

Draining International Water Law: Lessons from the Israel–Occupied Palestinian Territory Context

Ahmed Beshtawi

Faculty of Law, An-Najah National University, Nablus, Palestine
a.beshtawi@najah.edu

Gabriela Cuadrado-Quesada

Water Governance Department at IHE-Delft, Institute for Water Education,
Delft, The Netherlands
g.quesada@un-ihe.org

Abstract

This article discusses the complexities of International Water Law (IWL) in the Israel Occupied Palestinian Territory (OPT) context. In the Oslo Accords, Israelis and Palestinians agreed to employ the core principles of IWL in their respective utilisation of shared water resources, in particular, over shared water resources in the West Bank: the principle of equitable and reasonable utilisation of water courses, the principle of no significant harm and the duty of co-operation. This article critically discusses these three principles in the Israel–OPT context and addresses in particular the questions: To what extent these principles are applicable in the Israeli–Palestinian context, and to what extent have they been implemented? The article concludes that there is an evident lack of implementation of such principles which has resulted in adverse effects on Palestinian water rights and have been on the expense of the OPT.

Keywords

International Water Law – occupation – water – Israel – Occupied Palestinian Territory

1 Introduction

International Water Law (IWL)¹ regulates the relationship between states in relation to their respective utilisation of a shared watercourse. It evolved through state practice and the progressive codification undertaken by the United Nations (UN) and other private institutions. The main principles of that govern the non-navigational uses of water courses are codified in many international and regional conventions, agreements and declarations.² Among the core substantive principles of IWL are: (1) the principle of equitable and reasonable utilisation of a watercourse; (2) the obligation not to cause significant harm to a watercourse. Regarding a pre-eminent procedural principle there is the duty of co-operation. These principles are widely accepted as reflective of customary international law as evident in state practice and the decisions of international courts and tribunals, including the international court of justice.³

-
- 1 Law of occupation is the *lex specialis* governing relations between an occupier and an occupied territory; this article will focus solely on the main principles of IWL. The rules of the law of occupation pertaining to governing natural resources in the context of the Israeli occupation of the OPT have been extensively researched. See, e.g., A. Cassese, 'Powers and duties of an occupant in relation to land and natural resources', in E. Playfair (ed.), *International Law and the Administration of Occupied Territories: Two Decades of Israeli Occupation of the West Bank and Gaza Strip* (New York, NY: Oxford University Press, 1992) 419–442; I. Scobbie, 'Natural resources and belligerent occupation: Mutation through permanent sovereignty', in S. Bowen (ed.), *Human Rights, Self-Determination on Political Change in the Occupied Palestinian Territories* (The Hague: Kluwer Law International, 1997) 229–259; G. Abouali, 'Natural resources under occupation: The status of Palestinian water under international law', *Pace International Law Review* 10(2) (1998): 411–574, 480; H. Dichter, 'The legal status of Israel's water policies in the Occupied Territories', *Harvard International Law Journal* 35 (1994): 565–594; J. El-Hindi, 'The West Bank Aquifer and Conventions regarding Laws of Belligerent Occupation', *Michigan Journal of International Law* 11 (1990): 1400–1423; J.D. Dillman, 'Water rights in the Occupied Territories', *Journal of Palestine Studies* 19(1) (1989): 46–71.
 - 2 For instance: Helsinki Rules 1966, The Convention on Protection and Use of Transboundary Watercourses and International Lakes 1992, SADC Protocol on Shared Watercourses Systems 1995, Mekong Agreement 1995, Mahakali River Treaty 1996, UN Watercourses Convention 1997, Sava River Basin Agreement 2002, Berlin Rules 2004, Stockholm Declaration of the United Nations Conference on Human Environment; Convention on Biological Diversity; and Rio Declaration on Environment and Development.
 - 3 J.W. Dellapenna & J. Gupta, 'The evolution of water law', in T. Tvedt, O. McIntyre & T.K. Woldestadik (eds.), *A History of Water: Sovereignty and International Water Law*, Vol. 2 (London: I.B. Tauris, 2015) 27–46, pp. 27, 37; S.M.A. Salman, 'Entry into force of the UN Water Courses Convention: Why should it matter?', *International Journal of Water Resources Development* 31(1) (2014): 1–13.

Despite their potential applicability, these principles have not been implemented in a fruitful manner in the Israeli–Palestinian context. The article examines the root causes of the lack of implementation of these core principles of IWL in the Israeli–Palestinian context. It is important to note that the article discusses only the West Bank of the Israel Occupied Palestinian Territory (OPT) and not the Gaza Strip, since the Oslo Accords focus only on the Mountain Aquifer beneath the West Bank.

2 International Water Law Principles in the Israeli–Palestinian Context

On 2 January 2015, Palestine acceded to the UN Watercourses Convention and thus is bound by its obligations. It is important to mention that Israel is not a party to the Convention. As a treaty, the legal effects of the UN Watercourses Convention apply only to its parties. Thus, under a very restricted perspective it is not binding on Israel. The Convention as a whole is not considered reflective of customary law. However, the main principles of the Convention are equitable and utilisation, no significant harm and the duty of co-operation have passed into customary law. As customary international law, these principles are binding on all states regardless of whether they are or are not party to the UN Watercourses Convention.

To begin, there is the need to explain that, in the Oslo Agreements between Israel and the Palestinian Liberation Movement (PLO), both parties agreed to employ the core principles of IWL in their respective sharing and utilisation of the shared water resources. In Annex III of the Declaration of Principles 1993, both parties undertake to employ the principle of cooperation and equitable utilisation of shared water resources in the ‘field of water’ during the interim period and beyond.⁴ The parties also agreed to develop an environmental protection plan and joint co-ordinated procedures in this field. Moreover, in the Gaza–Jericho Agreement of 1994, the parties committed to preventing any harm to water resources⁵ and to establishing a committee to exchange all data relevant to water resources management and operation and prevention of harm to water resources.⁶ In the Interim Agreement of 1995, the parties reiterated their commitment to employing the core principles of IWL in

4 Para. 1, Annex III Protocol on Israeli–Palestinian Co-Operation in Economic and Development Programs, Declaration of Principles.

5 Para. 31.1, Article II Protocol Concerning Civil Affairs, Gaza–Jericho Agreement.

6 Para. 31.8, Article II Protocol Concerning Civil Affairs, Gaza–Jericho Agreement.

the management of shared water resources and environment.⁷ Article 40 of Annex II of the Interim Agreement enunciates several principles and undertakings in regards to water and environmental issues. The parties agreed upon important principles of IWL such as: the duty to prevent harm to water resources, sustainable use of water resources, the duty to co-operate and coordinate, and to prevent the deterioration of water quality in water resources.⁸

Therefore, the core principles of IWL are applicable to the Israeli–Palestinian context by virtue of being international customary law and the various agreements made between both sides. The water resources in the OPT include surface water (the Jordan River) and groundwater (the Mountain Aquifer and the Coastal Aquifer) resources. Article 2 of the UN Water Courses Convention defines the watercourse as ‘a system of surface waters and groundwater constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus’.⁹ This definition includes the surface water resources and the underground water resources that are connected to surface water. The Jordan River is an international watercourse that undoubtedly falls under the definition of Article 2 and is thus subject to the UN Water Courses Conventions rules.¹⁰ As for the Mountain and Coastal Aquifers, these aquifers are not connected to surface water and are considered to be confined, renewable groundwater resources since they receive a certain amount of rainwater which falls on the West Bank.¹¹ As such, the Mountain and the Coastal Aquifers do not fall under the definition of Article 2 of the UN Water Courses Convention. Nevertheless, the International Law Commission has issued a separate resolution¹² to bridge that lacuna in the UN Watercourses Convention,

7 Interim Agreement.

8 Article 40, Appendix 1, Annex III Protocol Concerning Civil Affairs, Interim Agreement.

9 Article 2, UN Water Courses Convention.

10 Abouali, *supra* note 1; F. Daibes-Murad, *A New Legal Framework for Managing the World's Shared Groundwaters: A Case Study from the Middle East* (London: IWA Publishing, Alliance House, 2005); A. Van Edig, *Aspects of Palestinian Water Rights* (Ramallah: Ramallah Centre for Human Rights Studies, 1999).

11 United Nations Environment Programme (UNEP), *Desk study on the environment in the Occupied Palestinian Territories* (New York, NY: United Nations, 2000), p. 32; Y. Kahane, ‘The Turonian-Cenomanian aquifer’ in E. Feitelson & M. Haddad (eds.), *Management of Shared Groundwater Resources: The Israeli–Palestinian Case with International Perspective* (Heidelberg: Springer Science & Business Media, 2001) 83–106; Y. Harpaz, M. Haddad & S. Arlosoroff, ‘Overview of the Mountain Aquifer’ in E. Feitelson & M. Haddad (eds.), *Management of Shared Groundwater Resources: The Israeli–Palestinian Case with an International Perspective* (Heidelberg: Springer Science & Business Media, 2001) 43–57, p. 48.

12 International Law Commission, ‘Resolution on confined trans-boundary groundwater: Report of the Commission to the General Assembly on the work of its 46th Session 1994’.

recommending that other types of groundwater should also be governed by the rules of the Convention.¹³ Furthermore, in the Oslo Agreements the parties did not exclude the applicability of the core principles of IWL to the shared groundwater. The general language of the Oslo Agreements, in relation to water resources, suggests that the parties intended to apply the agreed upon principles of IWL to both surface and groundwater.¹⁴ More than two decades have passed since the Oslo Agreements; however, no other treaty has been reached since then. Therefore, the Palestinian water resources, surface and groundwater, governed by the rules of the UN Watercourses Convention. Having established the applicability of these three principles of IWL to the Israel–OPT context, the following sections will discuss each principle and its implementation (or lack of) in the Israeli–Palestinian context.

2.1 *Principle of Equitable and Reasonable Utilisation of Watercourses*

The principle of equitable and reasonable utilisation is considered a cardinal rule of IWL, and enjoys overwhelming support as a customary rule of international law.¹⁵ It entitles each state sharing a given watercourse to a legal right to utilise that watercourse in a reasonable and equitable manner. The principle is grounded on the concept of limited territorial sovereignty, which allows each riparian state to make a reasonable use of the shared waters within its jurisdiction while respecting that other riparians should receive their shares. Thus, the equitable and reasonable principle provides for a balance of interests which reconcile the uses and needs of each riparian state.

in *Yearbook of the International Law Commission*, Vol. 2 (New York, NY: United Nations, 1996), p. 135.

- 13 G.E. Eckstein, 'Protecting a hidden treasure: The UN International Law Commission and the International Law of Trans-Boundary Ground Water Resources', *Sustainable Development Law & Policy* 5(1) (2005): 5–15, p. 7; G. Loibl, 'Groundwater resources: A need for international legal regulation?', *Austrian Review of International and European Law Online* 5(1) (2000): 81–120, p. 95.
- 14 J.W. Dellapenna, 'The Evolving International Law of Transnational Aquifers', in E. Feitelson & M. Haddad (eds.), *Management of Shared Groundwater Resources: The Israeli-Palestinian Case with an International Perspective* (The Hague: International Development Research Centre & Kluwer Academic, 2000) 209–259, p. 254.
- 15 O. McIntyre, *Environmental Protection of International Water Courses under International Law* (Farnham: Ashgate, 2007) 53–86; S.C. McCaffrey, *The Law of International Watercourses: Non-Navigational Uses* (Oxford: Oxford University Press, 2011). Daibes-Murad, *supra* note 12; Salman, *supra* note 4; O. McIntyre, 'The Principle of Equitable and Reasonable Utilisation', in A. Tanzi, O. McIntyre, A. Kolliopoulos, A. Rieu-Clarke & R. Kinna (eds.), *The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes: Its Contribution to International Water Cooperation* (Leiden: Brill-Nijhoff, 2015). 146–159.

The principle was coined in the early 20th century in several decisions by the Supreme and Federal Courts of the United States in interstate water apportionment cases.¹⁶ It has been incorporated in many international and regional treaties regarding shared water utilisation and endorsed in several decisions of international courts and tribunals and state practice.¹⁷ In the *territorial jurisdiction of the international commission of the river order* case, the Permanent Court of International Justice favoured the notion of community of interests in navigation among all riparian states and referred to the principle as ‘the perfect equality of all riparian states in the user [sic] of the whole course of the river and the exclusion of any preferential privileges of any riparian state in relation to others’.¹⁸ Moreover, in the case *Gabcikovo-Nagymaros* the International Court of Justice (ICJ) confirmed the status of the principle as a fundamental norm in the field of non-navigational uses of water courses.¹⁹ The Court recommended that Slovakia and Hungary settle their disputed issues in accordance to the principle of equitable and reasonable utilisation.²⁰ Moreover, the principle is incorporated in many international and regional water conventions and agreements; 1966 Helsinki Rules (Articles IV, V, VII, X, XXIX, The Convention on Protection and Use of Transboundary Watercourses and International Lakes 1992 (Article 2), SADC protocol on shared watercourses systems 1995 (Article 2), Mekong Agreement 1995 (Articles 4, 6, 26), Mahakali River Treaty 1996 (Articles 3, 7, 8), UN Watercourses Convention 1997 (Articles 5–7, 15–17, 19), Sava River Basin Agreement 2002 (Articles 7–9), and Berlin Rules 2004 (Articles 10, 12–16).

2.2.1 Palestinian Position towards the Principle of Equitable and Reasonable Utilisation of Water Courses

The Palestinian position considers the rules of international law as the basis for claiming their water rights. In particular, the official Palestinian position considers the principle of permanent sovereignty over natural resources as the backbone of its claims in regaining Palestinians’ water rights as a first step in

16 McCaffrey, *supra* note 15.

17 Catherine Redgwell, *International Law and the Environment*, 3rd edn. (Oxford: Oxford University Press, 2009), p. 542.

18 The Permanent Court of International Justice, ‘Case relating to the Territorial Jurisdiction of the International Commission of the River Oder’, *Publications of the Permanent Court of International Justice: Collection of Judgements* 16 (1929), p. 27, available online at http://www.icj-cij.org/pcij/serie_A/A_23/74_Commission_internationale_de_l_Oder_Arret.pdf (accessed 15 July 2016).

19 *Gabcikovo-Nagymaros Case* in ‘International Court of Justice ICJ’, *Gabcikovo-Nagymaros Project* (Hungary/Slovakia), Judgment 1, *CJ Reports 1997; e.g.*, paras 78, 85, 147, 150.

20 *Ibid.*

achieving a just solution.²¹ Palestinians claim limited territorial sovereignty over the Coastal Aquifer underlying the Gaza Strip, as well as parts of the Mountain Aquifer underlying the West Bank. It considers the eastern, western and northern basins of the Mountain Aquifer as shared trans-boundary aquifers with Israel, but refuses to consider the eastern basin of the Mountain Aquifer as a transboundary aquifer. Also, they claim limited territorial sovereignty to portions of the Jordan River basin adjacent to the West Bank.²²

According to the chief Palestinian negotiators for the permanent status negotiations, 'water rights are what the negotiations are all about, but Palestinians do envision co-operation with the Israelis in the future on the use of resources once they recognise these rights.'²³ They also insist that Palestinian water rights have always been recognised during the past under Ottoman, British and Jordanian rule of OPT, and that these rights were only denied under the Israeli occupation.²⁴ The Palestinian position further adopts the basic principles of international water law in regulating its water relations with Israel. It provides that the principle of equitable and reasonable utilisation should be the reference in utilising, protecting and developing shared water resources between Israel and OPT.²⁵ The position gives special regard to the factor of vital human needs in utilising the shared resources, and acknowledging that water for economic and social development needs shall be determined based on methodologies agreed on by both sides.²⁶ The Palestinian position has been criticised by some authors and refused by Israel²⁷ because it favours one factor – that of natural attributes of the watercourse – over the others in determining the OPT's equitable and reasonable portion of the shared waters.

21 'Legal Framework of Permanent Status Negotiations: The Palestinian Water Rights. Legal Report 2003'. Found in Daibes-Murad, *supra* note 10 at 52; see also Palestinian Negotiation Affairs Department, available online at: <https://www.nad.ps/en/our-position/water>.

22 *Ibid.*

23 Interview with Sa'eb Erekat, 1994. Quoted in A.R. Rouyer, 'The Water Issue in the Palestinian-Israeli Peace Process', *Survival: Global Politics and Strategy* 39(2) (1997): 57–81, p. 69.

24 *Ibid.*

25 H. Zarour & J. Isaac, 'Nature's apportionment and the open market: A Promising Solution to the Arab-Israeli Water Conflict', *Water International* 18(1) (1993): 40–53; J. Kuttab & J. Ishaq, 'Approaches to the Legal Aspects of the Conflict on Water Rights in OPT/Israel', *Studies in Environmental Science* 58 (1994): 239–249.

26 Daibes-Murad, *supra* note 10 at 53.

27 Israel Water Authority, *The Issue of Water between Israel and the Palestinians* (Jerusalem: Israel Water Authority, 2009).

2.2.2 Israeli Position towards the Principle of Equitable and Reasonable Utilisation of Water Courses

Israel bases its position on a needs-based approach instead of a rights-based approach to solve the water issue. To support its position, Israel bases its claim on the doctrine of 'prior use' or 'historical rights' and constantly insists that all existing uses are non-negotiable.²⁸ The position argues that the water from the Mountain Aquifer flows naturally to Israel, and immigrant Jewish farmers have utilised most of the waters of the Mountain Aquifer prior to 1967 and that 'the Palestinians have never used this water'.²⁹ Therefore, this has established a prior right to use that water to the Israelis, which is supported by international law.³⁰ The position further proposes 'practical solutions' to solve the water issue. It suggests alternative sources for the Palestinians to satisfy their water needs (*i.e.*, waste-water re-use, reduction of water losses, desalination, purchasing water from Israel and neighbouring countries). Israel considers the Palestinian proposition of sharing the trans-boundary waters, to be 'utterly unacceptable',³¹ as it threatens Israel's water security. Israel's official position prefers to preserve the status quo of the shares and control of water resources and finds pragmatic solutions for the water needs of the Palestinians without discussing water rights '[t]he practical reality existing between nations shows that it is not the rules of international law that determine agreed solutions, but rather practical considerations that are discussed and concluded in the framework of negotiations'.³²

Legally speaking, the UN Watercourses Convention clearly stipulates that no factor enjoys priority over other factors in determining equitable and reasonable utilisation of water resources.³³ The weight to be given to each factor is determined based on its importance in comparison with other factors, and all factors should be considered together to reach a conclusion.³⁴ When conflict arises between uses of water courses, special regard should be given to

28 *Ibid.*; H. Shuval, 'A Water for Peace Plan: Reaching an Accommodation on the Israeli-Palestinian Shared Use of the Mountain Aquifer', *The OPT-Israel Journal* 11(3) (1996): PAGE NUMBERS?; G. Baskin (ed.), 'The West Bank and Israel's Water Crisis', in *Water: Conflict or Co-operation*, Vol. 2 (Israel/OPT Center for Research and Information, 1992) PAGE NUMBERS?; Haim Gvirtzman, 'The Israeli-Palestinian Water Conflict: An Israeli Perspective', *Mideast Security and Policy Studies* 94 (2012): 1-36.

29 Israel Water Authority, *supra* note 27.

30 *Ibid.*; Shuval, *supra* note 28; Baskin, *supra* note 28; Gvirtzman, *supra* note 28.

31 Israel Water Authority, *supra* note 27.

32 *Ibid.*

33 Article 10(1), UN Water Courses Convention.

34 Article 6(3), UN Water Courses Convention.

vital human need.³⁵ Furthermore, although the factor of 'prior use' is listed in the Helsinki Rules as one factor in determining the equitable and reasonable utilisation of water resources, the UN Watercourses Convention does not mention 'prior use' in its list of factors, but does mention the factor of 'existing and potential uses'.³⁶ Between existing and potential uses, the UN Watercourses Convention gives equal consideration to both existing and potential uses of the watercourse. Neither use is given priority over the other.³⁷ However, in practice, recent research suggests that 'potential uses' is given more consideration than 'existing uses', and studies show that recent agreements over water sharing incline to favour a needs-based approach over a prior-use-based approach.³⁸ This means that Palestinians' 'potential uses' of the shared water courses would be given equal standing to the 'existing' Israeli share, or maybe even more. Even if, one accepted the Israeli argument that one factor, 'prior use', prevails over other factors, this argument is not equitable. When Israel raises the argument of 'prior use', it points to a specific period of time. That period is between 1920 and 1940 when Jewish settlers started utilising springs and then, after the creation of Israel, presumably from 1950 to 1967, Israel fully utilised the Northern and Western basins of the Mountain aquifer unilaterally.³⁹ Israel was established in 1948 and its major plans of diverting and utilising water resources of the area started in the mid-1960s, namely the diversion of the Jordan River and creating the National Carrier with its supporting water pumping units. These plans were executed unilaterally by Israel, while Palestinians and neighbouring Arab countries contested these plans.⁴⁰

Moreover, Israel's claim of prior use seems inconsistent with the rule of 'prior use' itself as Israel does not address the questions about 'prior uses' before the establishment of Israel and the arrival of the Jewish settlers to the

35 Article 10(2), UN Water Courses Convention.

36 Article 6, UN Water Courses Convention.

37 McIntyre, *supra* note 15; Edig, *supra* note 10.

38 A.T. Wolf, 'From Rights to Needs: Water Allocations in International Treaties', in E. Feitelson & M. Haddad (ed.), *Management of Shared Groundwater Resources: The Israeli–Palestinian Case with an International Perspective, Natural Resources Management and Policy* (Heidelberg: Springer Science+Business Media, 2001) 133–166; J. Lautze & M. Giordano, 'Equity in Trans-boundary Water Law: Valuable Paradigm or Merely Semantics', *Colorado Journal of International Environmental Law and Policy* 17(1) (2006): 89–122; I. Fischhendler, A.T. Wolf & G. Eckstein, 'The Role of Creative Language in Addressing Political Realities: Middle-Eastern Water Agreements' in S.B. Megdal, R.G. Varady & S. Eden (eds.), *Shared Borders, Shared Waters: Israeli–Palestinian and Colorado River Basin Water Challenges* (Boca Raton, FL: CRC Press/Balkema, 2012), 53–74.

39 Gvirtzman, *supra* note 28.

40 Abouali, *supra* note 1.

OPT. Israel's position seems to ignore that many Palestinians lived for generations on this same land and utilised the same resources until being expelled from it in 1948 by Jewish militias.⁴¹ Currently, more than 24% of the population of the OPT are refugees from what is now Israel living in devastating conditions with very limited access to water due to the Israeli restrictions.⁴² Furthermore, Israel's 'prior use' was established *de facto* by unilaterally diverting the Jordan River and extracting major quantities of water from the Mountain Aquifer. Israel did not notify other riparians (Jordan, Lebanon, Syria and OPT) about these water utilizations as required by procedural principles of IWL.⁴³ Israel's claim of 'prior use' seems to not take into consideration the OPT's circumstances of being restricted to utilise water resources due to foreign occupations. The Israeli *de facto* water utilisation, which was established and is maintained by military power, does not acquire legitimacy unless other riparians agree to it, which has not been the case even up until present. Moreover, when Israel occupied The West Bank and Gaza in 1967 it introduced restrictions and policies that resulted in changing the water sector in the OPT. These policies including several military orders that are still in force today enabled Israel to control all the water resources in the OPT, extracting significant amounts of water from the OPT, while freezing Palestinian water extraction and utilisation of water from the Mountain Aquifer, and totally denying Palestinian access to the Jordan River. At the same time, Israel has been diverting water from the OPT for its own benefit and to illegal settlements⁴⁴ in the OPT, particularly the agriculture settlements in the Jordan Valley which consume massive amounts of water.⁴⁵ For instance, the Israeli Military Proclamation No. 2 of 1967 considered all water resources in the OPT property of the state of Israel and under the exclusive custody of the military commander of the Israeli

41 I. Pappé, *The Ethnic Cleansing of Palestine* (London: Oneworld Publications, 2007).

42 United Nations Relief and Works Agency for OPT refugees in the near east UNRWA, 2015 *OPT Emergency Appeal Oneworld Publications: Annual Report* (New York, NY: United Nations, 2015), available online at http://www.unrwa.org/sites/default/files/content/resources/2015_opt_emergency_appeal_annual_report.pdf (accessed 2 August 2016); Amnesty International, *Troubled Waters: Palestinian Denied Fair Access to Water* (London: Amnesty International, 2009).

43 S.S. Elmusa, 'Towards an Equitable Distribution of the Common Palestinian-Israeli Waters: An International Water Law Framework', *Studies in Environmental Science* 58 (1994): 451-467.

44 Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, *ICJ Reports 2004*, p. 136, paras 95-101, 120.

45 Human Rights Watch, *Separate and Unequal: Israel's Discriminatory Treatment of Palestinians in the Occupied Palestinian Territories*, 2010.

forces in the region.⁴⁶ Further, Israeli Military Order No. 92 of 1967 empowered the Israeli officer in charge the responsibilities of managing water resources in the OPT including; licences of drilling water wells as well as the abstracting, distribution and use of water resources in the OPT.⁴⁷ Further, Israeli Military Order No. 158 amended pre-existing Jordanian Water Monitoring Law No. 31 (1953), by investing the Officer in Charge with comprehensive regulatory and procedural powers relating to 'water establishments'. Contrary to pre-existing Jordanian water monitoring law, which gave the authority the right to refuse to grant a license according to specified stipulations in that law, this order gave the Officer in Charge absolute power to refuse to grant permits without giving reasons.

Current water allocation between Israel and the OPT is neither equitable nor reasonable. Data shows enormous disparity in terms of water allocation. Israel *de facto* extracts 80% of the estimated potential of the Mountain Aquifer, while Palestinians have access to one-fifth of the Aquifer and only extract 20% of the estimated potential of the Aquifer.⁴⁸ In the Jordan River, Israel has exclusive control and access and denies Palestinians any access to the waters of the River since 1967 until the present. Further, the available water supply in the OPT is 196 million cubic meter (MCM) while in Israel is 2,271 MCM and the Israeli consumption of water for domestic use is 300 litres per capita per day (LPCD), Palestinian consumption for domestic use in the OPT is only 70 LPCD,⁴⁹ which is far below the recommended global standard of 100 litres per person per day set by the World Health Organization.

2.3 *Obligation not to Cause Significant Harm to a Watercourse*

The rule of no harm is a well-established customary rule of international law and considered to be an expression of the rule of good neighbourliness. It is also central to international environmental law.⁵⁰ In the context of IWL, the

46 Israeli Military Proclamation No. 2, available online at <https://andyreiter.com/wp-content/uploads/military-justice/il/Laws%20and%20Decrees/Israel%20-%201967%20-%20Proclamation%20No.%202%20Regarding%20Regulation%20of%20Administration%20and%20Law.pdf> (accessed 13 Oct. 2021).

47 Edig, *supra* note 10; Abouali, *supra* note 1.

48 The World Bank, *West Bank and Gaza: Assessment of restrictions on Palestinian Water Sector Development* (Washington, DC: The International Bank for Reconstruction and Development/The World Bank, 2009).

49 J. Luckmann, K. Siddig & J. Agbahey, 'Redistributing water rights between the West Bank and Israel: More than a zero-sum game?', *Economic Research Forum*, Working Paper No. 1410, Economic Research Forum (October 2020); Amnesty International, *supra* note 45.

50 A. Hilderling, *International Law, Sustainable Development and Water Management* (Utrecht: Eburon Publishers, 2004), p. 160.

obligation not to cause significant harm entails the prohibition of causing significant harm to the interests of other states who share the same watercourse.⁵¹ Such harm could take different forms; for example, it might be the result of diminution in the quantity or quality of water due to excessive pumping of groundwater, or new upstream work, or pollution.⁵² Furthermore, harm could also be a result of indirect use of the watercourse by a state, for instance, deforestation, which may cause harmful flooding in another state.⁵³ The no significant harm principle is not meant to forbid any harm; however, it aims at tackling serious harm and contains a due diligence obligation.⁵⁴ The due diligence duty means that the harm must have been foreseeable for the state that caused it on the basis of best available science and knowledge.⁵⁵

In measuring the degree of harm and when it becomes significant, the ILC has clarified that for 'appreciable harm'⁵⁶ to occur the harm must be capable of being established by objective evidence. There must be a real impairment of use, *i.e.*, a detrimental impact of some consequence upon, for example, public health, industry, property, agriculture, or the environment in the affected state.⁵⁷ The rule of no significant harm was incorporated in international legal instruments and agreements as well as judicial decisions such as the *Lake Lanoux* arbitration. The arbitral tribunal ruled that 'states are under obligation not to exercise their rights in a manner which ignores the rights of other states'.⁵⁸ Similarly, the ICJ in the *Pulp Mills* case considered the rule as the

51 M.M. Rahaman, 'Principles of international water law: creating effective trans-boundary water resources management', *International Journal of Sustainable Society* 1(3) (2009): 207–223.

52 McCaffery notes that harm could also result from 'obstruction of fish migration, works on one bank of a contiguous watercourse that caused erosion of the opposite bank, increased siltation due to upstream deforestation or unsound grazing practices, interference with the flow regime, channelling of a river resulting in erosion of the riverbed downstream, conduct having negative impacts on the riverine ecosystem, the bursting of a dam, and other actions in one riparian state that have adverse effects in another, where the effects are transmitted by or sustained in relation to the watercourse'. McCaffery, *supra* note 15 at 111, 348.

53 McCaffery, *ibid.*

54 J. Gupta & S. Schmeier, 'Future proofing the principle of no significant harm', (2020), *International Environmental Agreements: Politics, Law and Economic* 20(4) (2020): 731–747. DOI: 10.1007/s10784-020-09515-2.

55 *Ibid.*

56 This term was substituted with 'significant harm' in the 1994 Draft Articles of the UN Convention of Water Courses.

57 *Yearbook of the International Law Commission 1988* (1990) Part Two, *Report of the Commission to the General Assembly on the Work of its Fortieth Session*, 36.

58 Lake Lanoux Arbitration, 'Lake Lanoux Arbitration (*France v. Spain*)', Arbitral Tribunal, 12 R.I.A.A. 281; 24 I.L.R. 101 (1957) 116.

wellspring of all other customary rules of international environmental law.⁵⁹ Furthermore, the no significant harm principle is incorporated in many international and regional water conventions, agreements and declarations; 1966 Helsinki Rules (Articles v, x, xi, xxix, The Convention on Protection and Use of Transboundary Watercourses and International Lakes 1992 (Articles 2, 3), SADC Protocol on Shared Watercourses Systems 1995 (Article 2), Mekong Agreement 1995 (Articles 3, 7, 8), Mahakali River Treaty 1996 (Articles 7–9), UN Watercourses Convention 1997 (Articles 7, 10, 12–17, 19–22), Sava River Basin Agreement 2002 (Articles 2, 9), and Berlin Rules 2004 (Articles 10, 12–16). Stockholm Declaration of the UN Conference on Human Environment 1972 (Principles 2, 22), Rio Declaration on Environment and Development 1992 (Principles 2, 4, 13, 24) and Convention on Biological Diversity 1992 (Article 3).

The UN Water courses Convention embraces the obligation not to cause significant harm. Article 7 calls upon states to take all appropriate measures to prevent causing significant harm to other watercourse states⁶⁰ when they utilise an international watercourse.⁶¹ However, if despite taking all appropriate measures, significant harm is caused in the absence of an agreement that regulates that use, the state which caused the harm shall take all appropriate measures to mitigate and eliminate it in consultations with the affected state. The consultations should take into account the equitable and reasonable utilisation as indicated in Articles 5 and 6, and take steps to mitigate and eliminate the harm while considering the possibility of compensation to the affected state.⁶² The relationship between the principle of equitable utilisation and the no significant harm was problematic.⁶³ During the drafting of the rules of the UN Watercourses Convention, state parties adopted different views on the principles with some supported the primacy of the equitable and reasonable utilisation and others adopted the no harm principle.⁶⁴ However, the convention clearly subordinated the no harm principle to the equitable and reasonable utilisation.⁶⁵

59 'Pulp Mills on the River Uruguay (*Argentina v. Uruguay*), Judgment, *ICJ Reports 2010* (2010), p. 14.

60 Article 7, UN Water Courses Convention.

61 *Ibid.*

62 *Ibid.*

63 A.E. Utton, 'Which Rule Should Prevail in International Water Disputes: That of Reasonableness or that of No Harm', *Natural Resources Journal* 36(1) (1996): 635–641.

64 S.C. McCaffrey & M. Sinjela, 'The 1997 United Nations Convention on International Water Courses', *American Society of International Law* 92(1) (1998): 97–107.

65 S.M. Salman, 'The Helsinki Rules, the UN Water Courses Convention and the Berlin Rules: Perspectives on International Water Law', *Water Resources Development* 23(4) (2007): 625–640.

In regard to the status of shared water resources between Israelis and Palestinians, the degree of harm in the Mountain Aquifer, Coastal Aquifer and Jordan River is significant. This harm is mainly attributed to over-exploitation of water resources and very poor sewage treatment.⁶⁶ The situation of wastewater and sewage treatment in the OPT is chronically deficient and constitutes a major threat to the environment and public health. Although the pollution of water resources affects both the Palestinians and the Israelis, for the Palestinians the situation is more alarming since the Mountain and the Coastal Aquifers, in the West Bank and Gaza, are the sole available water resources, whereas Israel has more available water resources.⁶⁷ For instance, Israel has some 1,112 wells and springs, 645 desalination plants, 514 MCM of reclaimed water. On the other hand, the OPT has only 122 wells and springs, zero desalination plants, zero reclaimed water and it imports 74 MCM of water per year from Israel to meet the needs of Palestinian population.⁶⁸ However, both sides exchange accusations regarding the responsibility for the harm that is affecting the water resources.

In the West Bank, the Mountain Aquifer and the Jordan River suffer from over-exploitation and very low treatment of sewage and wastewater, which in turn flow in open places and infiltrate the Aquifer and the River.⁶⁹ Palestinians operate only one wastewater treatment facility in the *Al-Bireh* area, while no re-use schemes exist. Moreover, data shows that less than a third of the Palestinian communities in the West Bank are connected to the sewage system, while the remainder depend on septic tanks and cesspits.⁷⁰ It is estimated that some 25 MCM of untreated sewage is discharged every year into the environment in some 350 locations in the West Bank, which eventually infiltrates the Mountain Aquifer.⁷¹ Importantly, Israeli settlements in the West Bank are considered the major contributors to untreated wastewater; Israeli settlers are the largest per capita producers of wastewater in the West Bank, much of this wastewater is discharged directly into the environment adjacent to the settlements.⁷² According to a report by the Israeli NGO B'Tselem, it is

66 D.B. Brooks, J. Trottier & L. Doliner, 'Changing the Nature of Trans-boundary Water Agreements: the Israeli–Palestinian Case', *Water International* 13(6) (2013): 671–686.

67 *Ibid.*

68 Luckmann, *supra* note 49.

69 The World Bank, *supra* note 48.

70 Emergency Water Sanitation and Hygiene in the Occupied Palestinian Territory EWASH, *Down the drain: Israeli restriction on the WASH sector in the occupied Palestinian territory and their impact on vulnerable communities* (Gaza: EWASH, 2012).

71 World Bank, *supra* note 51.

72 EWASH, *supra* note 70; L. Asaf, N. Negaoker, A. Tal, J. Laronne & N. Al Khateeb, 'Trans-boundary Stream Restoration in Israel and the Palestinian Authority', in C. Lipchin,

estimated that 35 MCM of wastewater is produced by Israeli settlers per year and this flows into the West Bank.⁷³ Additionally, B'Tselem noted that many of the settlements do not have wastewater treatment facilities and none of the settlers 'outposts' have wastewater treatment facilities. Where such facilities exist, they are often not functioning or provide insufficient treatment for the wastewater.⁷⁴ Another important contributor to the harm inflicted on the Mountain Aquifer is the unorganised dumping of waste in the West Bank. Israel is using the West Bank as a ground to dump its waste which has dangerous substances, including hazardous industrial waste, without taking any adequate safety measures.⁷⁵ For years, Israel established dumpsites in the West Bank and allowed dumping including from Israeli contractors, mainly industrial waste, in those sites specifically in Area C of the West Bank.⁷⁶ Some of these sites still operate and are used by Israelis and Palestinians, while others have been closed. For instance, in the *Azzun* area, Israel established a dumpsite in the early 1990s. The site was closed in 2002; however, the site still exudes noxious fumes and pollutes the soil and water resources nearby. Likewise, in 2002 Israel established a dumpsite in the *Dier Sharaf* area that received industrial waste from Israeli companies. The site was closed in 2005 without any protection or safety measures to prevent it polluting or leaking into the soil and water resources.⁷⁷

Israel blames the PA for the harm inflicted on the shared water resources, citing the failure of the PA to establish adequate sewage and wastewater treatment systems in OPT as the main reason for contamination of the Mountain Aquifer.⁷⁸ The PA undoubtedly bears responsibility for establishing sewage and wastewater treatment systems and for ensuring the protection of the environment and water resources. Some of the constraints to improving water sector in the OPT are stemming from the institutional weakness of the PA. However, it is important to note that the PA has only limited jurisdiction in the OPT and its responsibilities are restricted to Area A and B of the West Bank which

E. Pallant, D. Saranga & A. Amster (eds.), *Integrated Water Resources Management and Security in the Middle East* (Heidelberg: Springer, 2007) 285–295.

73 E. Hareuveni, *Foul play: Neglect of wastewater treatment in the West Bank* (B'Tselem, 2009), p. 7, available online at http://www.btselem.org/sites/default/files/200906_foul_play_eng.pdf (accessed 22 August 2016).

74 *Ibid.*

75 A. Hass, 'Israel's dumping ground', *Haaretz* (29 November 2007), available online at <http://www.haaretz.com/israel-news/israel-s-dumping-ground-1.234266> (accessed 22 August 2018).

76 Amnesty International, *supra* note 45.

77 Hass, *supra* note 75.

78 Israel Water Authority, *supra* note 27.

constitute roughly 40% of the West Bank.⁷⁹ Therefore, this cannot conceal Israel's greater responsibility as an occupying power since 1967 for the current situation of water resources. Further, Israel has failed to build basic sewage and wastewater treatment systems in the OPT, allowing the discharge of sewage and wastewater into open areas and the aquifers. In addition, Israel invested massive amounts of money to expand its illegal settlements in the OPT, which added more contamination to water resources by its untreated sewage and waste water as explained above. Furthermore, Israel's usage of the OPT as a dumpsite for its waste has also contributed to the harm inflicted on the water resources. Most importantly, the restrictions which Israel imposes on projects in the OPT have prevented the establishment of any new sewage and wastewater treatments in OPT. The PA, since 1995, has submitted 30 proposals for constructing waste water treatment facilities in the OPT. However, only four proposals were approved by Israel. Implementation of those four approved projects has been constantly delayed, and currently only one wastewater treatment plant functions in the OPT.⁸⁰ while it refuses to grant permits for the PA to build new sewage treatment plants and blames Palestinians for inadequate sewage treatment, Israel treats Palestinian wastewater which flows towards it and uses it for agricultural irrigation and rehabilitation of streams, and deducts the cost of the treatment from the tax revenue which Israel owes to the PA.⁸¹ Israel's refusal to grant permits for establishing new sewage treatment in the OPT is mainly because Palestinians refuse to accept the connection of these projects to Israel's illegal settlements in the OPT.

79 In accordance with the Interim Agreement the West Bank was divided into three jurisdictional areas: A, B and C. Area A constitutes 18% of the total area of the West Bank. It includes parts of the major Palestinian cities in the West Bank, and the PA assumes powers and responsibilities for internal security and public order as well as responsibilities for civil affairs such as health, education, municipal services and policing in it. Area B constitutes 22% of the West Bank. In this area the PA has full civil control and a joint security control with the Israelis, and many Palestinian town and villages are located in Area B. Area C constitutes 60% of the West Bank. Those parts are under full Israeli civil and security control, and most of the Palestinian agriculture lands and water resources are concentrated in it.

80 United Nations Office for the Co-ordination of Humanitarian Affairs Occupied Palestinian Territory OCHA OPT, *Fragmented lives: Humanitarian overview 2013* (New York, NY: United Nations, 2014).

81 Hareuveni, *supra* note 73, p. 7.

2.3 *Duty to Co-Operate*

The duty to co-operate is widely accepted as a customary rule of international law in general⁸² and is considered to be the ‘most basic procedural, principle underlying international water law’.⁸³ The duty entails that riparian states are responsible for prior notification of planned activities, co-operating and exchanging information and data with other riparian states in regards to the state of water courses and future planned uses of water courses.⁸⁴ This duty is of a general character and has been described as ‘portmanteau’ or an ‘umbrella term’, which embraces a range of procedural obligations that reflect customary international law,⁸⁵ such as: the obligation of states to negotiate in good faith; the regular exchange of data information as well as the duties to notify, warn and consult between riparian states.⁸⁶ The legal status of the duty to co-operate, including whether it constitutes a true legal obligation or a rule of declaratory character, has been subject to debates in the ILC.⁸⁷ However, the duty has been incorporated in a number of international legal instruments and agreements, state declarations and resolutions⁸⁸ and has been invoked in several international judicial decisions. In the *Lake Lanoux* arbitration, for example, the Arbitral Tribunal emphasised the importance of the duty to co-operate between riparian states in the use of international water courses and its role in concluding effective international agreements.⁸⁹ Likewise, the ICJ in the case concerning the *Gabcikovo-Nagymaros project* stressed that co-operation is essential to alleviate environmental hazards and improve mutual benefits, urging the parties to the case to co-operate in the joint management of the project.⁹⁰ For example, the duty to co-operate is

82 McIntyre, *supra* note 15.

83 Berlin Rules, commentary on Article 11.

84 P.W. Birnie & A.E. Boyle, *International Law and the Environment*, 2nd edn. (Oxford: Oxford University Press, 2002), p. 322.

85 McCaffrey, *supra* note 15.

86 O. McIntyre, ‘The practice of shared responsibility in relation to trans-boundary water resources’, *Research Project on Shared Responsibility in International Law*, SHARES Research Paper 89 (SHARES, 2016), p. 13, available online at <http://www.sharesproject.nl/publication/the-practice-of-shared-responsibility-in-relation-to-trans-boundary-water-resources/> (accessed 10 August 2020).

87 McCaffrey, *supra* note 15.

88 For instance: Stockholm Declaration of the United Nations Conference on Human Environment (Principles 13, 22, 24); Convention on Biological Diversity (Articles 5, 17); Rio Declaration on Environment and Development (Principles 7, 9, 12, 13, 17, 27); United Nations General Assembly, ‘Co-operation in the field of the environment concerning natural resources shared by two or more states’ (3129 (XXVIII) United Nations, 1973).

89 *Lake Lanoux Arbitration*, *supra* note 58.

90 *Gabcikovo-Nagymaros*, *supra* note 19.

incorporated in many international and regional water conventions: Helsinki Rules 1966 (Articles XXIX, XXXI); UN Water Courses Convention (Article 8); Sava River Basin Agreement 2002 (Articles 3, 4, 14, 21); Indus Water Treaty 1960 (Articles VI, VIII); SADC Protocol on Shared Water Courses System 1995 (Articles 2, 5); Mekong Agreement 1995 (Articles 1, 2, 6, 9); Mahakali River Treaty 1996 (Articles 6, 9); UNECE Water Convention 1992 (Articles 6, 9, 11, 12, 13); Bellagio Treaty 1989 (Articles IV, XV); Berlin Rules 2004 (Articles 10, 11, 56).

Importantly, the duty to co-operate was incorporated in the UN Water Courses Convention as a general principle of the Convention. Article 8 of the Convention stipulates that state parties to the Convention shall co-operate on the basis of good faith and mutual benefit respecting the equal sovereignty and territorial integrity of each other, to attain optimal utilisation and protection of the watercourse.⁹¹ In doing so, states are encouraged to establish joint water commissions or mechanisms to facilitate co-operation on relevant measures and procedures. The Convention also calls on states to draw lessons from the experience of existing water commissions and mechanisms in different regions of the world.⁹² Furthermore, Part III of the Convention contains detailed procedural rules obliging state parties to the Convention to exchange data and information on a regular basis concerning the conditions of the watercourse, and to notify and consult other riparian states of planned measures which would have a significant adverse impact upon other states of the watercourse.⁹³

The duty to co-operate has also been incorporated in the agreement between Israel and OPT, namely in Annex III of the Declaration of Principles 1993⁹⁴ and in Article 40 of Annex II of the Interim Agreement.⁹⁵ To fulfil the duty to co-operate the parties agreed to establish a Joint Water Committee (JWC). The mandate of the JWC includes granting permits for the drilling and rehabilitation of wells, all increases of extraction from wells, protection of water resources and water and sewage systems, setting extraction quotas, resolution of water and sewage disputes, and co-operation in the field of water including exchanging information.⁹⁶ According to Article 40(13), the JWC shall be comprised of an equal number of representatives from each side, and all decisions

91 Article 8, UN Water Courses Convention.

92 *Ibid.*

93 Article 11, UN Water Courses Convention.

94 Para.1, Annex III Protocol on Israeli–Palestinian Co-operation in Economic and Development Programs, Declaration of Principles.

95 Article 40, Appendix 1, Annex III Protocol Concerning Civil Affairs, the Interim Agreement.

96 Article 12.40, Annex III, Protocol Concerning Civil Affairs, the Interim Agreement.

of the JWC shall be made by consensus, which includes the agenda, its procedures and other matters.⁹⁷ Moreover, joint supervision and enforcement teams (JSET) were created to ensure the implementation of water-related provisions of the Interim Agreement and the decisions of the JWC.⁹⁸ The JSETS are composed of five teams,⁹⁹ each team includes at least two representatives from each side.¹⁰⁰ The main responsibilities of the JSETS are to 'monitor, supervise and enforce the implementations of Article 40'.¹⁰¹ The JWC was the first body established to manage shared water resources between the Israelis and the Palestinians. As a model of water management co-operation that kept working despite the political tensions, the JWC has received compliments and been seen as an example for co-operation that deserves to be followed in other basins.¹⁰²

Nevertheless, the critiques of the JWC from scholars¹⁰³ and international organisations such as the World Bank¹⁰⁴ and Amnesty International¹⁰⁵ outweigh the compliments. These scholars and international organisations have described the JWC as a model of subordination rather than co-operation. Some scholars have gone even further and have called the JWC a 'tool within a water-apartheid regime'.¹⁰⁶ To understand better the functioning of the JWC and the implementation of its key duties (or lack of it) it is important to explain a number of facts. Firstly, the JWC has limited geographical jurisdiction to decide over only the water resources and sewage system in the West Bank, which means that all other shared water resources, *i.e.*, the Coastal Aquifer beneath Gaza and Israel, and the Jordan River, do not fall under the jurisdiction of the JWC and are subject to Israel's unilateral management and control.¹⁰⁷ This all indicates that the Israeli side can decide over any water related project (licensing,

97 Article 14.40, Annex III, Protocol Concerning Civil Affairs, the Interim Agreement.

98 Article 1, Schedule 9, Annex III, Protocol Concerning Civil Affairs, the Interim Agreement.

99 *Ibid.*

100 Article 2, Schedule 9, Annex III, Protocol Concerning Civil Affairs, the Interim Agreement.

101 Article 4, Schedule 9, Annex III, Protocol Concerning Civil Affairs, the Interim Agreement.

102 G.M. Jean, *La géopolitique de l'eau* (Paris: Assemblée Nationale, Commission des Affaires Étrangères, 2012).

103 J. Selby, *Water, Power and Politics in the Middle East: The Other Israeli–Palestinian Conflict* (London: I.B. Tauris, 2003); Abouali, *supra* note 1; M. Zeitoun & A.E. Cascao, 'Power, Hegemony, and Critical Hydropolitics', in A. Earle, A. Jagerskog & J. Ojendal (eds.), *Trans-Boundary Water Management* (Abingdon: Earthscan/ Routledge Environment and Sustainability, 2010) 27–42.

104 World Bank, *supra* note 48.

105 Amnesty International, *supra* note 42.

106 Glavany, *supra* note 102.

107 Fischhendler, *supra* note 38 at 21–22; B. Wasserstein, *Israel and OPT: Why They Fight and Can They Stop?*, 3rd edn. (London: Profile Books, 2008), pp. 73–99.

drilling of new wells, increasing quotas of extraction from any water source, any developments of water resources and systems) in the West Bank, while the Palestinian side does not have the same authority over any water related projects that Israel implements inside the Green Line, whether they are the same shared water resources, or not shared water resources.

Secondly, even within the limited territorial jurisdiction of the JWC, there is disparity in regards to the powers between the Israeli and Palestinian sides. In accordance with the Interim Agreement, the West Bank was divided into three areas. Area A constitutes 18% of the West Bank and includes the main Palestinian cities. This area is scattered, non-contiguous and surrounded by Israeli settlements, and the PA enjoys civil and security responsibilities. Area B constitutes 22% of the West Bank, and includes most Palestinian villages. The PA is responsible for the civil affair authorities while security affairs remains with Israel. Area C constitutes 60% of the West Bank including all the Israeli settlements, Israel retains full civil and security responsibility and practices it through the Civil Administration.¹⁰⁸ Moreover, two separate water supply systems exist in the West Bank. One is the Israeli water network system, that serves the Israeli settlements and which is integrated into the Israeli national water network, but it extracts water from wells located in OPT. The other is the Palestinian water network system, which serves the Palestinian cities and communities. It constitutes several non-contiguous lines, drawing water from some Palestinian controlled wells and receiving water from the Israeli network.¹⁰⁹ The above-illustrated dynamics of the West Bank have several implications overall for the water relations between the Israelis and the Palestinians and the JWC, rendering Israel the superior power. In addition to the full powers Israel enjoys in Area C, this gives Israel a veto power within the JWC on any water project in Areas A and B. Thus, when the Palestinian side propose a water project in Areas A or B, it should seek the approval from the JWC where Israel has the right of veto. Yet, if the project is in Area C (which inevitably involves most Palestinian water projects as it constitutes 60% of the West Bank) or Area A and B (which are non-contiguous, so the only way to connect between them is through Area C) then the Palestinian side should seek; first the approval from the JWC, then the approval from Israeli Civil Administration where the Palestinians are not represented.¹¹⁰

108 Israeli–Palestinian Interim Agreement on the West Bank and the Gaza Strip (28 September 1995).

109 Selby, *supra* note 103.

110 For further discussion about Israeli military orders pertaining water in the OPT, see: Amnesty International, *supra* note 42; World Bank, *supra* note 48 at IX.

Palestinians theoretically share veto power with Israel in the JWC in regards to Areas A and B, however, Israel has no settlements located in those areas. All the Israeli settlements are located in Area C which is the largest part of the West Bank and contiguous. Thus, there is no need to seek any approval from the JWC. Taking into consideration that the Israeli Military Orders pertaining to water are still in force in the West Bank,¹¹¹ and that the Israeli Civil Administration still functions in Area C, this all renders it very hard for the Palestinians to implement water projects even if they acquired the needed approval from the JWC, because Israel still retains powers to object to any projects through the Israeli Civil Administration (see Fig. 1).¹¹²

Data shows that the JWC has given its approval for most of the projects that were submitted by Israel (including water projects in settlements in the OPT) while only half of the projects submitted by the Palestinians have been approved.¹¹³ According to some researchers, who have examined the minutes of 142 of 167 meetings of the JWC during the period from 1995 to 2008, there is vast disproportion in regards to the numbers of Israeli and Palestinian projects that have been approved by the JWC.¹¹⁴ The research shows that between 30 and 66%¹¹⁵ of Palestinian wells applications were approved, compared to 100% of Israeli wells applications. An estimated 50–80%¹¹⁶ of Palestinian water supply network applications were approved compared to 100% of Israeli water supply networks approved, and 58% of Palestinian wastewater applications were approved compared to 96% of Israeli wastewater applications.¹¹⁷ Notably, the approval of the JWC does not mean that the projects will be executed; if a project is located in Area C Palestinians have then to apply for another permit from the Israeli Civil Administration, which is difficult to obtain.¹¹⁸ In terms of the capacity of the approved projects by the JWC, the data also shows a huge difference between the approved Israeli and Palestinian projects. Approved Israeli water storage facilities were almost five times larger than the approved Palestinian facilities; with 4,723 cubic centimetres for

111 Article 18.4.A, the Interim Agreement.

112 Amnesty International, *supra* note 42; World Bank, *supra* note 48 at IX.

113 Glavany, *supra* note 102; World Bank, *supra* note 48 at IX.

114 J. Selby, 'Dressing up Domination as "Co-operation": The case of Israeli–Palestinian water relations', *Review of International Studies* 29(1) (2003): 121–138, p. 130.

115 These numbers are unclear; however, due to very limited access to these meetings and/or the minutes, it is the only available number.

116 These numbers are also unclear, but again this is the only available information regarding the meetings where these decisions were made.

117 *Ibid.*

118 Amnesty International, *supra* note 42; World Bank, *supra* note 48 at IX.

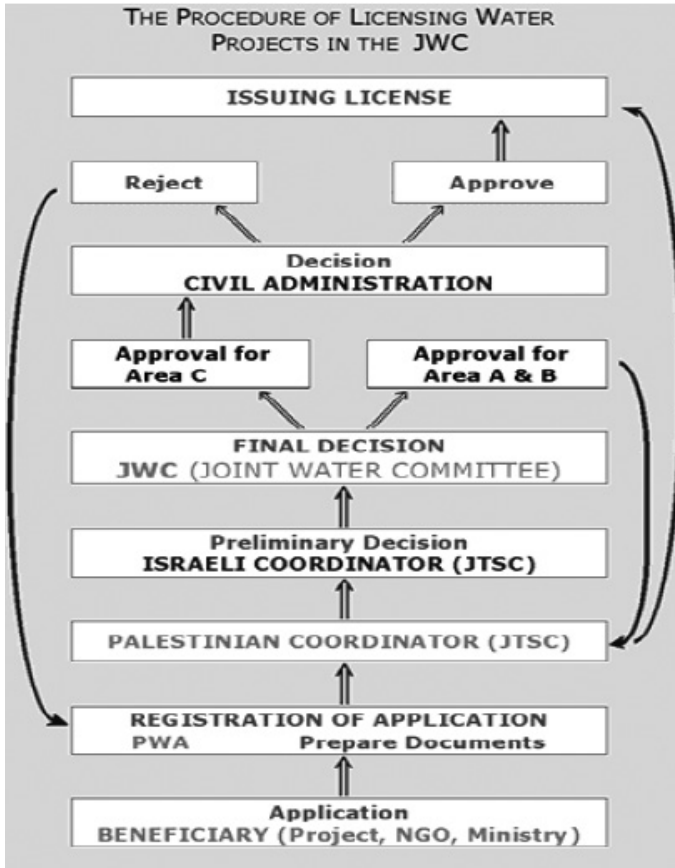


FIGURE 1 The Joint Water Committee – Licencing Procedures. Taken from: C. Messerschmid, *Till the last drop: The Palestinian water crisis in the West Bank, hydrogeology and hydro-politics of a regional conflict*, Paper presented at the Proceedings of the International Conference on Water Values and Rights, Ramallah–Palestine, 2005.

Israeli facilities compared to 965 cubic centimetres for Palestinian facilities.¹¹⁹ Furthermore, the JWC approved 174 storage tank/reservoirs for the Palestinians and 28 tank/reservoir for the Israelis. The total capacity of the 174 Palestinian tanks/reservoirs was 167,950 cubic centimetres while the capacity of the 28 Israeli tanks/reservoir was 132,250 cubic centimetres. Data convincingly shows that the most common diameter for approved pipelines for Palestinians was two inches, while for the approved Israeli pipelines 8–12 inches was most

¹¹⁹ Selby, *supra* note 114; World Bank, *supra* note 48 at IX.

common.¹²⁰ Most critically, Israel has hinged its approval for Palestinian water projects on the Palestinians' approval of water projects for Israel's settlements in the OPT.¹²¹ Palestinians have consented to water infrastructure projects for illegal settlements in the OPT because it refusal could mean Israel would not approve any Palestinian project in the OPT.

3 Conclusion

This article has critically analysed the applicability of the substantive principles of equitable and reasonable utilisation of water courses, and no significant harm; as well as the procedural principle of co-operation in the Israeli–Palestinian context. The discussion demonstrated that these principles should have been implemented because: (1) both parties, Israel and the OPT have agreed to them in the Oslo Agreements; (2) they are core principles of IWL, which means that they provide guidance to use and govern shared water-courses and provide a legal frame for the each party to allocate, share, and protect transboundary water bodies, such as rivers, lakes, wetlands, and aquifers; and (3) they are customary law.

However, as discussed in this article, there is a clear lack of implementation of these principles in the Israeli–Palestinian water relations context, by both parties, predominantly by Israel as the capacities/responsibilities of the PA are considerably less. While the situation between Israel and the OPT continues to be one of occupation, it seems that there is little hope for a fruitful implementation of the principles of IWL as the violation of such principles carries no responsibilities for Israel. The Israel and OPT situation has been portrayed as one of a conflict between two sovereign riparian states over shared water resources rather than the actual situation of occupation, as have been revealed by the analysis of the principle of *equitable and reasonable utilisation*, where it was evident that water sharing between Israel and the OPT is neither equitable nor reasonable.. Furthermore, the application of the *no significant harm principle* has added responsibilities to the PA beyond its capacity given that the PA does not enjoy control or sovereignty over its water resources nor over the West Bank due to the existence of Israeli occupation. As for the *duty to cooperate*, it was shown that the JWC, as an institutional body responsible to supervise the implementation of the undertakings of the parties under Article 40 of the Interim Agreement, has proven unsuccessful. Most projects submitted to

120 Selby, *ibid.*

121 *Ibid.*

the JWC by the Palestinian side have not been approved, while Israel have unilaterally kept implementing water and sewage projects within Israel and also in the illegal settlements in the OPT. Perhaps, the most alarming matter within the JWC is that the PA has to give its approval to some projects that serve Israeli settlements in the OPT in order to get Israel's permission for Palestinian water projects. In that cases, the JWC has been used as a method to solidify Israel's control over shared water resources with the OPT and a tool for expanding its illegal settlements and occupation in the OPT. It is worth highlighting that a significant number of illegal settlements have been built since the signing of the Oslo Accords, and the creation of the JWC, which according to the ICJ besides being illegal constructions under international humanitarian law are also using water resources illegally.¹²²

122 International Court of Justice (ICJ), *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion* (2004).