A Glass Half Empty:

Selections of Israeli Water-Related Policy Affecting
Palestinians in the West Bank and the Gaza Strip

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Water, taken in moderation, cannot hurt anybody-

Mark Twain
Foundation for Middle East Peace (FMEP), *The West Bank After the Second Israeli Redeployment (FRD) According to the Sharm el-Sheikh Memorandum* - March 2000

I. Introduction: Topic and Scope

The continued Israeli military occupation and governance of the West Bank and its policies regarding the Gaza Strip pose serious issues for the relationship between Palestinians and their own environment, in particular issues regarding water. Though technically part of the West Bank, East Jerusalem will not be part of what is discussed here. This paper does not deny that, in theory, the Oslo peace process ended the Israeli occupation of Palestinian territories, but does maintain that, in reality, the occupation continues in practice. While a program for joint-rule to eventually lead to the establishment of a Palestinian state was much of the purpose of the Oslo process even if this was not explicit, its breakdown has meant that, far from this happening, Israel today continues to expand its presence in the West Bank and is the de facto government there in many ways, while it also controls most of the access into and out of the Gaza Strip even after it withdrew from Gaza several years ago. This means that, where there is a dispute, Israel, backed by its capable military, the Israel Defense Forces (IDF), exerts its authority often at will, even in areas that are supposed to be under “full” Palestinian control. This paper is not interested in the legal technicalities of whether there is Israeli occupation or control of the West Bank and the Gaza Strip or not, but in the realities of who controls what in terms of applicable power, and Israel has far more power over the Palestinians in both the West Bank and Gaza than any Palestinian governmental structures. When it comes to responsibility, the author of this paper takes the simple position that the greater the power, the greater the responsibility. This paper also makes no claim to be comprehensive, but to merely introduce the issues and present some of the most salient related information.

When it comes to the most basic relationships between Palestinians and their environment, Israeli power, in the forms of the IDF presence and system of checkpoints and roadblocks, the system of blockade and maritime restrictions in relation to Gaza, the settlers themselves and their activity, and the dual Israeli Civil Administration (the branch of the IDF that governs the West Bank) and the Joint Water Committee (JWC, another body, “joint” really in name only since Israel dominates it, which has a high
degree of authority over Palestinians water rights/projects) system overseeing water issues of Palestinians and settlers all create realities on the ground that greatly hinder if not outright block Palestinians’ abilities to interact with their water supplies, their lands and farms, and to deal with pollution. This paper will focus on how the Israeli power structures mentioned affect Palestinians regarding issues concerning water access, use, distribution, and treatment, and will offer a brief analysis as to several possible steps forward for the near and medium terms.

II.) Political Background and Context

The day the British Empire’s authority over Palestine expired in 1948 in the midst of a civil war between the Jews of Palestine and its Arabs, the members of the Jewish community there declared unilateral independence and statehood as the nation of Israel; recognition was soon followed by the United States, the Soviet Union, and the United Nations (UN). Previously, UN plans to partition Palestine into one Arab and one Jewish state, with international governance of Jerusalem, had been rejected by the Arabs. After the formal armies of many of the region’s Arab states invaded the area and attacked the Jews, but were defeated, with a cease-fire being implemented in 1949, the de-facto and soon-to-be internationally recognized borders of Israel came to be where the cease-fire lines were when the fighting stopped. The Israelis, by prowess of arms, had managed to secure more territory for themselves than the original partition plans as they settled into their new state; Egypt controlled what became known as the Gaza Strip, and Jordan controlled the West Bank, which would soon be formally annexed by Jordan. The Palestinians there would be given Jordanian citizenship, while those in Gaza stayed in a legal limbo. After the Six-Day War of 1967, Israel drove Egyptian forces and Jordanian forces completely out of the Gaza Strip and the West Bank (including East Jerusalem), respectively, and took those territories over. Outside of East Jerusalem the territories were not formally annexed, but were administered through a military government operated by the IDF.
After Israeli conquest and the flood of refugees out of the areas stopped, the Gaza Strip had about 350,000 Palestinians, 210,000 of which were refugees from the 1948 war, 170,000 of those living in refugee camps, while the West Bank had approximately 600,000 Palestinians, only 60,000 of whom lived in camps.² Israel began exporting Jews from Israel (and some from abroad) into Gaza, the West Bank, and East Jerusalem after occupying the land, creating new settlements and expropriating Palestinian land. The Jews moving into these settlements became known as settlers, except in East Jerusalem, where their status is still a contentious issue. While Palestinians are subject to Israeli military law, and theoretically the settlers are too, in practice settlers have access to Israeli civil law. They also vote in elections. Egypt, bordering Israel and the Gaza Strip, finally signed a peace treaty with Israel in 1979. Around the time of the

signing of the Oslo Accords in 1993, the settler population in the Gaza strip was about 4,800 people, and in the West Bank was about 111,600 people. Following the announcement of Oslo, Jordan, bordering Israel and the West Bank, signed a peace treaty with Israel in 1994. When Israel removed all its settlements from the Gaza Strip in 2005, the settler population there had grown to about 8,200 people, or a three-quarters increase in the population from the time of the signing of the Oslo Accords; today in the West Bank (excluding East Jerusalem), there are over 327,800 settlers, or nearly three times the population from the date of the agreement, among some 2,500,000 Arabs in the West Bank (also excluding East Jerusalem).

A major purpose of the agreement was varying degrees of self-rule for the Palestinians to likely be gradually moved toward some sort of independent state, and yet, such a dramatic increase in the populations of Jewish settlers in territory form which Israel was supposed to be looking for ways to extricate itself at the very least would call into question the seriousness of Israel’s intent to ever really hand over such territory or control of it, just as violence and non-recognition of Israel’s right to exist by certain Palestinians parties causes people to question the Palestinians’ commitment to the peace process. Physical violence on the part of Palestinians and structural violence on the part of the Israeli government seem, then, to both be major contributors to the stalling and failure so far of the peace process. In fact, by any objective measure, the violence has overall decreased in recent years on the part of Palestinians, while apart from the removal of the 8,200 or so settlers from Gaza (a number which is only a tiny fraction of the overall settler population of the West Bank and not enough to even counter settler population growth there in the last few years), structural violence on the part of Israel seems only to have increased. This


paper maintains that it is objective and non-biased. One can argue about the merits of principles and
tactics, but this paper is concerned mainly with effects on the ground. The frequent if ineffective rocket
attacks launched from Gaza in recent years, which are of late being curtailed by Hamas, and the
extremely isolated individual attacks in the West Bank, are by any definition a dramatic decrease in the
violence of both the First and Second Intifadas; while, whether during the Intifadas or in years of relative
peace, the increase in the Israeli presence and control of the West Bank and Gaza is dramatic and
continuous. Even after the withdrawal of the settlers from Gaza, Gaza remains sealed, restricted, and
blockaded by the Israeli government, and the tripling of the settler population from over 110,000 to nearly
330,000 signals anything but an intent to vacate or hand that territory over to Palestinian jurisdiction.
Perhaps intentions are different on both sides; perhaps despite a sustained and major increase in the settler
population, Israel is serious about seeing the creation of a Palestinian state in most of the West Bank;
contrarily, perhaps the Palestinians are plotting further violence despite their reduction in violent acts.
But this is speculation; this paper is not concerned with speculation, or words and rhetoric, so much as it
is concerned with actions and measurable trends. And by actions alone, as of February 2011, the
Palestinians are moving in the direction of accommodation and non-violence, while Israel’s actions are
showing an increase in structural violence and in the Jewish presence in the West Bank. Still, the Islamic
movement of Hamas, governing Gaza, refuses to renounce violence or formally recognize Israel’s right to
exist, unlike Fatah, the party/faction which governs most of the West Bank, which has formally
recognized Israel as a state. Also, apart from Egypt and Jordan, the rest of the Arab countries near Israel
remain in a state of a cease-fire of a war against it. The Palestinians consider the continuation of
settlement expansion a sign of bad faith and are currently refusing to restart peace negotiations until Israel
halts its settlement activity in disputed territory. The Obama administration repeatedly tried to get the
Israeli government to completely halt settlement expansion, but failed repeatedly. The U.S. calls the
settlements “illegitimate” and counter-productive to peace, but still vetoed a resolution in the last few
days in the United Nations Security Council condemning the settlements and calling them illegal. The
rest of the Security Council was unanimous in voting for the measure, including the U.K., France, Russia and China, the other four permanent and veto-wielding permanent members of the body.

III.) Israeli Power, Water, and the Palestinians

a. Breakdown of Natural Water Resources

The easiest way to begin explaining the situation of water is to acknowledge that the territories comprising Israel, the West Bank, and Gaza are small and, to one degree or another, are generally part of the same natural water supply system. There are three mountain aquifers and some on the coast as well, and these form the ground water systems for the Israeli and Palestinian populations. From material and presentations from my recent trip in Israel and the West Bank, it is clear that Israeli authorities have a near monopoly on control of resources, especially water, in the West Bank. We were told that Israel takes water from the West Bank, brings it into Israel, and then sells some of that back to Palestinians at an increased rate. Israel also controls the water supply in such a way that it shuts off water access at will; there was no running water at the time when we visited the Applied Research Institute-Jerusalem (ARIJ) due to such action, we were told, by Israeli authorities. A report from the World Bank concluded the water being distributed for

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Palestinians from the three West Bank mountain aquifers was about 20% of the water being taken, while Israel was using 80% of the water taken the amount the same aquifers for Israelis, including settlers. The amount of water that Palestinians have been able to draw from their own aquifers has actually been decreasing over recent years, too, while new Israeli-used and drilled wells in the West Bank, tapping into water resources previously used by Palestinians, have also caused local Palestinians’ wells to dry up to the point they are much less effective or even completely unusable.

b.) The Sea of Galilee, The Jordan River, and The Dead Sea

A major aspect of the history of conflict centers around Lake Tiberias/the Sea of Galilee and the Jordan River, and to a lesser degree the Dead Sea. Jordan, Lebanon, and Israel, and especially Israel and Syria, were in conflict over rights/access to these bodies of water from the birth of Israel. Armed conflict broke out between Israel and Syria when Israel created its National Water Carrier in the early 1950s to divert water from the Sea of Galilee and the Jordan River—shared resources—into Israel. The administration of U.S. President Dwight Eisenhower attempted to mediate the dispute in the 1950s. As tensions increased, Israel built a dam in 1964 that severely restricted the flow of water from the Sea of Galilee into the Jordan River; later

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9 Ibid., 12.
that same year Jordan diverted water from the Yarmouk River, which also feeds into the Jordan River, and later still Syria created reservoirs that diverted water from the same tributary.\textsuperscript{11} Amid escalating tensions between Syria and Israel the first terrorist act of Fatah was attempted, and it was no coincidence that it was against a facility of Israel’s National Water Carrier in 1965, though the attempt failed.\textsuperscript{12}

From my own experience, seeing the Jordan myself in January of 2011, the results were clear: the Jordan “River” is little more than a stream, a fraction of its older size. Since the Jordan feeds into the Dead Sea, this has also contributed to severe shrinking of the Dead Sea, which is also being drained for industrial reasons by both Israel and Jordan. If such trends continue, presenters on my trip there made it clear the Dead Sea could dry up altogether. As it currently stands, Palestinians are totally denied use of the Jordan River for water while Israel uses 59\% of the water resources of the Jordan River.\textsuperscript{13} It was also explained to us that much sewage and pollution ends up in the Jordan, so if the Palestinians end up with control of any of the Jordan in a future agreement, they will inherit many problems along with it. Also, since the Jordan is the main source of much of the Dead Sea, the depleted flow, along with much industrial activity in the Dead Sea, has contributed to a steep decline in the water level of the Dead Sea. It is clear that unless drastic action is taken in the near future, the Dead Sea risks becoming only a memory. Thus, two of the main water resources Palestinians would likely have in any final future agreement are currently being ruined by the actions of the Israeli, Syrian, and Jordanian governments. The Palestinians themselves have no say in what is being done to these resources even though large parts of both the River and the Sea lie in their territory, and this water is generally being diverted not to benefit them, but, in the case of Israel’s governing authorities in the West Bank, are instead benefiting the Israelis.

\textsuperscript{12} Morris, 303.
c.) Examination of Israeli Policy and Effects of Israeli Settlements on Palestinians

Between the Israelis and Palestinians and their shared water resources, Israelis are two-thirds the population of the whole of the original area of Mandate Palestine, but use 90% of the water resources vs. only 10% being used by the Palestinians.\textsuperscript{14} Furthermore, the World Health Organization (WHO) stipulates that the minimum necessary cubic liters of water consumption for a person to maintain a healthy lifestyle is 100; the average Israeli consumes about 325 cubic liters a day, while Palestinians only can access and consume an average of sixty cubic liters per day.\textsuperscript{15} In addition, Palestinians are being forced to buy an increasing percentage of water from the Israeli state-owned National Water Carrier, from just over 30% in 2001 to close to 45% in 2007.\textsuperscript{16} Palestinians cannot implement water projects or drill wells even on their own land without permits from Israeli authorities, but these are rarely given, and even when they are, the process takes a long time, sometimes years, while most projects for Jews in settlement are approved. Wells are especially low in terms of their approval rate, and even when projects are approved by one Israeli governing body, say, the JWC, it might not be approved by another, such as the Civil Authority, or Palestinians may have difficulties obtaining the necessary materials and/or then not have the ability to move them through different zones of Israeli and Palestinian control. Even an area under “full” Palestinian control is surrounded by areas with either partial Israeli security control or an area of full Israeli control, and anything going in or out is subject to passage through Israeli military checkpoints and road blocks. Even approved projects fail to be completed when certain materials are prevented from being brought to the site by Israeli authorities. Overall, the occupation makes it extremely difficult, then, for Palestinians to either have access to water resources or develop the water resources they do have access to, while showing a strong bias for similar projects of Israeli settler Jews even though the land is Palestinian, and not Israeli. Large percentages of Palestinian projects are either denied permission outright or are prevented by Israel from being started or completed by Israeli

\textsuperscript{14} \textit{Ibid.}, 35.
\textsuperscript{15} \textit{Ibid.}, 36, 48.
\textsuperscript{16} \textit{Ibid.}, 38.
authorities. Israeli authorities also did not provide funds for maintenance of wastewater facilities over many decades, leading to their breakdown and deteriorating capabilities. Internal Israeli government reports showed that these problems were ignored even though Israeli authorities knew that crops and water sources were becoming contaminated by untreated wastewater, and Israel still has de-facto total approval rights over any Palestinian proposal or project regarding these issues. From 1996-2002, the Palestinian Authority raised $230-260 million USD worth of funds to build fifteen wastewater treatment facilities, yet only one such facility, the one we saw in al-Bireh, was built. This facility was forced by Israeli authorities to treat water from a nearby Jewish settlement, yet the settlement is not willing to pay anything for this service. The processes for getting such approvals are long and, again, can require permission from multiple Israeli governing bodies, with some approvals taking a decade to come through.

Other statistics are also quite revealing. In 2007, of 121 settlements, only 81 are part of a wastewater treatment network (and this does not include outposts); of 17.5 million cubic meters (mcm) of wastewater coming from settlements, 5.5 mcm, or nearly 1/3 of all the wastewater, is released into the West Bank untreated, often into Palestinian villages or water sources, and even making it into the groundwater. Yet when asked about raw wastewater flowing into the West Bank from settlements, Civil Administration officials have not even acknowledged there is a problem and deny significant amounts of untreated wastewater are dumped into the West Bank. Even where there are facilities in the settlements, many of these are not in good working order, nor are they well maintained or designed to handle the current amount of wastewater. Studies even going back to 1998 show that this is not a new problem, but has been a problem for many years. In one situation, an entire Palestinian village was flooded by sewage for three days before the IDF gave residents permission to fix the appropriate blocked pipe. The Palestinian Water Authority says it does not have the capacity to treat Jewish settlements’ wastewater,

17 WB, ix, 33-34, 47-56.
19 Ibid., 17-21.
and this problem is present throughout the West Bank. There is also a financial cost: the obstructions and security procedures of the West Bank, in making access and movement of water and related materials more difficult, also raises the prices of water, tankers, and other related items in areas that are already economically depressed and suffering from poverty.\textsuperscript{20} 2007-2008 saw West Bank Palestinian families paying 6.1\% of their income, on average, for water-related expenses, while Gazan Palestinians paid an average of 11.6\% of their total income.\textsuperscript{21} This does not even touch on the costs related to agriculture. Finally, Palestinians are not allowed to dig wells deep enough to fully access the groundwater tables, we were told on out trip, but the Isreali government does this for Israelis. Palestinians can only dig relatively shallow wells compared with what Jews are allowed to dig, again, according to presentations from my recent trip there.

Sanitation and health issues have also been significant in relation to the occupation. Since, as described, it is difficult to even obtain permission to build a well, let alone sanitation facilities like sewage or wastewater treatment plants, it has been difficult for Palestinians to have anywhere near adequate treatment facilities. Preventable diseases/conditions, including “Amoebas, Hepatitis A, and blue baby syndrome…throat infection, Diarrhea, Rhinitis, skin diseases, Asthma, Dysentery, Jaundice and cancer”\textsuperscript{22} are present, particularly in poor communities. About 3.6\% of the Palestinians in the West Bank and over 7\% of Gazans suffer from water-carried diseases/conditions, for a total of 5.8\% in all of the Palestinian territories.\textsuperscript{23} Much of this is caused by the wastewater from the settlements; the settlers, connected to Israel’s National Water Carrier, do not suffer the consequences of their own wastewater policy deficiencies, it is the Palestinians living around them, dependent on surface and well-water since they are generally denied going forward with any major infrastructure initiatives, that suffer from the actions of the settlers. The settlements are usually located on hilltops or high-ground, so their wastewater literally flows down to the Palestinians. Over the past decade, studies showed that levels of nitrates and bacteria

\textsuperscript{20} WB, 20-23.
\textsuperscript{21} Atallah, 58
\textsuperscript{22} Ibid., 53.
\textsuperscript{23} WB, 20-24.
in water in the West Bank for Palestinians are in levels far exceeding acceptable levels in large proportions of samples taken. In one instance, Israeli authorities did nothing for three years when wastewater from a settlement was killing crops and olive trees and creating an awful stench for a village until B’Tselem, an Israeli human-rights advocacy group, formally brought it to their attention.²⁴

The Arab Palestinian town of Salfit and the Israeli Jewish settlement of Ariel are a great pairing for a representative case study for many of the problems that the settlements and the duality of the governing systems in the West Bank cause the Palestinians. Israeli restrictions prevent natural expansion of existing Arab villages because of how the land is zoned, for the Jewish settlements (often built or zoned with privately-owned Palestinian land in their jurisdiction) have ample areas designated for future expansion, while Palestinian villages are usually hemmed in by zoning restrictions and become overcrowded. Often they are surrounded by land Israel designates for a nature reserve or park and are forbidden to build into them, but Jewish settlements comparatively are given exceptions to build into such parks or reserves, we were told on this trip. Because of travel restrictions designed to keep Palestinians away from Jewish settlements, Palestinians are forced to travel long distances in circuitous routes that exponentially increase the travel time for what would, without Israeli-imposed restrictions, be short distances and quick travel times; and these trips often must go through Israeli security checkpoints that can at times add hours to, or even prevent, travel.

For Palestinians near the Ariel settlement, a five-minute trip now takes thirty to forty minutes, if not longer. Settlements often impose adverse environmental conditions on Palestinian locales and people. In the case of Ariel, the settlement’s wastewater, untreated because of technical problems in the settlement, is dumped out of the settlement into the Palestinians areas, including the area where the town of Salfit’s water-pumping facility is, contaminating that town’s water supply. Even though funding has

²⁴ Hareuveni, 25-27.
been obtained for the Palestinians to build their own wastewater treatment facility, Israeli authorities will not let the project go forward and insist that the Palestinian facility will have to treat Ariel’s water too. It is telling that the facility inside the settlement is for Jewish use only, while a facility which would be built in a Palestinian area cannot get approval from Israeli authorities unless it is also used to treat Ariel’s wastewater.25 The wastewater has also killed off several plant and animal species in the area and has damaged Palestinian crops. As with other cases, denial, delay, and obstruction characterizes Israeli officials’ responses.26 Even in trying to clean pollution, the inequality and power imbalance between Palestinian and Israeli, Jew and Arab is starkly evident. There is not even a hint of reciprocity or equal treatment.

The construction of the Separation Barrier/Wall has also resulted in losses and hardships for Palestinians. At least twenty-eight wells and seventeen springs have been cut off or isolated from Palestinians’ use by the path of the wall.27 Farmers are even cut off from the wells used to water their land, and the people sent to maintain and work on water facilities are also cut off from reaching them.28

Palestinians, forced to act on their own without Israeli permission, dig their own wells which are then systematically targeted by Israeli authorities for destruction.29 The United Nations Resident and Humanitarian Coordinator for the occupied Palestinian territory recently condemned the routine destruction of Palestinian water infrastructure, saying that “It is difficult to understand the reasoning behind the destruction of basic rain water collection systems, some of them very old, which serve marginalized rural and herder Palestinian communities where water is already scarce and where drought is an ever-present threat,” and that such demolitions constitute violations of international law.30

26 Hareuveni, 29-32.
27 Atallah, 37.
28 WB, 23, 25.
29 Ibid., 14.
30 Office of the UN Special Coordinator for the Middle East Peace Process, Statement by the United Nations Resident and Humanitarian Coordinator for the occupied Palestinian territory, Maxwell Gaylard, on Continuing
Furthermore, during the Second Intifada, the IDF destroyed some 370 agricultural wells in the West Bank.\textsuperscript{31}

The settlers themselves come and often harass and attack Palestinians, including those trying to operate wastewater facilities. Such violent attacks and harassment are rarely seriously investigated, let alone stopped, while any violence on the part of Palestinians against Jews is met with the full force of the Israeli civil and military authorities.\textsuperscript{32} At the al-Bireh wastewater treatment plant, a Palestinian-American whom we met is a senior operator, and at times he has been able to show his American passport to discourage harassment by settlers, armed with guns. One wonders what options a Palestinian without an American passport would have been at his disposal without such recourse.

\textbf{d.) The Case of the Gaza Strip}

While some statistics concerning the Gaza Strip have already been mentioned, several issues specific to Gaza deserve further attention. Before Israel’s Operation Cast Lead, it was noted that 80\% of Gaza’s wells were only partly working, while the other 20\% were totally inoperable. The general water-related infrastructure was in disrepair and could not be maintained because of Israel’s blockade. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) noted that this general situation created the potential for “a major public health hazard.” Fully 80\% of the drinking water there at the time did not meet the WHO standards for safety and large amounts of untreated or improperly treated water was being dumped into the Mediterranean, making the fish caught near the shore poisonous to eat. The UN’s official investigation into the conduct of the operation found that Israel had hit Gaza’s wastewater treatment plant and damaged as many as eleven wells, destroying totally three of them. Much

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\textsuperscript{31} WB, 32.
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piping had also been damaged, and over 8,500 water tanks were damaged or destroyed. When it comes to Gaza’s wastewater treatment facility, the UN’s mission concluded:

The Israeli armed forces also carried out a strike against a wall of one of the raw sewage lagoons of the Gaza wastewater treatment plant, which caused the outflow of more than 200,000 cubic metres of raw sewage onto neighbouring farmland. The circumstances of the strike suggest that it was deliberate and premeditated. The Namar wells complex in Jabaliyah consisted of two water wells, pumping machines, a generator, fuel storage, a reservoir chlorination unit, buildings and related equipment. All were destroyed by multiple air strikes on the first day of the Israeli aerial attack. The Mission considers it unlikely that a target the size of the Namar wells could have been hit by multiple strikes in error. It found no grounds to suggest that there was any military advantage to be had by hitting the wells and noted that there was no suggestion that Palestinian armed groups had used the wells for any purpose. Considering that the right to drinking water is part of the right to adequate food, the Mission makes the same legal findings as in the case of the el-Bader flour mill.

These legal findings regarding the mill were as follows:

The nature of the strikes, in particular the precise targeting of crucial machinery, suggests that the intention was to disable the factory’s productive capacity. From the facts it ascertained, the Mission finds that there has been a violation of the grave breaches provisions of the Fourth Geneva Convention. Unlawful and wanton destruction which is not justified by military necessity amounts to a war crime. The Mission also finds that the destruction of the mill was carried out to deny sustenance to the civilian population, which is a violation of customary international law and may constitute a war crime. The strike on the flour mill furthermore constitutes a violation of the right to adequate food and means of subsistence.

Furthermore:

Notwithstanding the possible military advantage offered to the Israeli armed forces by the plant’s location, the Mission cannot find any justification for striking the lagoon with what must have been a very powerful missile, sufficient to cause a breach 5 metres deep and 22 metres wide. It is highly unlikely that Palestinian armed groups could have taken up positions in or around the lagoon after the initial occupation of the area by Israeli armed forces: any such groups would have been exposed in the open area. The fact that the lagoon wall was struck precisely where it would cause outflow of the raw sewage suggests that the strike was deliberate and premeditated.

34 Ibid., 21.
35 Ibid., 22.
36 Ibid., 208.
As far as the general water situation in Gaza, its only natural source is the coastal aquifer, but with the blockade and conflict going on there, there has been little constructed in the way of facilities. People make their own wells, but this strains an already strained natural water supply. Because there are few wastewater treatment options available, much of the water that is available is polluted and poses health risks. The Israeli blockade of Gaza has led to a shortage of necessary parts, materials, and chemicals required for treating water, maintaining wells and facilities, and building new and much needed plants and wells. Apparently, 26% people with diseases in Gaza got them from bad water. Nitrate concentration is also high in the drinking water.\textsuperscript{37} The overuse of the coastal aquifer also means more saltwater gets into the water supply. Another major issue is that Israel has surrounded Gaza with extremely large amounts of wells, many of them deep, so that Israeli wells drain large portions of the ground and surface water before it has a chance to flow to Gaza. The wells in are shown as red dots on the above map, so one can see the high concentration and make an argument that Gaza is deprived (deliberately?) of much of its natural water supply.\textsuperscript{38} Also, since Gaza is on the Mediterranean, sea life is an important resource, with Gaza having many fishermen. Yet even fisherman are caught in this conflict, too. Shortly after Oslo in 1994, a twenty mile zone extending from Gaza was allotted for Gazan fishers, reduced to twelve miles in 2002. \textsuperscript{39} The IDF then reduced this to ten miles in April 2006, six in October of the same year, and finally, only

\textsuperscript{37} WB, 27-31.
\textsuperscript{38} Atallah, 32-33. Map also.
three miles were allotted to Palestinian fisherman by the IDF starting in January 2009. B’Tselem notes that there is ample evidence of multiple instances of the Israeli Navy harassing fisherman and even firing at them *even* within the permitted zone. The areas of plentiful fish populations are further out than the three miles allotted to Palestinian fisherman, forcing fisherman wishing to make a living being fisherman to risk their lives by violating the IDF-imposed limits; the Gazan fishing industry has been devastated.40

IV.) Conclusion: Analysis, and a Way Forward?

There was a name for one nation taking control of another and its resources for the benefit of the first nation at the expense of the second: colonialism.41 Princeton University’s WordNet defines colonialism as “exploitation by a stronger country of weaker one; the use of the weaker country's resources to strengthen and enrich the stronger country.” The behavior of Israel towards the Palestinian territories is one of the best modern examples which fits this definition. Sure, many powerful nations exploit the resources of weaker ones, but this is usually done through some sort of peaceful economic agreement, where the weaker nation is paid in money or receives some other sort of benefit, be it arms sales, protection, or something else. In this case, Israel’s government simply takes these water resources from the West Bank, and not only does not pay, but even charges the Palestinians when they provide them with their own water through the National Water Carrier. The Palestinians have no check on Israeli behavior save violence, which has not been effective in the past. In fact, the IDF is far more capable in terms of violent action than anything the Palestinians have to offer, so even this card cannot be played by Palestinians for any real benefit. They have no diplomatic, workable legal, or real-world-power cards to play. Israel is strong and has the IDF, and they simply take what they want. The most powerful nation in the world, the United States, generally backs most of Israel’s actions, once in a while offering a verbal criticism but still giving Israel billions of dollars every year in aid and near-certain backing in the UN

Security Council. Just last week, the U.S. vetoed an otherwise unanimous resolution condemning the Israeli settlements as illegal. The truth of the matter is that Israel does what it wants now, and the Palestinians cannot stop them. Israel can take whatever land and water it wants from Palestinians for its own use, and faces no serious consequences when it does. It can destroy whatever Palestinians facilities it wants, also without consequences. There is no military force in the region that can stand up to Israel’s actions, and, more than once, Israel has beaten nearly all its neighbors simultaneously in war. Having whatever it wants whenever it wants, what incentive does Israel have to change its behavior and begin to implement equitable water policies for Palestinians? Even when Israel does make agreements, it unilaterally changes them; the shrinking of the Gazan fishing zone from twenty down to, eventually, merely three miles illustrates this point perfectly. The left in Israel has all but disintegrated, so there are not enough people who either care or know or disagree with these policies in Israel enough to make an issue out of them for there to be any serious domestic pressure to stand up for Palestinian water rights.; it does not win votes. Sure, one could make the clear and obvious case that it is in Israel’s long-term interests to reach a final, two-state solution with the Palestinians whereby they would control their own resources. But neither Israel, not its voters, have generally been serious about this to date. Sure, there have been negotiations, but words are just that: words. The last two governments to seriously make offers regarding a Palestinian state, those of Ehud Barak and Ehud Olmert, were swept out of power shortly after negotiations and there is little to indicate that the successor governments would have abided by any agreement. What speaks much louder is the nearly forty-five year policy of settlement and expansion in the West Bank, the heart of any future Palestinian state. Even throughout Oslo, the settlement population grew dramatically, from about 110,000 settlers to nearly 330,000 settlers today. If Israel was realistically planning to give that land up, it would almost certainly not increase the number of people it will have to relocate or even forcibly evacuate by threefold; actions speak louder than words. With the Palestinians as powerless as they are, anything short of a national Israeli epiphany means anything remotely resembling a just arrangement regarding water between Israelis and Palestinians is not likely to happen without outside pressure.
If an agreement will not likely be reached by the parties themselves, then, that means that outside pressure is the only hope. This is not to say that there should be a military invasion of the Gaza coast to drive the Israeli Navy out, or to drive the IDF out of the West Bank. That being said, the international community can put a number of non-violent means of pressure to bear upon Israel. Any such campaign, however, would live or die with or without U.S. participation if not outright leadership. It was disconcerting to see the U.S. veto the recent Security Council measure condemning the Israeli settlements, as the resolution did little more than reaffirm what is basically the will of the world and the stated position of every U.S. administration since President Lyndon Baines Johnson’s, and especially since it dramatically undermined America’s own policy aims for the region, and threatens to plummet America’s standing among the Arab people at a time when a democratic uprising is gripping much of the Arab world. The U.S. had recently tried very hard to persuade the Netanyahu government in Israel to halt settlement construction for three months in order to help the Palestinians believe that Israel was serious about negotiations, and this in exchange for $3 billion in further military aid and a guarantee that the U.S. would use its Security Council veto to counter any Palestinian effort to move against Israel and bypass negotiations at the UN. Pundit and polemicist Christopher Hitchens said it best when he said that “This is a national humiliation” for America and a “shame.” He continues with an excellent summary why:

The mathematics of the situation must be evident even to the meanest intelligence. In order for any talk of a two-state outcome to be even slightly realistic, there needs to be territory on which the second state can be built, or on which the other nation living in Palestine can govern itself. The aim of the extreme Israeli theocratic and chauvinist parties is plain and undisguised: Annex enough land to make this solution impossible, and either expel or repress the unwanted people...

The only mystery is this: Why does the United States acquiesce so wretchedly in its own disgrace at the hands of a virtual client state?

I wonder what Hitchens would write about the recent UN veto. Here, the Obama Administration practically begged the Netanyahu government to go forward with what is a basic step towards any final peace-deal and should be a pre-condition for negotiations just as renouncing terrorism or recognizing

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Israel’s right to existence was, and offered the equivalent of an entire year’s worth of military aid and a promise of UN Security Council backing if Israel did what it should just do anyway; in response, the U.S. was told by Netanyahu no, thank you. Then, when the Palestinians did come to the UN with a diplomatic initiative designed to pressure Israel on the settlements and not at all unaligned with the U.S.’s own stated position, America, even though Israel rejected its previous offer which included a promise to veto such action on the part of Palestinians, vetoes the Palestinian resolution \textit{anyway}. So, basically, the U.S. proved to Israel that if America asks it to do something in exchange for something, and Israel says no, the U.S. will still pretty much give what it offered Israel (and which Israel rejected) anyway, so why should Israel say yes in the first place? Why do \textit{anything} the U.S. ask it to do if the U.S. will still back it unconditionally? The U.S. basically has now guaranteed that Israel will ignore its requests concerning the Palestinians because it is incapable of exerting any real pressure. President Obama likes the phrase “teachable moment;” well, he let one go by, wasting the opportunity to let the resolution pass with an abstention or even a yes which would have told Israel, “Yes, there will be consequences if you reject a generous offer to get you to do what you should do, and that means that what we offered, and what you rejected, will \textit{not} be forthcoming.” Stephen Walt, writing for ForeignPolicy.com, agrees, noting that “It is hard to believe that…[the Obama Administration] didn’t recognize that voting "yes" on the resolution might be a much-needed wake-up call for the Israeli government, and thus be a good way to get the peace process moving again?”\textsuperscript{43} One Israeli columnist wrote that “If the U.S. had been a responsible superpower, it would have voted for the resolution on Friday to rouse Israel from its dangerous sleep;” for him, the U.S. veto “was a veto against the chance and promise of change, a veto against hope. This is a veto that is not friendly to Israel; it supports the settlers and the Israeli right, and them alone.”\textsuperscript{44} Now, arguably, the United States may in some ways have its lowest leverage ever with an Israeli government,


proving beyond a reasonable doubt that there is little the U.S. will do to pressure Israel when push comes to shove, even when Israel is doing the shoving.

This is very unfortunate. The Netanyahu government must be brimming with confidence after the U.S. veto, and now it is hard to see it making any meaningful moves regarding the Palestinians, period. One will have to hope for a change in government in Israel. In time, the revolutions convulsing the Arab world may help convince the Israeli voter that the Arab governments, previously paid by the U.S. to not exert any real pressure on Israel regarding the Palestinian and to guarantee peace with Israel regardless of its treatment of the Palestinians, may now change their tune. This means that it has never been more important for Israel to win over Arab hearts and minds by helping the Palestinians achieve dignity and freedom with their own state. That President Obama could have helped Israel realize this by allowing the UN resolution to go forward is not only a missed “teachable moment,” but a defeat for U.S. long-term interests in the region. Such a resolution would have opened the way to meaningful sanctions or possibly harsher diplomatic measures and help Israel awake from its folly of a fantasy of colonizing and settling the West Bank and preventing the establishment of a Palestinian state. The silent majority in Israel might not dream this, but only significant pressure from the outside can make it care enough to put a government in power that does not cater to what Hitchens dubbed the “extreme Israeli theocratic and chauvinist parties” and their disastrous dreams. If pressure cannot or will not come from the U.S., perhaps it might come from a democratic Egypt…

Benny Morris wrote in his landmark Righteous Victims that, after the 1967 war:

Israeli thinking was to some degree governed by the notion that the Arabs of the territories, starved of land and resources (primarily water), and denied the possibility of industrial development, would gradually drift away. Though never clearly enunciated, this was the government’s aim—especially after 1977. And, indeed, over the decades, a steady trickle of West Bank and Gaza Arabs left their homes to find an easier life abroad…45

Yet, in the end,

The war and its aftermath of occupation, repression, and expansionism swiftly reignited the tinder of Palestinian nationalism, propelling thousands of young men, especially from among the dispossessed and hopeless of the refugee camps in East Jordan, Syria, and Lebanon, into the

45 Morris, 339.
burgeoning resistance organizations. At the same time, much as the Zionist enterprise had helped trigger early Palestinian nationalism, so the daily contact and friction with Israel and the Israeli authorities inside the territories now reawakened it.\textsuperscript{46}

It is time for Israel to realize that this thinking which dominated its government cannot help it now and will certainly harm Israel further if it tries to hold onto it. The dream of driving the Palestinians out and of \textit{Eretz Yisrael} ("Greater Israel" in reference to the old biblical Jewish kingdoms encompassing much land beyond Israel’s current borders) must give way to a reaffirmation of Israel’s core democratic values and a long-term vision that involves peace and cooperation with the Palestinians and its other Arab neighbors. Only by moving away from such policies as those highlighted in this paper will this be achieved; the alternative is war, death, killing, strife, civil discord, and a cannibalistic devouring of Israel’s founding democratic principles. Israel needs a real friend who will help it realize this by putting real pressure on Israel to give its own political leaders the political cover to do what is necessary.

In the short term, however, short of UN Security Council resolutions, there are other options. Before the Arab-Israeli negotiations of 1991, political and resource negotiations were dealt with separately.\textsuperscript{47} Now, politics poisons even the most basic discussions on resources with the Palestinians; perhaps it would be wise to try to look at resource related issues separately again? It would be difficult for a foreign power, even the U.S., to impose a full settlement of the conflict on the parties. Yet, the U.S. can use its influence (preferably quietly and behind the scenes, if possible) to forcefully push Israel towards making concession on certain issues. A few basic items could be possible with this approach. This paper is concerned with water rights, and depoliticization of water could be a start to this. The U.S. can make its diplomatic support and its military aid—soon to be more than $3 billion per year—conditional on several specific changes. One would be a restoration of the twenty mile fishing zone for Gaza, accompanied by an offer to have several U.S. (it is unlikely Israel would allow UN or NATO)

\textsuperscript{46} Morris, 343.

vessels join in patrol to keep arms from being brought into Gaza by sea, or possibly U.S. funding for increased Israeli patrols. A second move would be more complicated but would scrap the Civil Authority and JWC regime of decision-making power in terms of approval for Palestinians proposals for projects. A new commission of a U.S. representative, an Israeli representative, and a Palestinian representative would hold final power, by a majority vote, of approval for Palestinians projects related to water facility development, including but not limited to wells, piping, and wastewater treatment plants. All efforts to bring related materials to the relevant sites would then be allowed, with follow up by the commission to make sure the projects are being implemented. In times of serious emergency and threat to the Israel state or Israelis in the West Bank, short, temporary suspensions of movement of materials could be imposed by Israel, but only for a limited time; longer delays would be subject to the new U.S., Israeli, and Palestinian commission. And Israel would be responsible for seeing that within a year’s time, the same amount and quality of water is accessible to Israeli and Palestinian alike. Large amounts of international aid would ensure that this deadline would be met, and the same commission mentioned before would have the authority to ensure obstructions and delays would be kept to a minimum. The U.S. could quietly, behind the scenes, threaten to dramatically reduce aid, possibly for different publicly stated reasons, if Israel did not comply with this, and could allow Israel and the Palestinians to both take the credit as if they had asked the U.S. to do this. Or, perhaps, a public battle of words might be necessary; whatever would get the job done. These measures would be temporary, to last as long as the occupation of the West Bank and the blockade of Gaza continues.

Full peace will not come tomorrow or in a year, but with such a program, water rights could. This is just one way that the U.S. could use its leadership and influence with Israel to strongly push it in the right direction regarding water issues. Certainly, there are other methods possible, but this is one is very doable, especially behind the scenes. The status quo is not only unjust, but harms Israel, American, and Palestinian interests. Change is sweeping the region, and Israel will likely not be immune. Here is one way to enact positive change in a nonviolent way. The situation I saw in one part of the West Bank,
where a single Jewish settler had more water for his farm than an entire Arab village across the street, if such a claim is true, must be one of the things that changes for there to be any “just and lasting” peace.