

Pace University

DigitalCommons@Pace

Pace Law School Student Publications

School of Law

5-14-2009

Israel's Transboundary Water Disputes

Philip A. Baumgarten

Pace University School of Law, philbaum89@aol.com

Follow this and additional works at: <https://digitalcommons.pace.edu/lawstudents>



Part of the [International Law Commons](#), and the [Water Law Commons](#)

Recommended Citation

Baumgarten, Philip A., "Israel's Transboundary Water Disputes" (2009). *Pace Law School Student Publications*. 2.

<https://digitalcommons.pace.edu/lawstudents/2>

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace Law School Student Publications by an authorized administrator of DigitalCommons@Pace. For more information, please contact dheller2@law.pace.edu.

TABLE OF CONTENTS

	Page:
Introduction	2
Israel, Syria and the Golan Heights	2
Potential Peace Negotiations	3
Strategic Concerns	4
Israel and Jordan	5
The Johnston Allocations	5
The 1967 War	6
The Jordan-Israel Peace Treaty	6
Annex II	9
Israel and Palestine	11
The Agreements: Declaration of Principles and Oslo II	11
Palestinian Water Rights After Oslo II	16
The Desalination Alternative	18
International Water Law	19
The Harmon Doctrine	19
The Helsinki Rules	20
The Convention on the Law of Non-Navigational Uses of International Watercourses	22
Application of the Watercourse Convention	24
Draft Articles on the Law of Transboundary Aquifers	25
Is International Law being Violated?	26
Map of Region's Water Systems	29

Introduction

As water is necessary to the function of life, it is imperative to understand the role of water in the politically turbulent Middle East. This paper will focus on Israel's water disputes with her neighbors and how such disputes have either led to military confrontation, have been partially resolved, and otherwise continue to exist. As populations in the region are expected to increase, the need for water, already in short supply, will be magnified. Thus negotiations to settle water disputes and provide for equitable distribution of the water resources will become more contentious. This legal analysis of Israel's water disputes will hopefully provide some guidance to the settlement of such issues in Israel's future peace negotiations with the Syrians and Palestinians.

I. Israel, Syria and the Golan Heights

The issue regarding water does not manifest itself in the Golan Heights but in the valley below, where the Jordan River flows into Lake Tiberias (also known as the Sea of Galilee).¹ The Golan Heights (captured in the 1967 war by Israel and annexed in 1981) which lies between the borders of Israel and Syria, prevents Syria from having access to the water of the Jordan River and Lake Tiberias.

¹ Donald Neff, Israel-Syria: Conflict at the Jordan River, 1949-1967, *Journal of Palestine Studies*, Summer 1994 at 26.

The background of the Israeli-Syrian water conflict begins with the creation of several demilitarized zones (DMZs) along the common border of Syria and Israel after the 1948 war in which Israel realized her independence. Initially, there were several conflicts regarding incursions into and appropriations of the DMZs by both sides. In 1966 the United Nations reported that Israel and Syria had produced 66,000 official complaints against the other, most of which having to do with the DMZs.² The period between 1957 and 1967 saw a fierce struggle over water.³ During this period Syria initiated several water projects to divert the Jordan River which Israel attacked. The Syrian projects were likely in response to Israel's diversion of the water of Lake Tiberias by sending it 155 miles south to the Negev desert in 1956.⁴ The series of conflicts ultimately led to the 1967 war. In leading up to the war, water was a primary issue, along with disputes over agricultural lands in the DMZs and Fatah operations which crossed the DMZs.⁵ As stated above the 1967 war resulted in Israel capturing the Golan Heights. Syria attempted to recapture the Golan Heights in 1973, however, Israel defended the area and retained control; Israel signed an armistice with Syria in 1974.⁶

Potential Peace Negotiations

The issue of the Golan Heights will be an important part of any peace treaty negotiations between Israel and Syria (the countries are still technically at a state of war). Recently, the parties have been engaged in peace treaty negotiation through Turkish mediators. The

² Frederic C. Hof, The Line of June 4, 1967, Middle East Insight, Sept. – Oct. 1999

³ Donald Neff, *supra* note 1, at 35

⁴ *Id.* at 36

⁵ 1967/ISRAEL, THE WAR, AND THE YEAR THAT TRANSFORMED THE MIDDLE EAST (Tom Segev ed. 2007) at 192.

⁶ Timeline: Israel and Syria – Conflict and Negotiation, <http://nytimes.com/interactive/2008/05/21/world/middleeast> (May 21, 2008).

Israeli government had announced that they would be willing to withdraw from the Golan Heights as part of a comprehensive peace treaty.⁷ Israel will likely give up the Golan Heights only if the water issue is favorably resolved. It is possible Israel will insist on a small DMZ along the eastern banks of the Jordan River and Lake Tiberias, thus maintaining the current allocation of water to Israel, and preventing Syrian access to the water. This will be a stumbling block for the Syrians, who will insist on returning to the borders that existed prior to the 1967 war.

Strategic Concerns

Initially, the capture of the Golan Heights provided Israel with a military advantage by giving it control of an area rising 3000m above sea level, looking down into Syria. However, due to spy satellite technology and weapons advancement, retaining the Golan Heights is no longer necessary for the military security of Israel. In fact the willingness to withdraw from the Golan Heights indicates that Israel believes that such withdrawal can help enhance Israel's security through realization of a peace treaty with Syria, thereby eliminating a military threat from one of its neighbors. Also, a peace treaty with Syria, who is an ally of Iran, may help tone down some of the inflammatory rhetoric currently being espoused by Iran's president.⁸ Once the parties come to the negotiating table, (notwithstanding the September, 2007 Israeli airstrike on a site in Syria, believed to contain a partially erected nuclear reactor⁹), the water issue may be the main obstacle that stands in the way of peace between these two countries.

⁷ See Id.

⁸ Ethan Bronner, Israel Holds Peace Talks With Syria, N.Y. Times, May 22, 2008

⁹ Supra, note 6

II. Israel and Jordan

The Jordan River starts in northern Israel, flows into Lake Tiberias and then, bordering Jordan flows into the Jordan River basin where it converges with the Yarmuk River. The Jordan River basin supplies Israel, Jordan and Syria with water. As of 2000, Syria was using 250 million cubic meters (mcm) of water and Jordan over 100 mcm.¹⁰ Although the water of the Jordan River basin is of prime importance, groundwater has been utilized as major source of water for Israel and Palestine.¹¹ As will be seen below, the water of the Jordan River basin has been a source of dispute between Jordan and Israel.

The Johnston Allocations

In view of rising tensions in the area, in 1953 the United States sent a special envoy, Eric Johnston, to the region to try to mediate a negotiated settlement of the Jordan River allocations.¹² Johnston's initial proposal was based on a study prepared by Charles Main and the Tennessee Valley Authority at the request of the United Nations. The proposal, known as the "Main Plan" allocated 393 mcm per year to Israel, 774 mcm per year to Jordan, and 45 mcm per year to Syria.¹³ After negotiations, the parties agreed on a Unified Plan (known as the Johnston allocations) under which Israel was allocated 400 mcm per year, Jordan 720 mcm per year, and Syria 132 mcm per year. The technical

¹⁰ THE MIDDLE EAST WATER QUESTION/HYDROPOLITICS AND THE GLOBAL ECONOMY (J.A. Allen, ed. 2002) at 76.

¹¹ Id.

¹² Aaron T Wolf, Middle East Water Conflicts and Directions for Conflict Resolution, International Food Policy Institute (March, 1996)

¹³

committees from both sides (Arab and Israeli) accepted the plan, but the plan was never ratified. Although not ratified, the Johnston plan was initially adhered to by the parties. ¹⁴

The 1967 War

In the 1960s both Israel and Jordan undertook projects that would divert the waters of the Jordan River for their own use, in excess of the Johnston allocations. In undertaking the East Ghor project, Jordan extended an irrigation canal from the Yarmuk river along the eastern shore of the Jordan River. Israel began withdrawing 320 mcm for its National Water Carrier plan. ¹⁵ Together with border skirmishes between Israel and Syria, these events helped bring about the 1967 war. ¹⁶ As a result of the 1967 war, Israel gained territory that improved its hydraulic geopolitical position. Israel's territorial gains resulted in acquisition of two of three headwaters of the Jordan River, riparian access to the entire river, and access to the Mountain Aquifer in the West Bank. ¹⁷

The Jordan – Israeli Peace Treaty

On October 26, 1994 Israel and Jordan together signed a peace treaty which ended a technical, if not actual state of war between these two countries. In the preamble to the treaty the parties set forth their desire “to ensure lasting security for both their states and

¹⁴ Id.

¹⁵ Id.

¹⁶ Id.

¹⁷ Raed Mounir Fathallah, Water Disputes in the Middle East: An International Law Analysis of the Israeli-Jordan Peace Accord, <http://www.law.fsu.edu/journals/landuse/Vol1121/Fathallah.pdf>

in particular to avoid threats and the use of force between them".¹⁸The settlement of the issue of shared water resources was addressed in Article 6, entitled "Water"¹⁹ as follows:

With the view to achieving a comprehensive and lasting settlement of all the water problems between them:

1. The Parties agree mutually to recognise the rightful allocations of both of them in Jordan River and Yarmouk River waters and Araba/Arava ground water in accordance with the agreed acceptable principles, quantities and quality as set out in [Annex II](#) , which shall be fully respected and complied with.
2. The Parties, recognising the necessity to find a practical, just and agreed solution to their water problems and with the view that the subject of water can form the basis for the advancement of co- operation between them, jointly undertake to ensure that the management and development of their water resources do not, in any way, harm the water resources of the other Party.
3. The Parties recognise that their water resources are not sufficient to meet their needs. More water should be supplied for their use through various methods, including projects of regional and international co-operation.
4. In light of paragraph 3 of this Article, with the understanding that co-operation in water-related subjects would be to the benefit of both Parties, and will help alleviate their water shortages, and that water issues along their entire boundary must be dealt with in their totality, including the possibility of trans-

¹⁸ Treaty of Peace Between the State of Israel and the Hashemite Kingdom of Jordan, Isr.-. Jordan, Oct. 26, 1994, 34 I.L.M. 43.

¹⁹ See id. Article 6

boundary water transfers, the Parties agree to search for ways to alleviate water shortage and to co- operate in the following fields:

- a. development of existing and new water resources, increasing the water availability including co- operation on a regional basis as appropriate, and minimising wastage of water resources through the chain of their uses;
 - b. prevention of contamination of water resources;
 - c. mutual assistance in the alleviation of water shortages;
 - d. transfer of information and joint research and development in water-related subjects, and review of the potentials for enhancement of water resources development and use.
5. The implementation of both Parties' undertakings under this Article is detailed in Annex II.

In Article 6, and in Annex II, discussed below, the parties agree to maintain allocations in accordance with Annex II, to exchange technology and research regarding the development of new sources of water and to create new sources of water and to jointly ensure the quality of the shared water resources. This provision of the treaty serves to remove disputes over water resources as a source of disagreement between the parties and prevent unilateral actions that otherwise may lead to military skirmishes or full scale armed conflict arising from the water issue. Article 6 has proved effective up until the present time as no armed conflicts over water have been reported.

Annex II

Annex II contains the details of the provisions agreed to above. The key provisions of the Annex are as follows:

Allocations: Israel is granted 12 mcm from the Yarmouk River during the summer period of May 15th to October 15th of each year. Jordan is granted the rest of the flow. During the winter period, October 16th to May 14th of each year Israel may pump 13 mcm and Jordan is entitled to the rest of the flow. Also during the winter period Jordan concedes to Israel pumping an additional 20 mcm from the Yarmouk in exchange for Jordan pumping an additional 20 mcm from the Jordan River during the summer period. Israel is to maintain its current use of the Jordan River waters. Jordan is entitled to an annual quantity equivalent to that of Israel provided that Jordan's use will not harm the quantity or quality of the Israeli use of the water.²⁰

Storage: The parties agree to build two storage systems with the cooperation of Israel and Jordan. The first project is to build a diversion/storage dam on the Yarmouk River directly downstream of the Adassiya diversion. The purpose is to improve the diversion efficiency into the King Abdullah Canal (East Ghor Canal) of Jordan's water allocation. The second project is to build a system of water storage on the Jordan River, along the parties common border between the confluence of the Yarmouk River and its confluence with Tirat Zvi/Wadi Yabis. The purpose is to allow Jordan to store its 20 mcm allocation during the summer period.²¹

²⁰ See id. Annex II, Article I.

²¹ See id. Annex II, Article II

Water Quality and Protection: Israel and Jordan agree to protect, within their own jurisdiction, the shared water of the Jordan and Yarmouk Rivers and Arava/ARaba groundwater, against any pollution, contamination, harm and of unauthorized withdrawals of each other's allocations.²² There shall be monitoring of shared waters under the guidance of the Joint Water Committee. Israel and Jordan shall each prohibit the disposal of untreated industrial wastewater into the Jordan and Yarmouk Rivers.²³

Cooperation: The parties undertake to exchange data on water resources through the Joint Water Committee.²⁴ The Committee shall be comprised of three members from each country. Subcommittees shall be formed, as deemed necessary and such sub-committees shall include a northern sub-committee and a southern sub-committee, for the management of the mutual water resources in these sectors.²⁵

Since the signing of the peace treaty the relationship between Jordan and Israel has endured. However, one commentator has called the peace a "cold peace" that has been influenced negatively by the inability of Israel to reach a two-state solution with the Palestinian Authority.²⁶ While Israel's water dispute with Jordan has seemingly been resolved, the dispute over water with the Palestinian Authority continues to be contentious.

III. Israel and Palestine

²² See id. Annex II, Article III

²³ See id.

²⁴ See id. Annex II, Article VI

²⁵ See id. Annex II, Article VII

²⁶ Alla Shukri Hamzeh, Ten-year Anniversary of Jordan-Israel Peace Treaty, Jordan Times, Oct. 26, 2004.

For the Israelis and Palestinians, the main source of concern with respect to water is the Mountain Aquifer located in the West Bank. The Mountain Aquifer underlies the West Bank extending east to Jordan, and extending west to the Mediterranean Sea. The Mountain Aquifer has three sub aquifers; 1) Western, 2) Eastern and 3) North-Eastern.²⁷ Israel uses 340 mcm per year of 362 mcm per year of the supply of the Western Aquifer, and the Palestinians use 22 mcm per year. The North-Eastern Aquifer has a potential of 145 mcm per year, with Israel using 103 mcm per year and the Palestinians 42 mcm per year. The Eastern Aquifer is the least developed, of its potential 172 mcm per year output, 40 mcm per year is used by Israel, and 54 mcm per year are used by the Palestinians, with the remainder not being utilized.²⁸

The Agreements: Declaration of Principles and Oslo II

The sharing of water resources has been an area of contention between the Israelis and the Palestinians. The issue was first addressed with the negotiation of the Declaration of Principles which took place in Washington D.C. in 1993.²⁹ The Declaration of Principles called for the creation of a Palestinian Water Administration Authority (among other administrative authorities) which was seen to enable economic growth.³⁰ The Declaration of Principles called for further cooperation in the field of water. This is to be accomplished by utilizing experts from both sides to prepare proposals for studies and

²⁷ Uri Shamir. The Water Agreements between Israel and its Neighbors, <http://urishamir.wri.technion.ac.il/files/documents/1997> (1997)

²⁸ The Israeli-Palestinian Interim Agreement on the West Bank and Gaza Strip, September 28, 1995, 36 ILM 551, (hereinafter "Oslo II"), Annex II, Schedule 10.

²⁹ Declaration of Principles on Interim Self-Government Arrangements. Isr. – Palestinian Org., September 13, 1993, 32 ILM 1525 (hereinafter "Declaration of Principles").

³⁰ See *id.*, Article VII (the article also called for the establishment of the Palestinian Electric Authority, Gaza Sea Port Authority, Palestinian Development Bank, Palestinian Export Promotion Board, Palestinian Environmental Authority, and Palestinian Land Authority.)

plans on water rights of each party, as well as the equitable utilization of joint water resources.³¹ It is important to note here the parties recognition of the equitable distribution of the water sources. How this develops in the subsequent years will be discussed further below.

In light of the agreement reached in the Declaration of Principles, the parties undertook to reach more comprehensive terms on the water issue in Oslo II in 1995. In Annex III, Article 40 of Oslo II³², the parties set forth their agreement on the water issue stated in part as follows:

On the basis of good-will both sides have reached the following agreement in the sphere of Water and Sewage:

Principles

1. Israel recognizes the Palestinian water rights in the West Bank. These will be negotiated in the permanent status negotiations and settled in the Permanent Status Agreement relating to the various water resources.
2. Both sides recognize the necessity to develop additional water for various uses.
3. While respecting each side's powers and responsibilities in the sphere of water and sewage in their respective areas, both sides agree to coordinate the management of water and sewage resources and systems in the West Bank during the interim period, in accordance with the following principles:
 - a. Maintaining existing quantities of utilization from the resources, taking into consideration the quantities of additional water for the Palestinians from the Eastern Aquifer and other agreed sources in the West Bank as detailed in this Article.
 - b. Preventing the deterioration of water quality in water resources.

³¹ See id. Annex III, subparagraph 1.

³² Supra, note 28

- c. Using the water resources in a manner which will ensure sustainable use in the future, in quantity and quality.
- d. Adjusting the utilization of the resources according to variable climatological and hydrological conditions.
- e. Taking all necessary measures to prevent any harm to water resources, including those utilized by the other side.
- f. Treating, reusing or properly disposing of all domestic, urban, industrial, and agricultural sewage.
- g. Existing water and sewage systems shall be operated, maintained and developed in a coordinated manner, as set out in this Article.
- h. Each side shall take all necessary measures to prevent any harm to the water and sewage systems in their respective areas.
- i. Each side shall ensure that the provisions of this Article are applied to all resources and systems, including those privately owned or operated, in their respective areas.

Transfer of Authority

4. The Israeli side shall transfer to the Palestinian side, and the Palestinian side shall assume, powers and responsibilities in the sphere of water and sewage in the West Bank related solely to Palestinians, that are currently held by the military government and its Civil Administration, except for the issues that will be negotiated in the permanent status negotiations, in accordance with the provisions of this Article...

Additional Water

6. Both sides have agreed that the future needs of the Palestinians in the West Bank are estimated to be between 70 - 80 mcm/year.

7. In this framework, and in order to meet the immediate needs of the Palestinians in fresh water for domestic use, both sides recognize the necessity to make available to the Palestinians during the interim period a total quantity of 28.6 mcm/year, as detailed below:

a. Israeli Commitment:

(1) Additional supply to Hebron and the Bethlehem area, including the construction of the required pipeline - 1 mcm/year.

- 2) Additional supply to Ramallah area - 0.5 mcm/year.
- (3) Additional supply to an agreed take-off point in the Salfit area - 0.6 mcm/year.
- (4) Additional supply to the Nablus area - 1 mcm/year.
- (5) The drilling of an additional well in the Jenin area - 1.4 mcm/year.
- (6) Additional supply to the Gaza Strip - 5 mcm/year.
- (7) The capital cost of items (1) and (5) above shall be borne by Israel.

b. Palestinian Responsibility:

- (1) An additional well in the Nablus area - 2.1 mcm/year.
- (2) Additional supply to the Hebron, Bethlehem and Ramallah areas from the Eastern Aquifer or other agreed sources in the West Bank - 17 mcm/year.
- (3) A new pipeline to convey the 5 mcm/year from the existing Israeli water system to the Gaza Strip. In the future, this quantity will come from desalination in Israel.
- (4) The connecting pipeline from the Salfit take-off point to Salfit.
- (5) The connection of the additional well in the Jenin area to the consumers.
- (6) The remainder of the estimated quantity of the Palestinian needs mentioned in paragraph 6 above, over the quantities mentioned in this paragraph (41.4 - 51.4 mcm/year), shall be developed by the Palestinians from the Eastern Aquifer and other agreed sources in the West Bank. The Palestinians will have the right to utilize this amount for their needs (domestic and agricultural)...

The Joint Water Committee

11. In order to implement their undertakings under this Article, the two sides will establish, upon the signing of this Agreement, a permanent Joint Water Committee (JWC) for the interim period, under the auspices of the CAC.

12. The function of the JWC shall be to deal with all water and sewage related issues in the West Bank including, inter alia:

- a. Coordinated management of water resources.
- b. Coordinated management of water and sewage systems.
- c. Protection of water resources and water and sewage systems.
- d. Exchange of information relating to water and sewage laws and regulations.
- e. Overseeing the operation of the joint supervision and enforcement mechanism.
- f. Resolution of water and sewage related disputes.
- g. Cooperation in the field of water and sewage, as detailed in this Article.
- h. Arrangements for water supply from one side to the other.
- i. Monitoring systems. The existing regulations concerning measurement and monitoring shall remain in force until the JWC decides otherwise.
- j. Other issues of mutual interest in the sphere of water and sewage.

13. The JWC shall be comprised of an equal number of representatives from each side.

14. All decisions of the JWC shall be reached by consensus, including the agenda, its procedures and other matters.

15. Detailed responsibilities and obligations of the JWC for the implementation of its functions are set out in [Schedule 8](#).

Supervision and Enforcement Mechanism

16. Both sides recognize the necessity to establish a joint mechanism for supervision over and enforcement of their agreements in the field of water and sewage, in the West Bank.

17. For this purpose, both sides shall establish, upon the signing of this Agreement, Joint Supervision and Enforcement Teams (JSET), whose structure, role, and mode of operation is detailed in [Schedule 9](#). Water Purchases

Of particular interest is that the provision recognizes the “water rights” of the Palestinians, as distinguished from the water allocation set forth in the Jordan-Israeli

peace treaty. These rights will be negotiated and settled in the permanent status negotiations.³³ The provision states that the additional water needs of the Palestinian people will be 70 to 80 mcm per year.³⁴ These needs will be partially satisfied by Israel making available to the Palestinians 28.6 mcm per year from existing sources³⁵. The remainder will come from the Palestinian development of the Eastern Aquifer.³⁶ The parties agreed to set up a permanent Joint Water Committee to deal with all water and sewage issues in the West Bank.³⁷ The terms of the provision will be enforced by Joint Supervision and Enforcement Teams (JSET).³⁸

Palestinian Water Rights After Oslo II

After Oslo II, the parties engaged in permanent status negotiations. However, after 2000 the negotiations stalled due in part to Israel's refusal to negotiate after the onset of the second Intifada. The following is a discussion of the state of the Palestinian water situation from Oslo II to the present.

The Joint Water Committee ("JWC"), a joint management concept agreed to in Oslo II, while conceptually being a significant step forward in cooperation has proved illusory in practice. The JWC has merely formalized a discriminatory management practice that was already in existence. Prior to Oslo II, the water network of the Palestinians and Israeli's was integrated, and that has not changed. Israel would continue to operate all the wells in

³³ See id. Annex III, Article 40, para. 1

³⁴ See id. para. 6

³⁵ See id. para. 7

³⁶ See id. para. 7.b.(6)

³⁷ See id. para. 11 and 12

³⁸ See id. para. 17

the West Bank.³⁹ Although, the Palestinians were responsible for maintaining and operating internal systems in Palestinian towns and villages, there is no control over, or access to, the water source. Thus, Israel was free to discriminate in favor of the Israeli settlers in the West Bank.⁴⁰ The water situation for many Palestinians in the West Bank remains dire. Seventy-five percent of the Mountain Aquifer is allocated to Israel, even though the Aquifer is on Palestinian land. Approximately 20% of the Palestinians in the West Bank are not connected to a water network.⁴¹ Many Palestinians have to buy water on the private market. A cubic meter of water is reported to cost 15 to 30 shekels, three to six times higher than what Israeli households pay.⁴² Israeli permission is necessary to dig wells on Palestinian territory, which is rarely granted. This especially true in the B areas (Israeli and Palestinian inhabitants). Permission almost never occurs in the C areas (Israeli inhabitants only). In the A areas (Palestinian inhabitants only), there is little groundwater, so permission to dig a well is a non-issue.⁴³ There recently was a period of 15 days where there was no running water in the West Bank. In Jenin, there was recently a 25 day period without running water.⁴⁴

The promise of additional source for the Palestinians from the undeveloped Eastern Aquifer has not come to fruition. After Oslo II was signed, international money poured (led by USAID) in for development of the Eastern Aquifer. Sixteen sites for production

³⁹Jan Selby. Joint Mismanagement: Reappraising the Oslo Water Regime
<http://www.ipcri.org/watconf/papers/jan.pdf>

⁴⁰ Id.

⁴¹ Palestine: Israeli Water Policies Leave West Bank Dry, <http://www.greenleft.org.au/2008/767/39588>

⁴² Id.

⁴³ Interview with Abeer Awaad, Media Coordinator, Palestinian Water Authority, NYC (Oct. 23, 2008)

⁴⁴ Interview with Samir Aldarabi, United Nations Radio-Arabia Unit, NYC (Oct. 23, 2008)

wells were agreed upon. However, the wells proved not to yield the expected flow, as it was determined that if the Eastern Aquifer were fully developed, salt water from the floor of Jordan Valley would flow up into the lower portion of the Aquifer, possibly contaminating existing wells.⁴⁵

The Desalination Alternative

It has been reported that Israel has a secret plan for a desalination plant to supply drinking water to the West Bank.⁴⁶ The plan calls for seawater to be desalinated at Caesaria on the Mediterranean coast and piped across Israel to the West Bank. The plan calls for the plant to be funded by international donors (primarily USAID). Cost is an issue for the Palestinians as one cubic meter would cost about 3 -4 shekels.⁴⁷ Conceptually, this plan would alleviate the water supply problems in the West Bank. Palestinians object to this plan since it would in reality be an abandonment to their claim to the water of the Mountain Aquifer.⁴⁸ A more equitable solution may be for the desalination plant to supply Israel with water, negating the necessity to run a pipeline across Israel to the West Bank, and then reallocate resources of the Mountain Aquifer to the Palestinian people. To date, no work on the desalination plant has occurred, as Palestinian Authority President Abbas has refused to consent to the project.⁴⁹

IV. International Water Law

⁴⁵ Supra, note 39

⁴⁶ Fred Pearce, Israel Lays Claim to Palestine's Water, New Scientist (May, 2004)
<http://www.newscientist.com/article/mg18224491.100-israel-lays-claim-to-palestines-water.html>

⁴⁷ Id.

⁴⁸ Supra, note 43

⁴⁹ Id.

The development of international water law can help define the obligations of Israel and its neighbors in their disputes. International water law has evolved into customary law which is a standard to be utilized in international dispute resolution forums, such as the International Court of Justice, or in diplomatic negotiations. The following is a description of the evolution of such law.

The Harmon Doctrine

The earliest water law theory was first proffered by US Attorney General Judson Harmon in 1906 claiming that Mexico was not entitled to water from the Rio Grande, a river which borders the United States and Mexico. The doctrine was based on the theory of absolute territorial sovereignty. Under this theory a state can use the waters on its territory without any obligation toward any riparian neighbors⁵⁰. This theory favors upstream riparian states and is usually rejected by downstream riparians.⁵¹ The Harmon Doctrine eventually gave way to a concept of reasonable and equitable sharing between riparian states.

The Helsinki Rules

The Helsinki Rules on the Uses of the Waters of International Rivers⁵² was an attempt to formalize in one document the concepts that had become international customary water law. Adopted by the International Law Association in 1967, the Helsinki Rules provide “that each basin state is entitled to a reasonable and equitable share in the beneficial uses

⁵⁰ Supra, note 17 at 138

⁵¹

⁵² ILA, 52 Conf. (August 20, 1967) (hereinafter “Helsinki Rules”)

of the waters of an international drainage basin".⁵³ The determination of what is a reasonable and equitable share is determined by all the relevant factors.⁵⁴ Under the Helsinki Rules the relevant factors include but are not limited to:

1. The geography of the basin, including in particular the extent of the drainage area in the territory of each basin State;
2. The hydrology of the basin, including in particular the contribution of water by each basin State;
3. The climate affecting the basin;
4. The past utilization of the waters of the basin, including in particular existing utilization;
5. The economic and social needs of each basin State;
6. The population dependent on the waters of the basin in each basin State;
7. The comparative costs of alternative means of satisfying the economic and social needs of each basin State;
8. The availability of other resources;
9. The avoidance of unnecessary waste in the utilization of waters of the basin;
10. The practicability of compensation to one or more of the co-basin States as a means of adjusting conflicts among uses; and
11. The degree to which the needs of a basin State may be satisfied, without causing substantial injury to a co-basin State.⁵⁵

The weight to be given to each factor is to be determined by its importance in comparison with that of other relevant factors. In determining what is a reasonable and equitable

⁵³ Id. Article IV

⁵⁴ Id. Article V, I

⁵⁵ Id. Article V, II

share, all relevant factors are to be considered together and a conclusion reached on the basis of the whole.⁵⁶

The Helsinki Rules establish the rules of equitable utilization and cooperation between states in settling water disputes. Also, reflected in the Helsinki Rules is incorporation of the concept that one can use the water source for their own benefit so long as they do not substantially injure another riparian state. The unofficial status of the International Law Association prevented enforceability of the Helsinki Rules provisions and undermined their binding authority.⁵⁷ However, the Helsinki Rules paved the way for a binding convention to be taken up by the United Nations.

The Convention on the Law of Non-navigational Uses of International Watercourses⁵⁸

Representing the culmination of the development of international water law from the Helsinki Rules to the present, the United Nations General Assembly adopted the Convention in 1997. The Watercourse Convention represents binding customary law on the member states of the United Nations. The Watercourse Convention is to apply to measures of protection, preservation and management related to the uses of non-navigational water courses.⁵⁹ The Watercourse Convention embodies the principles of

⁵⁶ Id. Article V, III

⁵⁷ Supra, note 17 at 141

⁵⁸ 36 ILM 700 (1997)) hereinafter ("Watercourse Convention")

⁵⁹ Id. Article 1

Equitable and Reasonable Utilization and Participation.⁶⁰ Article 5 of the Watercourse

Convention states this principle as follows:

1. Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse.
2. Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such participation includes both the right to utilize the watercourse and the duty to cooperate in the protection and development thereof, as provided in the present Convention.

Article 5, while adopting the Helsinki Rules principle, also adds the obligation of sustainable utilization of the watercourse, thereby adding an environmental element to international water law. The Watercourse Convention further adopts the principle of the obligation not to cause significant harm⁶¹ and a general obligation to cooperate.⁶² In addition, to Article 5, the Watercourse Convention adopts the following environmental provisions:

Article 20: Protection and Preservation of Ecosystems

Watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses.

Article 21: Prevention, Reduction and Control of Pollution

1. For the purpose of this article, "pollution of an international watercourse" means any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct.

⁶⁰ Id. Article 5

⁶¹ Id. Article 7

⁶² Id. Article 8

2. Watercourse States shall, individually and, where appropriate, jointly, prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse States or to their environment, including harm to human health or safety, to the use of the waters for any beneficial purpose or to the living resources of the watercourse. Watercourse States shall take steps to harmonize their policies in this connection.

3. Watercourse States shall, at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as:

(a) Setting joint water quality objectives and criteria;

(b) Establishing techniques and practices to address pollution from point and non-point sources;

(c) Establishing lists of substances the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.

The environmental concerns expressed by these two articles along with the “sustainable” language in Article 5, demonstrates an environmental awareness and concern that was not in evidence at the time of the Helsinki Rules, thereby resulting in a more comprehensive agreement.

Application of the Watercourse Convention

Although the agreed upon allocations in the Jordan-Israel Peace Treaty predates the Watercourse Convention, the Watercourse Convention states that nothing in the agreement shall affect the rights and obligations of a state arising from an agreement in force on the date it became a party to the convention.⁶³ The Watercourse Convention further provides that such states may, where necessary, consider harmonizing such

⁶³ Id. Article 3 (1)

agreements with the basic principles of the convention.⁶⁴ Thus, the principles of the Watercourse Convention may apply to the Treaty.

In the use of terms section,⁶⁵ watercourse is defined as a “system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus”. While it is clear from the definition that the Watercourse Convention applies to disputes along the Jordan River, it is unlikely that the Watercourse Convention would apply to the dispute regarding the Mountain Aquifer.

Jordan and Syria have ratified the treaty, which has not yet been ratified by a sufficient number of countries to come into force (16 of a required 35).⁶⁶ Israel has not yet ratified the treaty. Syria's ratification was with the reservation that ratification of the treaty “shall not under any circumstances be taken to imply recognition of Israel and shall not lead to its entering into relations therewith that are governed by its provisions”.⁶⁷ Israel responded to the Syrian reservation with an objection, stating that “in view of the Government of the State of Israel such reservation, which is explicitly of a political nature, is incompatible with the purposes and objectives of this Convention and cannot in any way affect whatever obligations are binding upon the Syrian Arab Republic under general international treaty law or under particular conventions. The Government of the State of Israel will, in so far as concerns the substance of the matter, adopt towards the

⁶⁴ Id. Article 3 (2)

⁶⁵ Id. Article 2

⁶⁶ Convention on the Law of the Non-Navigational Uses of International Watercourses, Status as at 20-11-2008, <http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&id=529&chapter=27&lang=en>

⁶⁷ Id.

Syrian Arab Republic an attitude of complete reciprocity."⁶⁸ In view of the animosity between them, the obligations under the Watercourse Convention of Syria and Israel to each other will need to be addressed as part of the process in future peace negotiations.

Draft Articles on the Law of Transboundary Aquifers

In August 2008, the International Law Commission, adopted draft articles for an international framework convention on transboundary aquifers.⁶⁹ The Draft Articles are similar in scope and represents the same principles as the Convention. The Draft Articles provide for the principles of equitable and reasonable utilization of a transboundary aquifer,⁷⁰ the obligation not to cause to significant harm⁷¹ and a general obligation to cooperate.⁷² In addition, the Draft Articles reflect environmental concerns by obligating states to provide for the protection and preservation of ecosystems⁷³ and for the prevention, reduction and control of pollution.⁷⁴

V. Is International Law being Violated?

The Fourth Geneva Convention⁷⁵ has been accepted as customary law by the international community. The Fourth Geneva Convention has specific provisions as to the

⁶⁸ Id.

⁶⁹ Available at http://www.untreaty.un.org/ilc/guide/8_5.htm (hereinafter "Draft Articles")

⁷⁰ Id. Article 5

⁷¹ Id. Article 6

⁷² Id. Article 7

⁷³ Id Article 10

⁷⁴ Id Article 12

⁷⁵ Geneva Convention Relative to the Protection of Civilian Persons in Time of War, Aug. 12, 1949, 6 U.S.T. 3516, 75 U.N.T.S. 287 [hereinafter Fourth Geneva Convention].

treatment of inhabitants of an occupied territory and is applicable to Israel's occupation of the West Bank. Israel has been accused of ongoing violation of the Palestinian's international law rights in areas that may be more of a pressing human rights concern than rights regarding water.⁷⁶ There are several articles of the Fourth Geneva Convention that can be said to apply to the water rights of an occupied people. The occupied people (referred in the Fourth Geneva Convention as "protected people") are entitled in all circumstances to, respect to their persons, their honor, and their family rights.⁷⁷ These fundamental human rights can be said to include water rights, as water is sacred to life. Pillage is prohibited⁷⁸; this would include the taking of goods by force which manifests itself through the inequitable sharing of water resources located on Palestinian land. The occupying power has the duty of ensuring the food and medical supplies of the occupied population⁷⁹. In addition, the occupying power has the obligation for ensuring and maintaining public health and hygiene in the occupied territory.⁸⁰ These two provisions can be read to require Israel to maintain adequate, accessible and affordable water supply to the Palestinian people. As Israel's water policy is discriminatory as it uses seventy-five percent of Mountain Aquifer for its own use, denies permissions to Palestinians to dig wells in promising areas, and allows a situation to exist where twenty percent of the West Bank population is without running water, and does not otherwise provide affordable

⁷⁶ Jeff Halper. Israeli Violations of Human Rights and International Law, From Occupied Palestine <http://www.fromoccupiedpalestine.org/taxonomy/term/64> (June, 2002) (International law violations are said to include humiliating and degrading treatment, brutalization of the civilian population, and destruction of property including homes); also, see, Israel: New Report Condemns Israel's Blatant Violation of International Law in West Bank, Amnesty International UK, http://amnesty.org.uk/news_details.asp?NewsID=17362 (June, 2007)

⁷⁷ Supra, note 72, Article 27

⁷⁸ Id. Article 33

⁷⁹ Id. Article 55

⁸⁰ Id. Article 56

water alternatives, Israel can be said to be in violation of the above referenced provisions of the Fourth Geneva Convention.

An Israeli defense on the grounds of military necessity fails, as Israel's water policy is disproportionate (in light of the fundamental nature of water rights), and discriminatory (negatively affects the large portion of Palestinian population who are not enemy combatants). Israeli may also claim that it is exercising its historical riparian rights to the Mountain Aquifer. However, this argument fails to take into account the "water rights" of the Palestinians established in the Oslo II agreement. These rights, which have been recognized in principle by Israel, are to be settled and established through negotiations. Also, such an argument is more consistent with the Harmon Doctrine which has been disavowed by the international community, and fails to account for current customary water law principles of equitable and reasonable utilization.

Israel is also violating the customary law principle of equitable sharing of resources contained in the Draft Articles, through its inequitable sharing of the Mountain Aquifer resource. Israel may argue that the Draft Articles apply only to transboundary states, and since the Palestinian Authority does not technically represent a state, this concept would not apply to the present situation. However, the principles of the applicable customary law provisions underlying the spirit and intent of the Draft Articles suggest the concept could be extended to an occupied territory that is anticipated to become a sovereign state.

In conclusion, it is submitted that based on the arguments set forth above, Israel's current water policy is in violation of International law with respect to Palestinian water rights.

