the German development agency pledged \$8 million towards building a plant. However, the Palestinian Authority has been at odds with this solution, because from their perspective a joint treatment plant including Israeli settlements would be effectively recognizing their right to exist. Although Foreign Assistance aid can assist by providing the financial means to solve the problem, the two groups will first need to agree to work together to find possible solution to the pollution problem.

The Role of Foreign Assistance in Implementing the Water Accords

The Oslo II agreement not only brought the two parties together, it opened up an avenue for foreign donors to assist with economic and social development in the Gaza Strip and the West Bank. Following the agreement, 29 states and organizations pledged \$2.5 billion in aid, of which \$365 million was specifically for water and sanitation projects. [17] To help channel the funds, two groups were formed, the Consultative Group and the Ad-Hoc Liaison Committee. The latter committee worked with the multilateral track of the peace process. A look at two of the major donors, the United States Agency for

International Development and the United Nations Development Program, illustrates how essential foreign assistance is for implementing the water accords.

The role of USAID in the implementation of the water accords is unique from the other international aid institutions. As the main broker of the peace talks and as a member of the trilateral committee which provides American mediation to intractable water disputes, the United States through USAID is the only donor that gets involved with the work of the JWC. With a \$58 million budget, USAID has made the water sector a central focus of its aid program to the West Bank and the Gaza Strip. Improving water quality is its primary goal for the Gaza Strip whereas increasing water supply is the main priority for the West Bank. The work has been contracted out to American construction firms such as Metcalf and Eddy, Camp, Dresser and McKee, and CH2M-Hill. For example, Camp, Dresser and McKee won a contract for a \$35 million project to increase the water supply in Hebron and Bethlehem by an additional 6-8 mcm/yr. In the Gaza Strip, Metcalf and Eddy operated a project to upgrade and reconstruct the entire sewer system such that it now runs into communities which previously had no sewage facility. According to USAID, improvements in the West Bank to the water distribution systems for 27 villages have already benefited 260,000 people. [18] By the year 2003, USAID expects water availability to increase in Bethlehem from 46 liters/person/day to 125 liters/person/day and in Hebron from 38 liters/person/day to 90 liters/person/day using the World Health Organization's 100 liters/person/day as its standard. The UNDP has been working in the West Bank and Gaza Strip since 1980 to improve economic and social conditions for Palestinians. However, before the Oslo agreements, their assistance remained on a small scale because there was no Palestinian institutional counterpart organization. With the creation of the Palestinian Water Authority, the agency and other donors now have a host organization to work with to formulate and implement development programs. [19] UNDP's project expenditures for the region tripled from \$15 million in 1992 to \$50 million in 1996. Two years later, UNDP had allocated 19 percent of its budget for water projects, and had become the largest agency implementing water networks in rural areas of the West Bank and Gaza Strip. Like all other agencies aside from USAID, UNDP does not get involved in the permit process of the JWC. Instead, it waits to commit funds until a permit has been issued. With a smaller funding base than USAID, UNDP's projects range from \$1-5 million and concentrate on providing water to villages or upgrading sections of a deteriorating urban water system. [20] UNDP has also distinguished its foreign assistance from that of USAID by emphasizing the development of institutional capacity. Towards this goal in the water sector, UNDP has launched the Water Resources Action Program (WRAP) which makes water specialists available to the Palestinian Authority. It has also made a high priority of including the Palestinians in the implementation of water projects to spur employment, technical transfer and foreign investment.

The interim agreement, through the birth of the Palestinian Water Authority and with the creation of an institutional water resource management structure, provided the inroads for foreign assistance to aid in the implementation of Article 40. The massive support in the form of financing, technical expertise, and mediation are essential components of the implementation process. Foreign Aid not only provided the bricks and mortar for water resource projects; it has also aided in capacity building. Without this support, it is unlikely that both parties, and especially the Palestinians, would have the resources to implement the water accords on their own. Some criticism of Foreign Aid has been leveled by Palestinian officials, particularly pointing to USAID's heavy insistence of feasibility studies and that these projects have been serving American economic interests through its contracts for construction firms.

[21] Although these firms are benefiting from the Oslo II agreement, they are also clearly providing major improvements to the water sector in the West Bank and Gaza Strip.

Analysis of the Implementation of the Water Accords

The last four and a half years have ushered in a dramatic change in relations between the Israelis and the Palestinians over the management of their common water resources. After decades of hostility and unilateral water resource development, the water accords of Oslo II laid out water management principles and created a completely new institutional structure for the parties to begin to work together. The implementation of this agreement has led to unprecedented cooperation between the two parties and water resource development. Three elements stand out as the most positive achievements of the implementation process: the Palestinian Water Authority, the role of Foreign Aid and the Joint Supervision and Enforcement Teams.

The birth and development of the Palestinian Water Authority has provided a much needed institutional interface for the planning and management of water resources now under the responsibility of the Palestinian Authority. From its beginning, the PWA has advocated for progressive water policies such as water pricing and the importance of public participation in local planning. As this institution continues to develop institutional capacity, it will be able to engage the Israelis with more sure footing about future concerns over protecting their shared water resources.

The ability of the Israelis and the Palestinians to work together in the Joint Supervision and Enforcement Teams is a milestone for joint water resource management between the two parties. Farther removed from the politics of the larger peace process, the JSETs show that it is possible for the two sides to work together over water. It is at this mid-level of institutional management that working relationships can take root.

Lastly, Foreign Aid has been an integral part of the implementation process. The strong support from governments and international organizations of the water accords has ensured that both parties have had the resources necessary to carry out the agreement. Without this financial, diplomatic and technical aid, it is nearly certain that the two groups would not have been able to implement the agreement on their own.

In spite of these groundbreaking achievements in implementing the water accords, one of the problems of the current institutional arrangement is that it has effectively reinforced the power imbalance which still remains between the Israelis and the Palestinians. This imbalance is evident in the implementation process of the water accords and the ongoing water disparities in the West Bank and the Gaza Strip. Although Shmuel Cantor, the Israeli co-director of the technical subcommittee of the JWC, has viewed the work of the Joint Water Committee and the permit process as being very effective, the Palestinians working within the PWA have voiced strong frustrations about the rate of progress being made. [22] In principle, a consensus-based approach appears the most equitable way to make group decisions. However, in practice, this approach in the JWC permit process has given Israel a veto on Palestinian water projects. In a situation where one side has more needs than another, as in the case of the West Bank, the veto power of one party using a consensus-based approach has very uneven consequences.

On the ground, the Palestinians point out that Israeli settlements' access to water continues to be subsidized, whereas Palestinians who get their water from Mekorot, Israel's national water authority, must pay the commercial rate. Moreover, although Foreign Aid is helping to improve the water and sanitation condition in the West Bank and Gaza Strip, the overall environmental situation is dire. Nearly all Palestinians in the West Bank and Gaza Strip still do not have access to the recommended standard of 100 liters/day for domestic consumption. Furthermore, only 25% of households are connected to a sewage network. [23] The situation in the Gaza Strip is the most severe. Over 1500 illegal wells have been dug since the Gaza Strip came under the authority of the PA. As Rouyer notes, "Most Israeli and PA officials recognize that any long-term solution to Gaza's water problem must come from outside the territory in the form of transfers from either the West Bank, Israel and perhaps Turkey." [24] The disparity between the access to water and sanitation for Palestinians compared to the Israeli settlements in the West Bank along with massive problems in the Gaza Strip indicates that both sides are clearly not on equal playing fields.

Political Analysis: New Hope from Netanyahu to Barak

The broader political landscape plays a pivotal role in understanding the implementation of the water accords. The Oslo II agreement was signed by an Israeli government led by Yitzhak Rabin and Shimon Peres who were committed to a land-for-peace agreement. [25] When Rabin was assassinated in November 1995, Peres became Prime Minister. However, escalating violence including suicide bombings in Israel the following February and March prompted the Israeli public to vote in the right wing Binyamin Netanyahu of the Likud Party.

Netanyahu was a known critic of the Declaration of Principles and the Oslo II agreement. Within months of becoming Prime Minister, Netanyahu authorized the opening of a second entrance to a tunnel in the Old City of Jerusalem which was near Muslim holy sites. This produced the worst Palestinian-Israeli violence since the 1967 war. [26] The following year, Netanyahu's expansion of Jewish settlements in Arab East Jerusalem also caused more violence. Israel's speaker of Parliament, Avraham Burg said of him, "Under Netanyahu, if we didn't wake up to 26 crises, 5 police investigations and 2 scoops an hour, it was not a day." [27]

Until recently, it was under this political climate that the water accords have been implemented. With an Israeli Prime Minister who was not committed to the peace agreements signed under the previous government, the water accords were inevitably going to suffer from the lack of Israeli support. This can help explain the gestures of distrust which have manifested between the two sides.

Frustrated and fatigued by political violence, Israel elected Ehud Barak in May 1999 as Prime Minister who promised peace with security. With this change, the political climate appears to have turned back towards embracing peace. Barak had campaigned on the notion that he was Rabin's heir, picking up the peace process where it had been left at his tragic assassination. Coming off the heels of Netanyahu, who had managed to antagonize Americans, Arabs and Israelis and created an atmosphere of mistrust, Barak, was known for being straight forward, where yes means yes and no means no, and as someone who shunned backroom wheeling and dealing.

When Barak came to Washington, DC in July, 1999, he expressed a strong commitment to moving the peace talks forward, suggesting a 15 month framework by which time he said, "We will know whether we have a breakthrough and are really going to put an end to the conflict, or alternatively...we are stuck once again." [28] Following off the heels of this commitment, in early September, Barak and Arafat signed an interim agreement on the implementation of the Wye agreement. The Sharm el-Shiek memorandum, named for the resort town hosting the conference, provided for the release of 350 Palestinians prisoners held for political offences by Israel and the Israeli transfer of 11 percent of the West Bank to the Palestinians by January 2000. [29] Hailed by the United States and other countries around the world, the Sharm el-Shiek agreement marked a rekindling of the peace process. In private, Barak was also making gestures towards peace. Shortly after the signing of the agreement, Barak invited Arafat over to a highly secret dinner at the house of colleague who supported the Labor Party Peace Initiative. Of this encounter Barak said, "It's like moving between the surrealistic nature of what you see and feel and the deep sense that something historic is happening." [30] Since this time, Barak has kept up his end of the peace agreement, by releasing prisoners, returning land and opening up a safe passage between the West Bank and the Gaza Strip. [31]

The renewed commitment to peace has ushered in the opening of the final status talks with the Palestinians. Under Barak's leadership, which has shown decisive efforts toward more cooperation with the Palestinians, there is a better chance than ever before to find a final solution for managing the water resources of the West Bank and the Gaza Strip which can satisfy the needs and concerns of both parties. With five years of experience working together under the interim agreement, continued international support, and a new political climate oriented towards peace, the parties now have the wisdom and the political backing to improve upon the interim agreement.

# Lessons from Academic Research

Alongside the political developments taking place in the peace process over water, there has been several academic studies specifically focusing on institutional frameworks for managing shared water resources between Arabs and Israelis. The studies highlighted in this section are the result of collective inputs from experts from both the academic world and the policy world on international water management and law. These studies are a rich source of information for designing a future permanent water management institution for the Israelis and the Palestinians. The following is an overview of two recent research projects aimed at identifying what can be considered "best practices" for a water management institution.

As part of a project conducted by the Water Research Institute at the Technion University in Haifa, Israel, 23 international water experts were interviewed about their views on what an "ideal" institutional structure for managing Arab-Israeli water resources should include. [32] The goal of the study was to compare the institutional frameworks created in the Israeli-Palestinian interim agreement and the Israeli-Jordanian agreement. Table 2 lists categories relating to an institutional joint water management framework and the corresponding dominant opinion from the interviewees. Some of these categories will be further elaborated upon.

Several key issues are identified in this study. To begin with, all the respondents of the study suggested that joint management is the best arrangement for shared water resources. It was recommended that one institution should be responsible for this and should include all the riparians of the Jordan watershed, Israel, Syria, Lebanon, Jordan and the Palestinian Authority, and also allowing for subdivisions by source (a specific aquifer, for example). [33] About 90 percent of the respondents indicated that acknowledgement of water rights, particularly for the Palestinians, is a fundamental prerequisite to establishing a water management structure. Lastly, the interviewees emphasized the importance of addressing water quality concerns along with water quantity concerns, which are often the focus of attention.

Five years after the signing of the Oslo II agreement, several of the recommendations and concerns from this study have shown to be highly relevant in the process of implementing the water accords. Two components in particular from the study have proved to be ongoing sources of contention. First, the loosely defined status of Palestinian water rights has caused frustration by the Palestinians who claim that the institutional structure as it now functions according to the interim agreement effectively gives Israel a veto over all proposed Palestinian water projects. Until Palestinian water resources are more clearly defined, it is likely that these frustrations will continue. Second, water quality concerns with regard to water pollution in the West Bank and the Gaza Strip has been a major source of contention. Finding a solution to the pollution problem should be a fundamental component of the water section of a final peace agreement.

The second study is the result of a five-year project undertaken by Palestinian and Israeli researchers with the aim of constructing a method for creating joint management institutions for shared aquifers. The study was the result of the first Israeli-Palestinian water conference in Zurich in December of 1992 with the recognition that very little research had been done which addressed the process of building a management regime for groundwater. Most of the experience and literature focused on management of transboundary surface water. [34] In the first phase of the project, 30 participants, one-third Israelis, one-third Palestinians and one-third water experts from other countries, convened at two workshops to discuss existing knowledge about managing transboundary water resources. From this initial phase, 19 possible joint management structures were identified which differed in scope and goals. All structures emphasized the importance of confidence building measures, joint monitoring and data sharing, and conflict resolution mechanisms. [35]

By the end of the first phase, an approach was created by the researchers, called a "Flexible-Sequential Approach," which enables decision making to take place along a preagreed upon framework. According to this approach, joint water management could proceed in incremental steps along four routes, which would ultimately lead to an integrated management structure. The four routes or areas of focus are resource protection structures, crisis management structures, economic based structures and comprehensive integrated structures. [36] Resource protection structures would focus on maintaining water quality and quantity of the aquifer. Crisis management structures would address all types of crisis to the aquifer, including sudden crisis such as an oil spill, and cumulative crisis such as droughts and overpumping. Economic structures would encompass market mechanisms to manage water efficiently. Finally, comprehensive integrative structures would cover all elements of aquifer management

addressing issues that the other three structures don't consider such as mechanisms for resolving disagreements, policies for droughts, regulatory capacity and land use.

The second phase of the research study was undertaken along side the implementation of the water accords. After two years of implementing the water accords, the study asserts that the JWC and the JSETs have been a disappointment for both the Israelis and the Palestinians. The study further argues that this disillusionment with the current joint water management structures will make the starting point for building any future joint water management institutions more difficult. [37] Given the complexities and the problems that have arisen from the use of temporary water management structures for the past five years, this caution seems reasonable. Yet, these five years have also provided invaluable information for designing future permanent joint water management institution for the Israelis and the Palestinians. Whether the institution builds off existing structures or is completely new, the flexible-sequential approach advocated in this study should be evaluated by policy makers on both sides. This approach to institution building, which builds on joint cooperative activities incrementally, would allow for time to build working relationships around specific activities and hopefully create more trust between the two groups.

A future water agreement between Israel and the Palestinians will have the benefit of five years of experience from implementing the interim agreement combined with new research which has focused on joint water resource management options for Israel and the Palestinians. This chapter has highlighted some of the successes and problems that have arisen with the implementation of Article 40. The development of the Palestinian Water Authority and the strong support and commitment of the international community are positive aspects of the implementation process which will have lasting effects in the final agreement. The work of the Joint Supervision and Enforcement Teams has shown that Palestinians and Israelis can work together to manage their shared water resources.

Still, one of the main points of frustration especially for the Palestinians continues to be the power imbalance that is manifested in the management of their joint water resources. Even if the Palestinians attain statehood and become political "equals," this imbalance with regard to water will continue in the future because of the vastly different water needs and priorities between the two groups. The Palestinians will want to continue to develop their water resources in the future. However, they will be working with a partner who is much farther along in their water resource development. A future water agreement will have to incorporate a mechanism for handling this imbalance. This is an area of research that is beyond the scope of this paper. One broad recommendation is for both sides to adopt clear minimum standards about water quality and water quantity (for example, adopting the World Health Organization's standard of 100 liters/person/day or something approaching this) to guide future decisions about water resource development. These standards could act to counter the imbalance with respect to water between these two groups. For example, if the Palestinians or Israelis want to drill a new well, minimum standards on water quality and water quantity could provide a measure of impartiality to the decision making process. Additionally, the recent academic research discussed in this chapter has pointed out key water management issues and postulated several joint water management structures, such as the flexible-sequential approach, which can provide valuable information for designing a permanent water agreement.



- [22] Rouyer, 131.
- [23] USAID West Bank and Gaza Mission.
- [24] Rouyer, 132.
- [25] Deborah Shmueli, "Approaches to Water Dispute Resolution: Applications to Arab-Israeli Negotiations," International Negotiation 4 (1999): 321.
- [26] Albin, 333.
- [27] Deborah Sontag, "Peace. Period." The New York Times Magazine, 19 December 1999, 58.
- [28] Comments from a press conference by President Clinton and Prime Minister Barak on 19 July 1999. Http://www.state.gov/www/regions/nea/990719\_clinton\_barakpress.html 15 August 1999.
- [29] "Israel, Palestinians sign interim agreement on Wye River Accords," Deutsch Presse-Agentur, 5 September 1999.
- [30] Sontag, 63.
- [31] Ibid., 83.
- [32] Nurit Kliot and Deborah Shmueli, "Real and Ideal Institutional Frameworks for Managing the Common Arab-Israeli Water Resources," Water International 23 (December 1998): 216.
- [33] Kliot and Shmueli, 221.
- [34] Eran Feitelson and Marwan Haddad, "Identification of Joint Management Structures for Shared Aquifers: A Cooperative Palestinian-Israeli Effort," World Bank Technical Paper No. 415 (Washington, DC: The World Bank, 1998), 2.
- [35] Ibid., 5.
- [36] Ibid., 13.
- [37] Ibid., 20.

# **Chapter Four: Lessons Learned from the Israeli-Jordanian Water Agreement**

One year before the signing of the Israeli-Palestinian interim agreement, Israel and Jordan signed a historic peace treaty with the hope of establishing a "warm peace." Like the negotiations between Israel and the Palestinians, the subject of water between Israel and Jordan had long been an area of contention that played a key part of the final peace treaty. This final chapter examines three events

which have taken place since the signing of the peace treaty with respect to the implementation of the water agreement. The first looks at a controversy about the quantity of water and the allocation of costs for future water resource development projects. The second involves a month long water pollution crisis in Jordan in the summer of 1998. The last example looks at the political consequences of a severe regional drought in 1999. By examining the implementation of the water agreement, the aim is to identify some key elements of the Israeli-Jordanian agreement which can provide valuable lessons for shaping a future permanent water agreement between Israel and the Palestinian Authority.

Prior to signing the peace treaty, Israel and Jordan proceeded unilaterally with their own water development projects. Although publicly each country often expressed frustration with the other over water, certain discussions between Israel and Jordan over the Jordan and Yarmuk Rivers were kept out of the public eye. In the 1950s, the Johnston negotiations led to a water management plan that was not formally accepted by Israel , Jordan , Lebanon and Syria . Political tensions between the countries prevented the Johnston agreement from being accepted, but the negotiations instigated an avenue for secret talks between Israeli and Jordanian water officials, which have continued up until the present day. Beginning in the 1970s, these so-called "Picnic Table Talks" have been held every two to three weeks at the confluence of the Jordan and Yarmuk Rivers to discuss quotas for each side. [1] With the recent peace talks between Israel and Jordan opening up a new pathway of relations, information about the secret talks began to surface. Three months before the signing of the treaty, Israeli Water Commissioner Gideon Tsur at a press conference openly admitted to the secret meetings with Jordan for over a decade. [2]

Like the negotiations between Israel and the Palestinians, the peace talks between Israel and Jordan followed the same two-track structure using both a bilateral track and a multilateral track. The bilateral track was intended to focus on the more contentious political issues between the two countries including territory and security, whereas multilateral negotiations focused on creating a forum to discuss regional issues like the environment and water.

One significant difference with respect to the negotiations over water is that while the dispute between Israel and the Palestinians was over groundwater, the conflict between Israel and Jordan was primarily over surface water. The negotiations between Israel and Jordan focused on allocating water from the Jordan and Yarmuk Rivers, as well as the status of a small amount of groundwater from the Arava Valley , which is located from the south of the Dead Sea to the Gulf of Agaba crossing into both countries. As a result of the 1967 war, Israel controlled the Golan Heights, and in doing so gained access to the Upper Jordan and a greater portion of the northern shore of the Yarmuk including the King Abdullah Canal. Since this time, Jordan has criticized Israel for using the bulk of the waters in the Upper Jordan , arguing that the Johnston Plan, although never officially signed, allocated 100 mcm/yr of the Jordan River to Jordan . [3] A further area of contention was the issue of building a dam on the Yarmuk. In 1987, a dam proposal by Jordan and Syria was rejected by Israel on the grounds that the winter flows of the river would first need to be secured. Unable to resolve the dispute, Jordan asked for assistance from the United States, who sent United States State Department Ambassador Richard Armitage to assist in finding a solution. As an agreement began to unfold in 1990, other factors came to the forefront, especially the inability to engage Syria in discussions over the Yarmuk and the outbreak of the Gulf War, which ultimately brought the discussions to a halt. [4]

After nearly three years of negotiations, in a significant gesture of cooperation suggesting a move towards peaceful relations, in August 1994 Israel began to supply Jordan with 4 mcm of water from the Yarmuk to help alleviate their water shortage resulting from a winter drought. [5] Two months later, on October 26, 1994, Israel and Jordan signed an agreement ending 46 years of conflict. The agreement established full diplomatic relations and promoted broad cooperation in the areas of trade, tourism, water, environmental issues, and economic development, with the goal of creating a "warm peace" between the two countries. [6] A critical aspect of this warm peace was the agreement over water.

#### Israeli-Jordanian Water Agreement

Similar to the water accords in the Israeli-Palestinian interim agreement, the water agreement between Israel and Jordan begins by laying out general principles for managing water resources. These principles include the commitment to prevent harm to the water resources of the other party, the prevention of contamination of water resources, mutual assistance during water shortages, joint research and development in water-related subjects and cooperation over finding new water resources. [7]

These principles take shape in Appendix II, which describes the details for implementing the water-related matters of the agreement. The articles in Annex II delineate the allocations of the Yarmuk and the Jordan Rivers between the two countries. For the Yarmuk River, Israel is allocated a specific amount both for the summer (12 mcm) and the winter period (13 mcm), with Jordan receiving the rest of the flow. For the Jordan River, Jordan is allowed to store 20 mcm of water during the winter months as part of a future water storage project on the Yarmuk. In return, Israel is to transfer 20 mcm of water during the summer. Jordan is also entitled to 10 mcm of desalinated water and an additional 50 mcm of water to be provided in the future. [8] The most innovative section of the agreement concerns the solution to the land-water ownership of the Arava Valley. In a creative compromise, Israel is allowed to retain access to some of the groundwater resources which it acquired in the 1948 war, but are now located on the Jordanian side of the border. The territory is under Jordanian sovereignty, but the water belongs to Israel, with provisions for increasing abstractions up to 10 mcm within five years of the implementation of the treaty. Finally, similar to the water accords of the Oslo II agreement, a Joint Water Committee was established for the purposes of implementing the agreement.

## Implementation of the Agreement

With the signing of the peace treaty, relations between Israel and Jordan over water suddenly became public and open to scrutiny. For three years, Israel dutifully transferred 50 mcm of water to Jordan, which is stored in Lake Tiberias according to the terms of the treaty. Yet, disagreement ensued over the additional water resources promised to Jordan in the treaty. Exactly how much and who was to pay for them was under dispute. Around this time the media began to document the difficulties of implementing the water agreement. In May 1997, regional and international news sources concurred that the agreement was clear in purpose but ambiguous with details. [9] Stories in The Jerusalem Post and The Economist lay out the points of contention over the quantity of water Israel was supposed to transfer to Jordan, the means of transporting the water and the question of which country would pay for additional water development projects. These problems were related to the provisions in Article I in

Annex II of the agreement which describes the allocation of the water from the Yarmuk and the Jordan Rivers and provisions for additional water.

The interpretation of Section 3 of Article I in particular had become a great source of frustration. This section calls for both countries to work together to find an additional 50 mcm of water for Jordan specifying a one year deadline for a plan to be drawn up. A year and half later, the issue had not been resolved. Israel proposed using desalination to provide Jordan the extra water with the costs being shared by both countries. This proposal was unacceptable to the Jordanians who argued that the water was theirs outright and that the agreement said nothing about cost sharing. It was only after Jordan charged Israel with signing another agreement that it never intended to implement that the dispute was addressed. Responding to this charge, President Netanyahu secretly met with President Hussein and agreed to transfer another 25 mcm of water to Jordan, though it was not entirely clear where the water would come from. [10]

One year after this dispute was resolved, Jordan experienced a month long water pollution crisis which sparked accusations that the problems were the result of the Israeli-Jordanian peace treaty. The crisis began on July 5, 1998 when residents in the Jordanian capital of Amman began to notice a strange smell and taste to their drinking water. At first, the government attributed the change in water to high temperatures, which had created a suitable environment for moss to grow in Jordan's reservoirs. [11] While tests were being run to pinpoint the exact source of the pollution, Jordanian Minister of Water and Irrigation Mundhir Haddadin took pains to deny any link between the water problem and Israel saying, "The water pipe that pumps water to us is the same one that provides many Israeli settlements around the Yarmuk triangle with water. We get the same water they do and they distill it just as we do." [12] However, as it became evident that the contaminated water was coming from the Zay water treatment station which receives water from Lake Tiberias, a group of opposition parties began to blame Israel for the water pollution and called for the abrogation of the peace treaty. [13]

Throughout the crisis in July and August, the Jordanian government consistently took the stance that the water contamination was due to human and technical faults. When reports came out that the contamination came from a high concentration of algae from the Yarmuk River and Lake Tiberias, not only was the Jordanian government put under the gun, but the Israeli-Jordanian treaty was too. King Hussein, who was hospitalized in the United States at the time, came down hard on his government for not being able to produce a firm explanation of the water problem. [14] Ultimately, the entire cabinet was forced to resign over the incident. [15]

The political turmoil resulting from the water crisis effectively tested the implementation of the water agreement. What's interesting is that despite the calls from Jordanian political opposition parties for the abrogation of the peace treaty and the severe political fallout that followed, both governments worked together to try to solve the water pollution problem. It is telling that midway through the water crisis, a group of engineers from Jordan went to Israel to consult with some of their water purification experts. [16]

This is an example of a crisis due to human and technical problems, not a failure of water agreement. With respect to water transfers, Section 4 of Article II says, "The quality of water supplied from one

country to the other at any given location shall be equivalent to the quality of the water used from the same location by the supplying country." [17] The implication that Israel had been transferring contaminated water was unfounded and clearly politically motivated, especially given the fact that the water coming from Israel was also was also used by them. Rather, as Haddadin had claimed from the beginning, the water contamination resulted from inadequacies from Jordan's water treatment plant.

Less than a year after the water crisis in Jordan, the water agreement faced its most serious challenge in the form of a severe regional drought. With rainfall dipping to below 2 percent of its seasonal average in January 1999, Jordan officially declared a state of drought. By March, both Israel and Jordan were expressing deep concerns about their respective country's water situation and the potential for drastic shortages during the summer. With the real threat of worsening conditions for the region's overall water resources, Israel and Jordan fell into disagreement over the implementation of their water agreement. Faced with a severe drought both governments were adamant that the other side was interpreting the water agreement inappropriately.

With the Yarmuk River and Lake Tiberias reaching their lowest levels in 20 years, the dispute began in mid-March 1999 when Israel requested a reduction of the amount of water it was required to supply to Jordan according to the peace treaty. [18] Noting that the water agreement lacked provisions for a drought, Israel's Water Commissioner Meir Ben-Meir pointed out that their request was the result of an extreme situation which was also forcing Israel to take deep cuts in its own water usage. Unmoved by this claim, the Israeli request created an outcry from Jordan who demanded that Israel hold up its full water commitment under their peace treaty. After a week of negotiations, Jordan walked out of a meeting stating that the government categorically refused to redefine water shares in Lake Tiberias. [19] The situation hit a low point shortly afterward when Jordan threatened Israel with "appropriate actions" if Israel reduced its water share. [20]

A breakthrough in the dispute came five weeks later in the form of a compromise. By allowing for some flexibility in the delivery timetable of the water, Israel agreed to provide Jordan with the full share of water according to their peace treaty. [21]

The dispute had been resolved, but not without causing serious political tension between the two countries. The consequences of the severe drought had revealed a significant weakness in the water agreement of the peace treaty with its lack of provisions for such a situation.

These three examples point out some key issues in the implementation of the Israeli-Jordanian water agreement. First, a water agreement should have clear language for setting out water allocations and cost allocations. Ambiguity will only lead to future disputes, as has been the case between Israel and Jordan over planning and financial responsibility on future water resource development projects. Even with clear language, problems can still arise, such as the month long pollution crisis. However, as this situation illustrated, a problem can be more easily resolved if there is clarity in the agreement. Section 4 of Article II could have been left out or been completely different, but its clarity created an unambiguous standard for Israel and Jordan to follow. Ultimately, the pollution crisis was shown to be the result of human error, not from ambiguous language or a breach of the agreement. Second, in a water scarce region like the Middle East, provisions for emergency situations such as an extreme drought are

essential in an agreement. Had there been such a section in the Israeli-Jordanian water agreement, tensions might still have arisen but the two countries would have had a procedure to address the situation. These issues, clear language about water and cost allocations, and provisions for extreme events such as a drought, are important considerations for both Israel and the Palestinians as they move forward toward a permanent peace. As such, the Israeli-Jordanian peace treaty provides valuable lessons learned for a future water agreement between Israel and the Palestinians.

- [1] Liat Collins, David Makovsky and Jose Rosenfield, "Water Allocation Talks between Israel and Jordan no Longer Hidden from View," The Jerusalem Post, 1 August 1994. See also "Israel, Jordan Held Secret Water Talks," United Press International, 18 July 1994.
- [2] Ibid.
- [3] Libiszewski, 388.
- [4] Aaron Wolf, Yarmuk Negotiations case study, part of Transboundary Fresh Water Dispute Database, http://www.transboundarywaters.orst.edu/, 7.
- [5] David Rudge, "Israel to Give Water to Jordan Temporarily," The Jerusalem Post, 9 August 1994.
- [6] Clyde Haberman, "The Jordan-Israeli Accord: An Overview," The New York Times 27 October 1994.
- [7] Treaty of Peace Between the State of Israel and the Hashemite Kingdom of Jordan, 26 October 1994. See article 6.
- [8] Ibid, Annex 2.
- [9] David Rudge, "Water Pact Difficult to Implement," The Jerusalem Post, 11 May 1997, 2. See also "Water Politics, Jordan asks for more," The Economist 17 May 1997, 52.
- [10] "Water Politics, Jordan asks for more," 52.
- [11] Ibtisam Awadat, "Despite Outcry, Officials Reassure Public," The Star 16 July 1998.
- [12] "Ministers Deny Allegations of Water Pollution, Israeli Involvement," transcript of Radio Amman Jordan, 21 July 1998.
- [13] "Jordan Opposition Coalition Calls on Government to Resign," Jordan Times, 8 August 1998.
- [14] "Jordanian Government in Crisis over Water Scandal," Xinhua News Agency, 8 August 1998.
- [15] Jamal Halaby, "Jordanian Cabinet Resigns, King designates new Prime Minister," The Associated Press, 19 August 1998.

- [16] "Israelis, Palestinians Work Together on Water Purification," Middle East News, 19 August 1998.
- [17] Treaty of Peace between Israel and Jordan, Article II.
- [18] Danna Harman, "Jordan rejects Israel's request to reduce Water Transfer," The Jerusalem Post, 15 March 1999. See also Christopher Walker, "Jordan Protests at Israeli Water Cut," The Times, 16 March 1999.
- [19] "Delegation Head says Amman Cannot Renegotiate Water Shares with Israel," Shihan, 21 March 1999.
- [20] "Jordan Threatens "Appropriate" response if Israel reduces Water Share," Al-Sharq al-Aswat, 22 March 1999.
- [21] "Jordanian Minister says Israel to Provide Jordan's Full Share of Water," Jordan Times, 9 May 1999.

#### Conclusion

The past nine years have witnessed a paradigm shift in relations between the Israelis and the Palestinians. After decades of tension, which resulted in the inability to cooperate over water resources, the Middle East peace talks transformed the dialog and the relationship between these two long time adversaries towards peace. Through its two-track structure, the peace talks have facilitated the ability to address both sensitive political issues through bilateral negotiations while including a channel for less formal multilateral negotiations to focus on regional issues.

The Multilateral Working Group on Water Resources, despite having relatively few plenary meetings, opened up an invaluable channel for addressing water issues in a less politically tense environment. By keeping the focus of the multilateral negotiations on regional issues and emphasizing the technical rather than the political component of water issues, the working group on water resources fostered new perceptions of old problems around water. The working group on water has successfully engendered trust and better working relationships over water between the Israelis and the Palestinians where none existed before. Although it was not designed to find a solution for the Israelis and the Palestinians over water, the working group on water has produced a more cooperative atmosphere which hopefully can promote an environment for a solution over water that is acceptable for both groups to take shape.

Article 40 of the Israeli-Palestinian agreement broke new ground through its temporary arrangement for managing their joint water resources. The implementation of the agreement has shown that these two groups can cooperate over water. Several positive accomplishments have developed through the implementation process, namely the creation of the Palestinian Water Authority, the Joint Supervision and Enforcement Teams and strong support of the international community. Along with these successes, one of the principle problems with the current institutional arrangement has been that it has reinforced the power imbalance that exists between Israel and the Palestinian Authority over water. Because most of the proposals for new water projects going before the Joint Water Committee are from

the PA, the consensus-based decision-making process of the JWC has effectively given Israel veto power over water projects in the West Bank . With this issue in mind, one problem for further research is to how to design policies and mechanisms for joint water management which take account of the effects of past power imbalance.

With the ongoing support of the international community, lessons learned from the implementation of Israeli-Jordanian water agreement and the interim Israeli-Palestinian water agreement, and the recent research projects explicitly focusing on joint water management structures for Israel and the Palestinians, a future final water agreement between these two groups has a wealth of experience and knowledge to draw from in designing a system that satisfies each of their needs. The season for peace is now.

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