

Parched

Israel's policy of water deprivation in the West Bank
B'Tselem report, April 2023

Research and writing: Eyal Hareuveni Fieldwork: 'Aref Daraghmeh, Salma a-Deb'i, Iyad Hadad, Manal al-Ja'bari, Nasser Nawaj'ah Translation: Maya Johnston

Editing: Michelle Bubis
Cover Photo: Manal al-Jarbari, Hebron, 22.6.22

ISBN 2-54-7613-965-978

B'tselem thanks Dr. Clemens Messerschmid for his assistance in preparing this report.



Table of Contents

Introduction	5
Overview: How Israel manages all the water sources between the Jordan River and the Mediterranean Sea	6
Israel's takeover of all water sources between the Mediterranean Sea and the Jordan River	8
How is the water agreement implemented, if at all?	11
Testimonies	18
Conclusions	25

Introduction

Every May, when the temperatures start rising, our suffering begins. We live with a chronic water shortage that's so bad, it's become all we think about. We talk of nothing else and don't care about anything but water: is there water, isn't there water, the pressure in the faucet is low, the water's about to get cut off, don't turn the faucets on too much, check the water tanks, make sure there's water in them, call the municipality.

This is how Rana Khweirah, a 52-year-old resident of Nablus, described her daily life in the summer months. She is not alone. The roughly three million Palestinians who live in the West Bank, the vast majority of whom suffer from chronic water shortages, share her predicament. Some have running water once every few days, some once every few weeks, and others are not connected to the water grid at all.

Running water is not a luxury. It is a basic service required for reasonable living conditions. Apart from the existential need for drinking, water is needed for a variety of basic necessities, such as cooking, personal and domestic hygiene, animal and crop farming, sanitation, industry and tourism. None of these are possible without a regular water supply.

Over the past generation, Israel has become a superpower in terms of water. It now produces twice as much water as supplied by natural sources, mostly thanks to desalination plants and heavy reliance on reclaimed water for agriculture. While Israel has developed some degree of resilience to weather conditions and climate change, this starkly contrasts the state of neighboring countries and of Palestinians in the West Bank and Gaza Strip, whose water supply falls far short of the need.

For Israeli citizens and residents, including those living in settlements in the West Bank, unlimited access to running water is a given. They would find it inconceivable to live without a constant supply of water in their homes, workplaces, fields, factories or swimming pools every hour of the day, in every season.

Palestinians in the West Bank are not suffering this shortage due to fate, an unavoidable natural disaster or a regional water crisis that cannot be averted. The water shortage in the West Bank is the intentional outcome of Israel's deliberately discriminatory policy, which views water as another means for controlling the Palestinians. Israel alone now decides how much water is supplied and to whom in the entire area under its control. Israel sets the limits on Palestinian water consumption, decides where wells are drilled, and controls how much water is transported, from where and to what destination. This absolute control allows Israel to prevent the development of an independent Palestinian water sector and keep the residents of the West Bank completely dependent on its goodwill.

This report details Israel's management of water allocation for Palestinians in the West Bank. It explains how Israel took over all the water sources between the Jordan River and the Mediterranean Sea, enshrining this takeover in temporary agreements meant to expire nearly 25 years ago. The report shows how the restrictions and prohibitions imposed by Israel create not only a chronic water shortage for all Palestinian residents of the West Bank, but also significant differences in water consumption across Palestinian districts. The testimonies included in this report illustrate the distress wrought by the water shortage, both in major Palestinian cities and in shepherding communities throughout the West Bank, and the consequences of Israel's deprivation policy.

Overview: How Israel manages all the water sources

between the Jordan River and the Mediterranean Sea

Israel is now a superpower when it comes to water. Smart planning, massive investment and a technological revolution have made it possible to build an advanced, efficient water management system that is relatively impervious to the effects of droughts and climate change. This system is designed to meet the needs of the population until 2050 at least. As a result of all this, citizens of Israel, both those living within its sovereign territory and those living in West Bank settlements, enjoy an almost unlimited supply of water for domestic and public consumption, as well as water-intensive agriculture, including in desert areas.

Israel's water supply system relies on desalination of seawater using innovative facilities and on expansive, efficient collection and conveyance systems. It is also geared towards recycling and improving the use of natural water resources. This includes restoring natural bodies of water (including adding a projected 100 million cubic meters a year to the Sea of Galilee), recycling a massive 85% of wastewater and diverting it to irrigation, improving wells, restoring streams and working to increase and store rainwater.

Thanks to this revolution, Israel no longer depends on natural water resources and annually produces more than twice the average amount of water that can be extracted from them. In 2020, Israel produced about 600 million cubic meters (mcm) of desalinated water, setting a target of desalinating 1.2 billion cubic meters as early as 2030. Throughout 2020, Israel produced a total of 2.4 billion cubic meters, a figure that is expected to grow by more than 50% and reach 3.7 billion cubic meters a year by 2050.²

Of the total amount of water produced in Israel in 2020, nearly 50% was designated for agriculture, about 43% for domestic use (more than 80% of which was desalinated seawater) and the remainder was supplied to the Palestinian Authority and to Jordan. The amount of water allocated for domestic use in Israel has doubled since 1993 – from just over 500 mcm a year to more than one billion cubic meters in 2020. This figure is expected to grow by another 70% by 2050.³

Israel's average daily per capita water consumption was 247 liters in 2020 – much higher than in Europe, which was 144 liters in 2018 (as opposed to 244 in Israel that year).

^{1.} Lea Kronaveter and Michael Zaida (managers with the Water Authority Planning Department), "Water Sector Development Plan", Water Engineering, Vol. 131, February 2022. See also, "The water infrastructure for Judea and Samaria will be ready for 2040 in four years", announcement of the sub-committee for civil and security affairs of the Knesset Foreign Affairs and Security Committee, 19 June 2018; Avi Bar-Eli, "Water Authority Masterplan: Palestinians to Receive 40% Less Water than their Jewish Neighbors", TheMarker, 14 November 2016 (Hebrew).

^{2.} Citizen's Empowerment Center in Israel, Follow-Up Report - Strategic Plan for Counteracting a Drought in the Water Sector for 2018 to 2030, August 2020 (Hebrew). See also, Lea Kronaveter and Michael Zaida "Water Sector Development Plan"; Yogev Israeli, "Israel No Longer Drying Up: How we became a water superpower", ynet, 9 December 2012 (Hebrew).

Israel Water Authority, Water Consumption for 2020 - Summary Report, 21 October 2021 (Hebrew).

^{4.} Israel Water Authority, <u>Water Consumption for 2018 - Summary Report</u>, September 2018 (Hebrew); Israel Water Authority, <u>Water Consumption for 2020 - Summary Report</u>, October 2021 (Hebrew). The calculation is made according to 90.1 cubic meters of "specific consumption" per capita a year, divided by the number of days a year. See also, European Environment Agency, <u>Water use in Europe - Quantity and quality face big challenges</u>, 30 August 2018.

The average monthly expenditure on water for a single Israeli household is negligible – a mere 0.64% of income in 2018.⁵

Palestinian subjects in the West Bank in no way enjoy the benefits of this revolution. The three million residents of the West Bank had access to only 239 mcm of water in 2020, about a tenth of the amount Israel produced, and remained completely dependent on natural water sources and on water purchased from Israel.

Average daily per capita water consumption among West Bank Palestinians is significantly lower than that of Israelis: 82.4 liters in 2020. In the West Bank's rural areas, which are home to more than a million Palestinians, about half of this amount is used for agricultural purposes. Some 70 Palestinian communities throughout the West Bank, numbering more than 100,000 people in total, have no running water. Their water consumption is similar to consumption in disaster zones: about 26 liters per capita a day.⁶ The minimum amount recommended by the World Health Organization is 100 liters per capita a day.

Only 36% of Palestinians in the West Bank have daily access to running water all year long. Another 47% receive running water less than 10 days every month. To meet the criteria set by the World Health Organization for "water availability," a water source must be located no farther than a kilometer from the home, and the water should not take more than half an hour to collect. As of 2016, 20% of the West Bank's Palestinian population does not meet these criteria. To grapple with the chronic water shortage, 92% store water in tanks on their rooftops and use domestic pumps to use it.⁷

On top of that, due to aging infrastructure and various technical problems, about a third of the water in the Palestinian water grid is lost to depreciation. This is a very high figure compared to water depreciation in Israel – including in settlements – which is about 3%.

Finally, the UN's development plan recommends the cost of water not exceed 3% of household expenses. There is no current data on average Palestinian household expenditure on water. However, at the turn of the millennium, the figure was about 8% of monthly expenses.9

^{5.} Israel Central Bureau of Statistics, <u>Household Income and Expenditure</u>, <u>Data from the 2018 Household Expenditure Survey - General Summary</u>. According to the survey, a household spends an average of NIS 132.5 (1 NIS = USD 0.28) per month on water, out of a total household net income of NIS 20,478. See also, Bat Chen Rotenberg, "Government Proposal for Raising Price of Water for Agricultural Use: Review and Analysis," **Water Engineering**, Vol. 131, February 2022 (Hebrew).

^{6.} The Palestinian Central Bureau of Statistics [PCBS], and the Palestinian Water Authority [PWA] Issue a joint Press Release on the Occasion of World Water Day, 22 March 2022. See also, Amira Hass, "Just How Much Do Palestinians Rely on Israel for Water?", Haaretz English Edition, 13 February 2014. See also, B'Tselem: "Summer 2016 – Israel cut back on the already inadequate water supply to Palestinians", 27 September 2016, "The economic crisis aggravates the water shortage in the Occupied Territories", 9 May 2010.

^{7.} World Bank Group, <u>Towards Water Security for Palestinians – West Bank and Gaza Water Supply, Sanitation, and Hygiene Poverty Diagnostic</u>, 2018, pp. 36, 39, 48-49.

^{8.} Israel Water Authority, <u>The Water Issue between Israel and the Palestinians</u>, March 2009, p. 20 [Hebrew]. See also, Yogev Israeli, "Israel No Longer Drying Up: How we became a water superpower".

^{9.} World Bank, Assessment of Restrictions on Palestinian Water Sector Development, April 2009, pp.16, 21.

Israel's takeover of all water sources between the

Mediterranean Sea and the Jordan River

There are three major water reservoirs between the Mediterranean Sea and the Jordan River: two groundwater reservoirs (the Mountain Aquifer and the Coastal Aquifer) and a surface water reservoir (the Jordan River Basin). ¹⁰ Two of these reservoirs are shared by Israel and the Palestinians:

- The Mountain Aquifer, which traverses the Green Line, is divided into three sub-aquifers: the Western Aquifer, the Eastern Aquifer and the Northeast Aquifer. This system spans the West Bank, extending from the foothills of Mount Carmel in the north, through Israel's coastal strip, to the northwestern edge of the Negev Desert in the south.
- The Jordan Basin, which extends from the Upper Galilee in the north to the Dead Sea in the south.

The third system is the Coastal Aquifer, which runs along the coastal strip of the Mediterranean Sea, from the foothills of Mount Carmel in the north to Rafah in the south, including the Gaza Strip. Experts are divided on whether this system should be considered shared, given the flow of groundwater from east to west. Opinions are also split on the degree to which Israeli drilling and pumping inside the Green Line affects water reservoirs in the Gaza Strip.

Before the Interim Agreement was signed

Israel utilized water from the Coastal Aquifer and the Mountain Aquifer prior to capturing the West Bank in 1967. Water from the Jordan Basin was used by Israel, as well as by Jordan, Syria and Palestinian residents of the West Bank, who pumped about 30 mcm per year at the time.¹¹

Israel introduced sweeping bans and restrictions on the Palestinian water sector immediately after occupying the West Bank. In August 1967, two months after the occupation began, the GOC Central Command issued a military order entitled Order Regarding Powers in Water-Law Matters. The order transferred all powers related to water in the West Bank – including production, conveyance and consumption – to Israel. The main effect was that Palestinians were now required to seek permission from Israel to drill new wells. Israel, on its part, gave such permits sparingly.¹²

Israel connected all the settlements built in the West Bank, with the exception of the Jordan Valley, to the Israeli water grid. Water is supplied to settlements based on consumption indicators inside Israel, and the water supply for Israeli communities on both sides of the Green Line is managed as a single system.

Not only that, but the order allows Israel to use new water sources to which it did not have access prior to the occupation, including the Eastern Aquifer, which flows into the Jordan Valley. Israel has drilled 28 water wells in this sub-aquifer and pumps more than 30 mcm per year from them. This water is not transported into Israel's sovereign territory, but rather serves the Jordan Valley's self-sustaining water supply, which relies entirely on local wells. Though the number of

^{10.} For more, see B'Tselem, <u>Thirsty for a Solution: The Water Crisis in the Occupied Territories and its Resolution in the Final-Status Agreement</u>, July 2000, pp. 28-33.

^{11.} Assessment of Restrictions on Palestinian Water Sector Development, p. 5.

^{12.} Order regarding Powers in Water-Law Matters (No. 92) (Hebrew), signed by GOC Central Command Uzi Narkis on 15 June 1967. See also, Order Amending the Supervision over Water Law (No. 158) (Hebrew) signed by GOC Central Command Uzi Narkis on 30 October 1967, and Order Regarding Land and Water Arrangement (No. 291) (Hebrew), signed by the Commander of the West Bank, Brigadier General Refael Vardi on 19 December 1968.

Palestinians living in the area is more than eight times the number of settlers, about 70% of the water output is given over to Israeli settlements, which engage in intensive farming. Palestinian communities make do with the rest. Residents of settlements in the Jordan Valley enjoy double or even triple the water allocation compared to average consumption by all other Israeli citizens, ranging from 400 to 700 liters per capita a day. They also enjoy generous water allocation for intensive farming in the area¹³

Israel's takeover of water sources in the Jordan Valley has directly harmed Palestinian water consumption. Two Israeli drillings near the village of Bardalah dried up the main springs used for Palestinian agriculture in the area. In response to international pressure, Israel undertook to compensate the Palestinian farmers, and supplies water to the village to this day. 14 Israel also declared the springs of 'Ein Fashha and Fasayil nature reserves and denies Palestinian communities access to the Jordan River Basin, which they had used for farming and fishing.

The Interim Agreement

The issue of water was addressed in the Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip (Interim Agreement), signed between Israel and the PLO in 1995. The agreement was to remain in effect for five years only, after which a permanent agreement would be signed. That has yet to happen.¹⁵

The Interim Agreement did not redistribute shared water sources fairly. Instead, it preserved the principle followed previously, whereby Israelis have access to water on demand, while Palestinians receive water according to predetermined allocations. To maintain this principle, at the time of signing, the parties agreed that any increase in Palestinian water consumption would be supplied from new water sources only.

The agreement makes no reference to the Jordan River Basin system. That discussion was left for permanent agreement negotiations – but those never took place, leaving Palestinians without access to this shared water source to this day. With respect to the Mountain Aguifer, the agreement stipulates that water allocations for the Palestinians should be increased and that the increase would be pumped from new drillings in the Eastern Aquifer and from "other agreed sources." According to the calculations in the agreement, the Palestinians were to reach production of 196 mcm from the Mountain Aquifer: 118 mcm (20% of the aguifer's water), representing total consumption at the time the agreement was signed, and an additional 78 mcm allocated for "future needs "16

The Interim Agreement also provides for the establishment of a Joint Water Committee (JWC) set to "deal with all water and sewage related issues in the West Bank." The JWC is meant to engage in the coordinated management of water and sewage systems and resolve related disputes. It consists of an equal number of representatives from each side and must reach decisions unanimously.

^{13.} B'Tselem, <u>Dispossession and Exploitation: Israel's Policy in the Jordan Valley and Northern Dead Sea, May 2011, pp. 7-8, 21, 23.</u>

^{14.} Ibid., p. 21. Israel allocated Bardalah 5.5 mcm of water in 2022 on top of the general allocation of water to sell to the Palestinian Authority for the West Bank and the Gaza Strip. See, Israel Water Authority, Water Allocations for 2022 in Thousands of Cubic Meters, 11 September 2022, p. 587 (Hebrew).

^{15.} <u>Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip 28 September 1995, Annex III:</u> Protocol Concerning Legal Affairs, Article 40, Water and Sewage.

^{16.} Assessment of Restrictions on Palestinian Water Sector Development, p.7.

The agreement also stipulates that Israel and the Palestinians will establish a Joint Supervision and Enforcement Mechanism, comprised of at least five Joint Supervision and Enforcement Teams (JSETs) that would have unrestricted access to all Israeli and Palestinian water and sewage facilities in the West Bank. The JSETS were to monitor connections to water systems, new well drillings, contamination prevention, water quality testing, the electric and

energy systems providing power to water systems, and more.

The agreement completely separated the water supplied to Israelis on either side of the Green Line from the water supplied to Palestinians, clarifying that the latter would have powers and responsibilities only over water and sewage systems "related solely to Palestinians," while systems serving both Palestinians and Israelis would be managed by Israel alone.

How is the water agreement implemented, if at all?

The arrangements laid out in the Interim Agreement nearly 30 years ago do not reflect the current need for water among Palestinians in the West Bank. The agreement did not foresee the rapid Palestinian population growth in the West Bank in the years since it was signed: from 1.54 million in 1997 (excluding annexed East Jerusalem) to 2.7 million in 2022.¹⁷ Despite a growth of 75%, the amount of water Israel allows Palestinians to extract remains the same.

Furthermore, the agreement did not foresee the technological revolution in Israel's water sector, which freed the country from dependency on the Mountain Aquifer and on intensive extraction from it. This development could have allowed Palestinians to pump much more water from the Mountain Aquifer than the agreement allows, with no effect whatsoever on Israelis' water consumption, yet Israel's policy remains unchanged.

The agreement ignores the reality of occupation

From the outset, the provisions of the Interim Agreement failed to reflect the needs of the Palestinian side, partly due to its structural disadvantage during negotiations. ¹⁸ The key failure lies in complete disregard for the reality of occupation and for the power relations between Israel and the Palestinians. The agreement is full of phrases implying equality between the two parties, and the language of the provisions creates an illusion of two equal water sectors between the Mediterranean Sea and the Jordan River – one Israeli and the other Palestinian – that share water sources, run joint monitoring mechanisms and make decisions together.

For instance, it is stated that the parties reached an agreement "on the basis of goodwill" and that they "agree to coordinate the management of water and sewage resources and systems in the West Bank during the interim period." It is also established that these systems will be "operated, maintained and developed in a coordinated manner" and that "each side shall ensure" that the provisions of the agreement are implemented. The JWC will manage water resources and water and sewage systems in a "coordinated" manner; its decisions will be reached by consensus; and the agreement will be enforced by joint teams that will split the costs evenly.

But the two sides are not equal. Israel is an occupying power in the West Bank, controlling Palestinian subjects who have not elected it and cannot influence the institutions that govern their lives. Given the extreme power disparity and the Palestinians' complete dependence on Israel, the Water Agreement clearly did not create two equal water sectors, but rather entrenched Israel's monopoly over the single water sector that exists between the Jordan River and the Mediterranean Sea. The agreement cemented Israel's status as regulator and sole authority for strategic decisions concerning water.¹⁹

Moreover, clauses addressing the distribution of water completely ignore the division of the West Bank into Areas A, B, and C in other articles of the same agreement. The Palestinian Authority received some civilian powers only in Areas A and B, disconnected enclaves where almost all Palestinian communities are located. They are surrounded by Area C, a contiguous area that covers about 60% of the West Bank and contains all Israeli settlements and all open spaces in the West Bank. Any connection

^{17.} Palestinian Bureau of Statistics, <u>Census Final Results – Summary (Population, Housing Units, Building and Establishments)</u>, 30 November 1998; <u>Estimated Population in the Palestine Mid-Year by Governance</u>, 1997-2026.

^{18.} Uri Blau and Yotam Feldman, "A Dry and Thirsty Land", Haaretz English Edition, 13 August 2009.

^{19. &}lt;u>Israeli-Palestinian Interim Agreement on the West Bank and the Gaza Strip 28 September 1995, Annex III:</u> Protocol Concerning Legal Affairs, Article 40, Water and Sewage.

between Areas A and B must go through Area C, and as Israel has retained all powers in that part of the West Bank, Palestinians need Israel's consent for virtually anything: every new drilling, every water grid that connects nearby Palestinian communities, and every wastewater treatment facility – which inevitably have to be built far from residential neighborhoods – must pass through Area C and therefore require Israeli approval.

The Palestinian Authority cannot develop an efficient water grid that runs across Palestinian communities, as any such system would have to traverse Area C – something Israel prevents as a matter of policy.²⁰ The fragmentation of Palestinian space therefore prevents the establishment of an efficient, uniform and integrative water system with a development strategy and with quality and performance indicators like the Israeli water sector.

The fragmentation of the West Bank results in sharp differences in daily per capita water consumption among Palestinian communities. While the Interim Agreement allows Israel to export water from inside the country to West Bank settlements, it precludes the Palestinian Authority from transporting water from one part of the West Bank to another. This creates an absurd situation, as the Palestinian Water Authority produces water at a negligible cost in the Qalgiliyah, Tulkarm and Jericho districts but cannot deliver it to other Palestinian communities, sometimes just a few kilometers away. The resulting discrepancies in water consumption among the various Palestinian districts are staggering: in 2020, daily per capita water consumption in Bethlehem and Hebron Districts stood at 51 liters, in Jenin District at 69.4 liters, in Tubas District at 71.4, in Nablus District at 84.5, in Salfit District at 104.6, in Ramallah, al-Bira and al-Quds District (excluding Jerusalem, which was annexed to Israel) at 111.7, in Tulkarm District at 129.2, in Jericho District at 129.5 and in Qalqiliyah District at 141 liters.²¹

To make up for the shortage, the Palestinian Authority is forced to purchase water from Israel's national water company, Mekorot, at a much higher cost. The total amount of water consumed by Palestinians in the West Bank in 2020 was 239 mcm. Of these. 77.1 mcm were purchased from Israel and unevenly distributed according to Mekorot's infrastructure in the West Bank, built to serve Israeli settlers rather than Palestinians. This meant water consumption in the Ramallah, al-Bira and al-Quds District in 2020 was 29.4 mcm, of which 24.5 mcm (83%) - about a third of all the water the Palestinian Authority bought from Israel - was purchased from Mekorot. Nablus District consumed 33.3 mcm, of which five mcm (15%) were purchased from Mekorot. In the same year, 49.2 mcm were consumed in Jericho District, 2.8 mcm (5.6%) of which were purchased from Mekorot, while in Tulkarm District, 25.1 mcm were consumed that year, of which 0.5 mcm (1.9%) were purchased from Mekorot.²²

The fragmentation of the West Bank, created by Israel's full control over Area C, also impacts the technical aspects of water projects for Palestinians. The pipes the Palestinians asked the JWC to approve had an average diameter of 4.7 inches – just a third of the size of the pipes supplying water to Israelis (13.8 inches on average). This gap is also evident in the dimensions of the water reservoirs: Israeli reservoirs are almost five times larger than their Palestinian equivalents. The reason for the differences is that

^{20.} Assessment of Restrictions on Palestinian Water Sector Development, p.VII, 33.

^{21.} Palestinian Bureau of Statistics, <u>Table 9: Quantity of Water Supply for Domestic Sector</u>, <u>Water Consumed</u>, <u>Total Losses</u>, <u>Population and Daily Consumption per Capita in the West Bank(1) by Governorate</u>, <u>2020</u>, 2022; Towards Water Security for Palestinians – West Bank and Gaza Water Supply, Sanitation, and Hygiene Poverty Diagnostic, p. 14.

^{22.} Palestinian Bureau of Statistics, <u>Table 6. 7,8,9: Quantity of Water Supply for Domestic Sector, Water Consumed, Total Losses, Population and Daily Consumption per Capita in the West Bank(1) by Governorate, 2020.</u>

Palestinians are only permitted to carry out local projects of limited scope and without crossing into Area C, while Israel lays large-capacity water pipes all over the West Bank to supply water from Israel to the settlements.²³

When it comes to the Palestinians — the agreement is not implemented

Most of the arrangements stipulated in the Interim Agreement have not been implemented to this day, almost 30 years after it was signed. The Palestinians have yet to receive the promised additional supply from shared water sources; the JWC has become a tool for advancing Israel's interests over the years; and enforcement is applied only to Palestinians, contrary to the agreement on a joint supervision and enforcement mechanism – which was never activated.

A. The Palestinians are not pumping the agreed amounts of water

The Israeli Water Authority claims "Israel has discharged all its obligations under the Water Agreement with respect to an additional water supply to the Palestinians, and far beyond." It also notes that "the Palestinians are utilizing water made available to them in the Agreement from the Eastern Aquifer only partially, likely deliberately... As a result, Israel is 'forced' to provide the Palestinians more than 30 mcm from its territory." ²⁴

The Israeli Water Authority is correct in noting that the Palestinians are only partially utilizing the Eastern Aquifer. According to the Palestinian Water Authority, the amount of water produced from the

three sub-aquifers of the Mountain Aquifer has steadily increased over the past decade – from 71.6 mcm in 2010 to 108.6 mcm in 2020. The amount produced from springs has changed over the years: in 2020, it reached 53.3 mcm, but was significantly lower in the following years. Still, even in 2020, the year in which Palestinians produced the largest amount of water, the total amount was 161.9 mcm – a far cry from the 196 they were promised in the agreement.²⁵

At the same time, the allegation that the Palestinians are likely doing so "deliberately" is misleading. According to the agreement, the additional water supply for the Palestinians was to originate in the Eastern Aquifer and in "other agreed sources." Not only have such agreed sources never been identified, but it is unclear what this phrasing meant, as all natural water sources barring the Eastern Aquifer were already in use when the agreement was signed.

Israel seized control of the Eastern Aquifer's most productive outlets in the northern Dead Sea and in the Jordan Valley back in the late 1960s, and has made 28 drillings since. Some of these drillings were carried out near the most abundant springs in the area – 'Ein Fashha, al-'Auja, Fasayil and Bardalah – greatly reducing their natural flow. Palestinians have no permits for new drillings in these locations.

Most of the remaining area of the Eastern Aquifer was classified as Area C, where Israel restricts Palestinian access and prevents utilization of water sources. Large parts of Area C were declared as "firing zones," though most have not been used for that purpose for decades; others were declared as "nature reserves," despite the fact that parts of

^{23.} Jan Selby, "Cooperation, domination and colonization: the Israeli-Palestinian Joint Water Committee", Water Alternatives, 6 (1), 2013, pp. 11-12.

^{24.} Israel Water Authority, The Water Issue between Israel and the Palestinians, March 2009, p. 21 (Hebrew).

^{25.} Palestinian Bureau of Statistics, Table 2: Selected Indicators for Water Statistics in the West Bank 2010-2021, 2022.

them are cultivated by Israeli settlements in the Jordan Valley; and still others were allocated to the municipal jurisdiction of settlements. In practice, Israel denied Palestinians access to all these areas even before the agreement, and continues to do so today.

Hydrological surveys conducted by Israel in the late 1990s revealed that the unutilized water in this sub-aquifer is not potable due to high salinity. This was likely the main reason Israel did not drill there itself. This means that even in the few cases in which Israel did allow the Palestinians to drill in the Eastern Aquifer, the drillings were deep and expensive, and the extracted water required costly desalination. Ultimately, the cost of production and the distance from the water grid did not justify utilizing these wells.²⁶

As it cannot pump the amount of water promised, the Palestinian Authority is forced to purchase water from Israel. This water is not "supplied" to the Palestinians, as the Israeli Water Authority states, but rather sold at full price, accounting for the full real cost of "production at the source and the conveyance all the way to the point of delivery."²⁷ The amount of water Israel sells to the Palestinian Authority for use in the West Bank increases every year. The Palestinian Authority bought 27.9 mcm of

water from Mekorot in 1995, 53.3 mcm in 2012, and in 2022 the amount rose to 81.2 mcm.²⁸

The Palestinian Water Authority's West Bank Water Department charges local authorities 20% less than the cost of water production in order to assist them. Yet many cannot make full, regular payments for the water they consume, even with the discount. As a result, the Palestinian Water Authority incurs debts to Mekorot, which Israel then deducts from the tax monies it collects on behalf of the Palestinian Authority. ²⁹

Israel shirks its responsibility for this reality and claims the Palestinian Authority is violating the Water Agreement by ignoring approximately 250 illegal water wells drilled by Palestinians, mainly in the Jenin area. This district has one of the lowest per capita water consumption figures in the West Bank – 69.4 liters per day, as of 2020. Israel accuses the Palestinians of producing 10 mcm in excess of the amount stipulated in the agreement from these drillings. 30 The former head of the Palestinian Water Authority, Dr. Shaddad Attili, says these wells produce a maximum of four mcm.31 But even if Israel is correct, the extent of pumping to which it takes exception is nowhere near the amount of water the Palestinians were promised to extract in the Water Agreement. Moreover, this amount is negligible compared to the amount of water Israel

^{26.} B'Tselem, <u>Thirsty for a Solution: The Water Crisis in the Occupied Territories and its Resolution in the Final-Status Agreement</u>, July 2000, pp. 28-30. Jan Selby, "Joint Mismanagement: Reappraising the Oslo Water Regime", in Water Resources in the Middle East: Israel – Palestine Water Issues- From conflict to cooperation, (eds. Hillel Shuval & Hassam Dweik), Hexagon Series on Human and Environmental Security and Peace, 2007, pp.13-14. See also: <u>Assessment of Restrictions on Palestinian Water Sector Development</u>, p. 36.

^{27.} Section 81 of the Water Agreement between Israel and the Palestine Liberation Organization.

^{28.} Israel Water Authority, Water Allocations for 2022 in Thousands of Cubic Meters, 11 September 2022, p. 587 (Hebrew). In 2022, Israel also supplied 20 mcm of water to the Gaza Strip. See, Israel Water Authority, <u>Direct Water Supply from Israel to the Palestinian Authority – Commitment vs. Performance (in mcm)</u> (Hebrew). See also, Table No. 4, Palestinian Bureau of Statistics, <u>Annual Available Water Quantity in Palestine by Region and Source</u>, 2020.

^{29.} Toward Water Security for Palestinians – West Bank and Gaza Water Supply, Sanitation, and Hygiene Poverty Diagnostic, p. xxii.

^{30.} Haim Gvirtzman, "The Israeli-Palestinian water conflict: An Israeli Perspective", **Mideast Security and Policy Studies**, no. 94, 2012, Begin-Sadat Center for Strategic Studies.

^{31.} Meeting with Dr. Shaddad Attilli, former Minister in Charge of the Palestinian Water Authority and currently a minister in the team advising the negotiations, 21 June 2022.

extracts from the Mountain Aquifer, and certainly in relation to the total amount of water produced by Israel today.

B. The Joint Water Committee — a tool for promoting Israeli interests only

Over the years, Israel has turned the JWC into an instrument for promoting its own interests while keeping the Palestinian side weak. This goal was achieved in several ways.

Already in the JWC's early years, Israel dictated that projects intended for Palestinians would be discussed together with projects intended for settlements as a "package deal." The Palestinians, who oppose the establishment of settlements – which are a breach of international humanitarian law and a daily source of human rights violations against Palestinian residents³² – found themselves obliged to vote in favor of projects intended for settlement expansion, while their veto power lost all meaning.

In 2010, after about 15 years of the JWC operating in this manner, the Palestinian Authority decided to stop approving settlement projects. In response, Israel announced it would withhold approval for Palestinian projects, including infrastructure for the Palestinian city of Rawabi, then under construction.³³ The JWC stopped convening for six years, during which time 97 Palestinian projects funded by donor countries piled up, awaiting its approval.

In 2016, the JWC reconvened after Israel agreed to token concessions, such as waiving the requirement for the Palestinian side to seek approval for every pipe exceeding 200 meters in length and two inches in diameter and running only through Areas A and B, as well as approval for the construction of water reservoirs within the municipal boundaries of Palestinian communities. Israel demanded the Palestinians completely forego the provision made in the Water Agreement requiring JWC approval for all projects for supplying water from within the Green Line to the settlements. The Palestinians complied.³⁴

As part of these agreements for resuming the JWC's work, the Palestinians withdrew their longstanding opposition to a plan to discharge wastewater from Jerusalem through a tunnel running under Palestinian Authority territory (Abu Dis and al-'Eizariyah) to the Og sewage treatment facility that Israel built south of Jericho. Once the tunnels and the connection to the reservoir are completed, raw sewage will no longer be discharged into the Kidron valley. With about 11 mcm of raw sewage discharged into the valley each year, this is the largest sewage hazard between the Jordan River and the Mediterranean Sea.³⁵

Since the JWC resumed work, Palestinians no longer have any information about the scope of projects Israel is undertaking in settlements and about their impact on shared water sources and on Palestinian

^{32.} See, "The settlements in international law and violation of Palestinians' human rights in the West Bank" in B'Tselem, **By Hook and by Crook: Israeli Settlement Policy in the West Bank**, July 2010, pp. 49-55.

^{33.} Gili Cohen and Jack Khoury, "Despite Military Approval, Minister Shalom Delays Water Connection for Rawabi", **Haaretz**, 15 February 2015 (Hebrew).

^{34.} Jan Selby, "Renewing cooperation on water: what hope for the two state solution?", Open Democracy, 26.1.17.

^{35.} Zfarir Rinat, "Israeli-Palestinian Cooperation Is Necessary to Clean Up This Highly Polluted Stream", Haaretz English Edition, 3 July 2020; Aviv Lavie, "Israel, Palestinians eye smooth waters with historic cooperation on sewage", Times of Israel, 22 June 2020. HCJ 7995/15 Zalul Environmental Association v. Government Water and Sewage Authority, a petition demanding a resolution for the Kidron sewage hazard, which was stricken in light of the understandings reached between Israel and the Palestinian Authority (ruling dated 24 March 2019).

residents.³⁶ The new reality is that Palestinians are excluded from a significant portion of decisions made regarding use of shared water sources, yet need Israel's permission for any and all use they make of them.

Another way in which Israel has emptied the JWC's work of meaning is the requirement – which has no basis in the Interim Agreement – that any project designed to serve Palestinians which crosses Area C in whole or in part must receive approval from the Civil Administration Supreme Planning Committee. Palestinians have no representation on this committee, which is made up of Israelis alone. This requirement often renders JWC decisions meaningless, as nearly all Palestinian projects traverse Area C, whether they are pipelines connecting neighboring Palestinian communities or sewage treatment facilities that cannot be installed near built-up areas.

Even projects that receive permission from both the JWC and the Civil Administration are not necessarily in the clear. Palestinians must obtain the approval of the Coordinator of Government Activities in the Territories to import equipment and materials needed for projects from abroad, and yet another permit from the Civil Administration to transport these inside the West Bank. The US Administration often has to intervene to help obtain permits to transport equipment.³⁷

A study of JWC decisions in the years it was fully operational conducted by Prof. Jan Selby, an expert on

water conflicts from the University of Sussex, clearly illustrates the bias in favor of the Israeli side. From 1995 to 2009, the Palestinians submitted 602 projects. to the JWC. Of these, 188 concerned drilling new wells and rehabilitating existing ones. The JWC did not approve a single new well for the Palestinians in the Western Aquifer, and approved 24 in the Eastern Aguifer. A total of 68 wells were approved (new ones, substitute ones and groundwater monitoring wells), but implementation was delayed for years due to Israeli demands for further, separate approval for pumping facilities and pipelines. Ultimately, just 38 of the 68 wells approved for the Palestinians were actually utilized.³⁸ In addition, as of 2008, 106 projects designed to improve water supply for more than 1 million Palestinian residents of the West Bank were delayed by Israel, including 85 projects for construction or rehabilitation of local water networks. Until that time, only three projects for the construction of sewage treatment facilities for the Palestinians had been approved (out of 16 projects submitted to the JWC).39

In the same timeframe, all 108 Israeli applications for supply lines to settlements and for three new wells were approved, as were nearly all requests for the construction of sewage treatment facilities for settlements. All these projects connected the western side of the Green Line to the settlements. They included five lines approved in 1998, which increased water supply to settlements by 25 mcm, and another line, approved in 2002, servicing settlements south of Bethlehem.⁴⁰

^{36.} Jan Selby, "Renewing cooperation on water: what hope for the two state solution?".

^{37.} Meeting with Dr. Shaddad Attilli, 21 June 2022.

^{38.} Jan Selby, "Cooperation, domination and colonization: the Israeli-Palestinian Joint Water Committee", pp. 12-14.

^{39.} Assessment of Restrictions on Palestinian Water Sector Development, pp.48-50.

^{40.} Jan Selby, "Cooperation, domination and colonization: the Israeli-Palestinian Joint Water Committee", pp. 12-13.

C. Failure of the Joint Supervision and Enforcement Mechanism — Israel has sole enforcement powers

The equal supervision mechanism stipulated in the Interim Agreement was never implemented. The Palestinians were not given access to the municipal territories of the settlements, and the agreement never gave them access to projects within the Green Line in the first place, even though these projects use shared water sources. In essence, the Palestinians' supervision and enforcement powers faded away shortly after the agreement was signed.

This freed Israel of all external controls. No one, including the Palestinians, has any supervision or enforcement powers that can challenge the plunder of freshwater springs and water cisterns by settlers, the blocking of access to water sources due to settler violence, or the unauthorized water connections to settlement outposts in the West Bank. Israel backs

and enables these practices as a matter of policy, with soldiers and police officers sometimes actively participating.⁴¹

In contrast, as the occupying power in the West Bank, Israel has enforcement powers over the Palestinians, which it uses, among other things, to demolish water sources serving Palestinian shepherding communities in the South Hebron Hills and in the Jordan Valley. The official excuse for the demolition is that these source constitute "unapproved water use" or pollute water systems. The true objective, however, is to drive Palestinians off their lands. These water sources provide just a few dozen cubic meters of water each, and clearly have no impact on the Israeli or the Palestinian water sector. For the isolated Palestinian communities that dependent on them completely, however, their functioning makes a world of difference.

^{41.} Office for the Coordination of Humanitarian Affairs (OCHA), <u>How Dispossession Happens: The humanitarian impact of the takeover of Palestinian water springs by Israeli settlers</u>, March 2012. See also, B'Tselem, <u>State Business - Israel's misappropriation of land in the West Bank through settler violence</u>, November 2021.

Testimonies

B'Tselem collected dozens of testimonies for this report from Palestinians in the West Bank. Together, they illustrate the outcomes of Israel's takeover of water sources between the Mediterranean Sea and the Jordan River. Residents describe how the chronic water shortage created by Israel dictates their families' daily routines and financial planning, and how much thought they have to put into using water for cooking, cleaning and personal hygiene. These conditions exist both in urban areas, where the water supply falls far short of the population's need, and in shepherding communities, which have no running water at all and must purchase water purchased from private contractors.

Palestinian cities

Palestinian cities are connected to a water grid. However, the limited quantities Israel allocates to Palestinians force the Palestinian Water Authority to stagger the water supply, so residents have running water only once every few days.

Due to the intermittent supply, most Palestinians in the West Bank install water tanks on their rooftops. On days when they have running water, they fill the tanks up to use when the supply is cut off. The water tanks need regular maintenance and their pumps must be monitored constantly. Often, the tanks cannot store enough water to meet the family's needs, forcing residents to buy more water from private contractors at a much higher price than they pay the local authority, or to buy bottled water for drinking and cooking.

Testimony of Ghadah a-Rabi, 50, a mother of three from Ramallah:⁴²

We live in a detached house in the neighborhood of Um a-Sharayet in Ramallah. The water shortage is getting worse every year, especially from April to November. When summer approaches, we start preparing for a life of disruptions because of the supply cuts that sometimes last a whole week.

We have two water tanks, each with a capacity of 1,500 liters, and another solar water heater tank with a capacity of 1,000 liters. We get running water according to the Water Authority's plan for Ramallah: most of the year, our area gets water three days a week. The supply starts on Saturday night with a weak flow, and continues through Sunday and Monday. The rest of the week, the water is cut off. When we have running water, we fill up the tanks.

But even the water in the tanks is not enough for all the housework, even though we collect water in bottles and buckets and recycle it. We've gone back to the old days, when everything was done by hand. We wash the dishes with a jug, wash clothes by hand, and shower with a pot of hot water and a large cup. I always feel that nothing is really clean – the dishes, the laundry or my body. It's never 100% compared to using running water with normal water pressure.

Because of the water shortage, we also have to buy water from private contractors, which is much more expensive. To fill a tank of three or four cubic meters, we pay them NIS 200 (NIS 1 = USD 0.27), compared to five NIS per cubic meter we pay the Palestinian Water Authority. Since the beginning of summer, we've bought water from private contractors four times already. It's a heavy financial burden. We don't use the water we buy for drinking or cooking because we do not know where it comes from and it may be contaminated. So we have to buy mineral water, too. Every week, we buy about 21 bottles of 1.5 liters. Another expense on top of all these is disposable plastic dishes, to avoid wasting water on washing dishes.

Our lives revolve around water and supply times. I check the faucet in the yard to see if the water is on. When it comes on, you have to make sure it's pumped up to the tanks on the roof. My husband climbs up to the roof to make sure, because sometimes the water comes in but the float is stuck or broken because the water has been cut off for a few days, which creates residue or calcification. Sometimes, we need to bring a plumber in or buy a new float. We've replaced the float twice since the summer started. If the malfunction happens exactly when the water is on, then the tanks aren't filled and we have to wait another week

Because of the water shortage, we don't have guests over so we don't feel embarrassed if, for example, someone uses the toilet and there's no water to flush with. Sometimes, I have to take time off work on the days when the water is running, so I can get through as much housework as possible and gain another day of full tanks.

Anxiously waiting for water all the time disrupts our lives and affects our mental health and mood. We're careful not to waste a single drop. We keep reminding ourselves and each other to save water, and the topic comes up all the time: The water's running out, who will get us water, who will call the contractor to buy water, who will buy mineral water. It's a story with no beginning and no end.

Why do our lives have to be so disrupted? The Jews who live in Israel and in the settlements get water so easily, with no worry or stress, and enjoy it without worrying it'll get cut off all of a sudden or having to buy large tanks to store water. They get water through the grid, without disconnections and at the right pressure. They have gardens, swimming pools, farms and luxurious lives, while our lives are miserable because of the shortage.

Testimony of Khulud Damen, 44, a mother of two from Nablus:⁴³

I've been living in a rented house in the neighborhood of a-Dahiyah al-'Ulya since I got married. We suffer from a water shortage all year round, even in winter. We only have one water tank on the roof of the building, because the owner says the roof can't hold any more. When that tank is empty we have no hot water, either.

I don't do laundry during the week. I wait for water to arrive. Most of the time, the water comes on at night, after 10:00 P.M., and then I run the washing machine over and over for hours until I finish everything.

The problem gets worse in summer, because we need more water. Showering in summer requires planning. My children walk home from school and need a shower, so I fill a bucket up in the shower and allow them to bathe only with that, so we have water left for other needs such as drinking, preparing food, washing dishes and ablutions before prayers. I use the dishwasher only once a day to save water. I wash the rest of the dishes by hand.

Two years ago, in the summer, the water supply was cut off several times for more than 12 days in a row. I had to go to my mother's house to shower and wash my clothes and the children's clothes. I stayed at her place for several days. Last year, my younger sister visited me with her four small children. We went out to the garden, and the children played in the sand and got dirty and had to shower and change. I had to supervise their showers. I apologized to my sister for not being able to run the washing machine because I was afraid the water would run out, and asked her to wash her children's clothes at her house. If I had run the washing machine, we wouldn't have had a drop of water left to drink. It was embarrassing, but I had no choice.

When I invite the family over for a meal, I plan it around the supply times, too. Our whole lives are tied up with water. I ask the children to be considerate when they turn on the faucet and not use it too much, so we don't run out of water. Whenever I hear the water running, I immediately call out to them and they already know what I want. Before I even say anything, they say: "Okay, Mom, we're turning the faucet on carefully."

When the water comes on, I first fill every empty container I have. I have a barrel on the balcony that I use for cleaning when the supply is cut off. When we order water from a contractor, it costs us NIS 100 to fill the tank on the roof. That's a lot of money for us, and we also have to wait for the delivery. If we order in the morning, it can only arrive at the end of the day and maybe even the next day. That's why I fill all the available containers in the house. That and doing all the housework manually takes up most of my day. The next day I'm completely exhausted. It's very difficult.

Testimony of Nirmin Abu Hayah, 41, a married mother of five from Hebron:⁴⁴

I live in an old building in the area of a-Shalala Street, and work in the food industry. My husband is a construction worker. We suffer from not having enough water the supply is cut off for long periods. We have 10 water tanks on the roof, but that's not enough.

The Hebron Municipality supplies us with water once every 18 to 30 days, for 24 hours at a time. Even then, the flow is weak and it's only enough to fill five tanks. We can't buy water from private contractors because the roof is too high for them to fill the tanks. So I have to make do with the five tanks until the water comes back on

I cook sheep and goat heads. That's my family's main income. Cleaning and cooking them requires a lot

of water, and what we get isn't enough. Sometimes, I turn down orders because I don't have enough water and lose the income.

We always have to ask neighbors with wells for water. Sometimes, I feel they don't like it when I ask them for water over and over. It's embarrassing and humiliating. I often buy drinking water in stores, too. When there's no water, the filth and smell from the toilet fill the house and attract flies. Because of the shortage, we flush the toilets manually with a jug of water, and that's how we shower, too. We've shut off the toilet tank and shower head so we don't waste water. Sometimes, I feel depressed and mentally exhausted because the water is cut off. I take the younger kids to my sister's house and stay there for a few days. I often yell at the boys because of the shower. I keep asking them to finish quickly and not waste water.

When my son Maher got engaged, the bride's family asked to stay with us for a few days, but our water was cut off and my husband, Mahmoud, was working in Israel. I couldn't find anyone to give me water. The neighbors refused, too, and said they didn't have enough. Everything looked bleak and I didn't know what to do. I called my dad and cried. I told him the fiancée's family was coming to visit but the house was dirty and smelly, and I couldn't find water to clean or cook. He reassured me, and called our neighbor and begged him to give us some water to save me shame that day. The neighbor agreed and connected a water pipe to one of the tanks, and gave us some water. I started cleaning the house and the bathroom and washing the dirty utensils that were piled up in the kitchen.

On the day we get water from the municipality, I work all night cleaning the house and preparing meals, all at the same time. It wears me down physically and mentally. Sometimes there's a week's worth of laundry waiting, so I use the washing machine again and again – and save the laundry water to wash the yard and stairs.

Shepherding communities facing expulsion

The West Bank is dotted with dozens of Palestinian communities that subsist on farming and shepherding, with thousands of residents. Israel covets their land and wants to remove them, without the bad publicity of forced expulsion. Instead, it forces these communities to live in unbearable conditions in order to drive them to leave their homes - ostensibly of their own accord. As part of this policy, Israel does not permit them construction for either residential or public purposes, refuses to clear or pave access roads to the communities, and prevents them from hooking up to water and power grids. Left with no other choice, the residents build without permits, clear their own roads and connect to infrastructure independently. Israel then issues demolition orders. following through on some of them.

One way the Civil Administration pressures these communities is by destroying water networks, reservoirs and cisterns and confiscating water tanks. Israel provides various pretexts for these actions, such as lack of permits or location inside a firing zone – even in zones that have not been used for decades.

From the beginning of 2012 until the end of June 2022, B'Tselem documented 234 incidents in which Israel damaged water sources in the West Bank: 12 of network demolition, 33 of reservoir demolition, 112 incidents of cistern demolition, and 77 incidents of tank confiscation. This peaked in 2020 and 2021, with 56 and 50 incidents recorded respectively. Also, since 2017 B'Tselem has documented 32 incidents of searches for "illegal" water sources in the Jordan Valley, which were then either sealed shut or issued a demolition order.

Most of these communities have been living in their locales for generations, long before Israel occupied the West Bank. Yet even when they lie mere meters from a water grid intended for area settlements, Israel refuses to hook them up. Because of this policy, these communities have to rely on water delivered in tanks or tankers at a much higher cost than water supplied through the grid. Prices depend on the distance the supplier has to travel to the community, the state of the access road and the risk of the tanks being confiscated, given Israel's efforts to block supply to the communities.

The result is that daily per capita water consumption in these communities is close to what the WHO considers consumption in disaster areas: about 26 liters per person a day, or roughly a quarter of the recommended minimum.

Testimony of Maryam Khalil, 62, a married mother of eight from al-Malih, Jordan Valley:⁴⁵

My family makes its living from raising sheep and goats. Before the occupation, the al-Malih valley had water flowing in it and abundant springs. More than 30 years ago, after the occupation began, the Israelis dried up the springs in the valley and destroyed the water cisterns. Many people left the area to look for other water sources.

In order to provide water for the family and the flock, we have to buy water in tanks. Last year, we decided to buy a tractor to help us transport the water, because we bring it from far away. The military and the police chase the tractors everywhere and prevent them from getting through. They chased after my sons more than once and forced them to pour the water out of the tanks. The military says people steal water from the pipes that run past our homes, which serve military camps and settlements. People from the community asked the

Israelis several times to connect us to the water grid, but they refused.

One kilometer from our house, there's a water pipe that serves a military camp. They don't let us fill a single bottle from it. We are afraid to go near it because they might accuse us of sabotaging the pipeline, jail us and fine us.

In the summer it's much worse. We don't always have water and going go out to get it is like heading off to war. My sons walk along dirt paths to get water from springs, but the flow is very weak and you can hardly fill up there. It takes about three hours to fill a three-cubic-meter tank. A lot of people gather there, and sometimes they argue over who will fill up first.

In summer we use at least 10 cubic meters of water a day, for ourselves and for the flock. Every cubic meter we buy costs NIS 20 and that's only after we beg the driver, because the water comes from faraway areas and is very expensive. We end up paying thousands of shekels for water, more than half our income. The other problem is that there are many people in the same predicament and they all call to order water, so we have to wait for our turn. In the summer, we went two days without any water at all, not even half a glass to drink. Without help from our neighbors, who have a water tank, all our flock would have died of thirst.

Testimony of Yusef Bsharat, 45, a married father of 11 from Khallet Makhul, Jordan Valley:⁴⁶

I raise sheep and goats together with my father and brothers. We live in tents and in temporary shelters in harsh conditions. Our life is even more difficult because we don't have water. The pipes that supply water to the military camps run under our tents, but we're not allowed to take even one glass. Once, they found a hole in the pipe that formed by itself, near my brother Ashraf's tent. They arrested him twice and fined him more than NIS 3,000 for stealing the water, but that was a lie. We've often begged them for access to water from the pipes. We were willing to pay any amount, but the Israelis refused every time.

Over the years, I've spent a lot of money buying water from tankers. One cubic meter of water costs more than NIS 25, and tankers aren't always available. Every year, I spend more than NIS 15,000 on water for the flock and the house. Years ago, before the settlers came here, we used to take the flock to distant areas, where there were several wells they could drink from. Now, after the settlers have taken over those wells, no one dares go there.

For more than a year now, I've been hauling a three-cubic-meter water tank with a tractor from the a-Ras al-Ahmar area, a distance of more than 10 kilometers. Sometimes, I travel two or three times a day to fetch water, especially in the summer. I spend a lot of time on the road, because sometimes I have to pull over for two hours just so I won't be harassed by the police. The police officers make up excuses to give tickets. Even if the tractor is in perfect working order, they find something to issue a ticket for.

Our biggest problem is water. We watch every drop and save it for our flock, which cannot survive for a minute without water. Everything life requires water. Doing laundry, showering and cleaning takes water. No one can give up on basic hygiene. My wife sometimes piles up clothes and dishes for more than a week before she washes them. If we don't do laundry, and don't shower, and don't wash dishes, we'll get sick because of the bacteria and rodents.

Sometimes we use the water twice. We use the laundry and dishwashing water for the flock. Right now, I'm about to do the ablutions for prayers under the tree, in order to water it and not waste the water.

Testimony of Wadha Nawaj'ah, 56, a married mother of five from Susiya, South Hebron Hills:47

I am a homemaker and live with my husband, Murad, who is unemployed, and with my son Zein. We make our living raising 15 goats and sheep and selling dairy products we make. We rely on cisterns to store rainwater, but there has been less in recent years. We have one leaky cistern that needs fixing. In the past, our family had 13 cisterns that met all our needs. The occupation forces destroyed some of them, and we can't reach others because the settlers drive us away and throw stones at us, and the soldiers help them.

The al-Harini well is 100 meters from our house, but the military and settlers prevent us from accessing it. We've asked the Yatta Municipality to hook us to a water network, but they can't because it would have to go through Area C and the Civil Administration doesn't allow it. We buy water tanks from Yatta at NIS 350 for 10 cubic meters of water. That's enough for two weeks and barely meets the needs of the family and flock.

I always try to save as much water as I can. I ask my daughter Sarah, who comes every day to help me, to use as little as possible when she cleans up, washes dishes or cooks. We often put off washing blankets and carpets because it takes a lot of water. Sometimes, I ask my daughters-in-law to take them to Yatta to be washed. I also ask my sons to hold off visiting with their families sometimes, because I have no water and am waiting for a tank to be delivered. I like to grow ornamental plants, but

they wither without water. My husband complains that I use too much water to wash the house, but it's impossible not to wash it every day, especially in summer. We live in a dusty area and there's no choice. We live on a limited income, and the cost of water is a heavy burden and causes us difficulty and stress.

Testimony of 'Azzam Nawaj'ah, 61, a married father of seven from Susiya, South Hebron Hills:⁴⁸

I am a farmer and raise sheep. I used to have 150 heads of sheep, but the flock shrank to 30 over the last few years. That's because we're harrassed by settlers and the military, who stop us from accessing pastureland, and because sheep rearing has become more expensive due to an increase in fodder and water prices.

We suffer from a shortage of clean water for personal use and for watering our sheep and crops. Khirbet Susiya is not connected to the Mekorot water network, even though the company's pipes run just meters from our homes. We've asked the Israeli and Palestinian authorities many times to supply us with water, but they have rejected our requests.

In the past, we relied on 30 ancient cisterns to collect rainwater in the area of Khirbet Susiya, which were shared by all the families. But these cisterns are now located in areas that Israel considers "state land" or are close to the settlement of Susiya, so it's too dangerous to go there. When we could use them, the water was enough for all the families and for the flocks of sheep, which were much larger than the flocks we raise today. Now, the settlers attack us if we go to those cisterns. They fly drones to scare the sheep and scatter them.

^{46.} Testimony given to B'Tselem field researcher 'Aref Daraghmeh on 5 June 2022.

^{47.} Testimony given to B'Tselem field researcher Manal al-Ja'bari on 9 March 2022.

I have a small well near my house. It yields 40 cubic meters of water, which is barely enough for the family and flock for one month. We are forced to buy water in tanks from Yatta, Bani Na'im and Hebron. A cubic meter of water can cost as much as NIS 35. The price is highest in summer. We manage our water consumption very carefully and use it only for the most basic needs, like showering, cleaning the house and laundry. We do everything using the most primitive methods. We bathe with water that we heat and pour from a jug rather than using a

showerhead. We also wash the dishes and the floor with a jug. For laundry, we use machines with two drums because they use less water than automatic washing machines. After washing the dishes and cleaning the house, we reuse the water for the few plants we have. We don't grow vegetables, which require irrigation, and have to buy them at the market. Our drinking water isn't clean, even though we filter and sometimes even boil it. Sometimes we have to buy mineral drinking water, for the children or when a member of the family is sick.

Conclusions

There is no shortage of water in the area between the Jordan River and the Mediterranean Sea, unlike in neighboring countries. There is, however, a chronic water crisis that only affects Palestinians in the West Bank and the Gaza Strip. In the West Bank, the crisis is a deliberate outcome of the Israeli apartheid regime and a part of its control over all aspects of Palestinians' lives.

The Israeli apartheid regime works to promote and perpetuate Jewish supremacy in the entire area it controls from the river to the sea, through land and immigration policies, movement restrictions and management of water resources. Within this single water sector, the regime deliberately creates a huge disparity in water consumption. One group enjoys the luxuries afforded by a first-world water superpower, its lifestyle effectively impervious to weather conditions and climate change. The other—Palestinian subjects—suffers a chronic water crisis that stands to grow along with climate change.

This report examines how this policy is applied to Palestinians in the West Bank, who make up about 20% of all people living under the Israeli apartheid regime.

Immediately after occupying the West Bank in 1967, Israel took over all the shared water sources between the river and the sea, later enshrining this monopoly in the Interim Agreement signed with the Palestinians in 1995. Since the agreement was signed, reality on the ground has changed dramatically. Technological advancements have made Israel a water superpower, eliminating its dependence on the natural water resources divided with Palestinians under the agreement. As a result, Israeli citizens living on either side of the Green Line have access to a nearly unlimited supply of water.

Given this new reality, it would be only reasonable for Israel to allow the Palestinian population in the

West Bank, which has grown by 75% since 1995, to pump more water than originally agreed. Yet Israel continues to limit Palestinian use, clinging to an outdated agreement that was unfair to begin with and was set to expire 25 years ago. This policy intentionally manufactures an ongoing water crisis for the entire Palestinian population of the West Bank

The result is evident in the figures: Israelis on either side of the Green Line consume, on average, three times more water than Palestinians in the West Bank, and in some cases more. The total Israeli water consumption is 10 times that of West Bank Palestinians, although Israel's population is only three times larger.

In developing its water network over the past few decades, Israel has treated its own territory and the West Bank as a single geographic unit, hooking up all the settlements and creating a single water sector in the entire area between the Mediterranean Sea. and the Jordan River Yet Palestinians in the West Bank are not hooked up and must make do with an outdated, inefficient supply system that is broken up among population enclaves. Moreover, Israel does not allow even water drilled with its approval to be supplied between different Palestinian communities. These conditions prevent the Palestinians from developing an independent water sector that can meet their needs and from furthering their interests. Instead, they are forced into growing dependence on purchasing water from Israel at a full price.

While Israel cites the Water Agreement as justification for its policy, this agreement promised Palestinians water sources that do not exist. The Palestinians cannot pump the quantities allocated to them in the agreement from existing wells, whether because Israel prevents them from doing so for various reasons or because, as it turned out, contrary to promises, the sites where they are permitted to drill have no water.

Israel also uses the Joint Water Committee, designed to operate on an equal basis, to advance its interests alone and limit Palestinian water drillings. The JWC has become a tool for promoting settlement projects, while projects serving Palestinians are delayed and rejected. Even those that do get approved by the committee are also required to obtain the approval of the Civil Administration, a body with no Palestinian representation – which is a provision never made in the agreement. The enforcement mechanisms that the agreement does provide for, which were designed to monitor water supply to both Palestinians and settlers, were never implemented by the Israeli side.

This policy clearly demonstrates the profound dehumanization Palestinians have undergone in Israeli society. This process has enabled Israel to use the most basic of resources as a means of control and to achieve political goals, even at the cost of keeping millions of people thirsty. This dehumanization also

enables the systemic, cruel campaign to deprive the most vulnerable Palestinian communities in the hottest, most arid parts of the West Bank of their water sources, even in the blistering heat of summer, so Israel can rob them of what little possessions and land they have left and take over as much territory as possible, all in order to continue its settlement project and the dispossession of Palestinians.

The apartheid regime would not be able to pursue this policy or cement the astounding disparities between the Israeli and Palestinian water sectors without the near full immunity provided by the international community for severe violation of Palestinians' human rights. Moreover, by supporting the discriminatory logic of the Israeli-Palestinian Water Agreement, donor countries and other countries that help uphold it are not only allowing Israel to keep up this policy, but are indirectly subsidizing it.