

Hands Off Water in War: Weaponization of Water in the Occupied Palestinian Territory



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*[**Paola Gaeta** is a professor of international law at the Geneva Graduate Institute and director of the Geneva Academy of International Humanitarian Law and Human Rights.]*

***Dr Etienne Henry** is an independent legal consultant and a lecturer in international humanitarian law at the University of Neuchâtel, whose recent work includes contributing to the Geneva Academy's research project IHL in Focus.]*

The weaponization of water—[namely](#), the use of water and water systems as tools or weapons in armed conflicts—has become a recurrent practice in contemporary warfare. According to recent research, cases of weaponization involving water during armed conflict have surged dramatically: the [“Water Conflict Chronology”, an open-source database hosted by the Pacific Institute](#), documented nearly 1,000 incidents between 2000 and 2023, [compared to](#) only 160 throughout the entire 20th century conflicts. This is most commonly realized through attacks on dams, wells, and water, sanitation and hygiene (WASH) facilities. Weaponization of water—by destruction of infrastructure, denial of access, or deliberate flooding as a tactical threat—raises humanitarian issues of profound gravity. In a recent development in the tense relationship between India and Pakistan, the latter has

accused India of ‘weaponization’ of the Indus Waters Western Rivers by means of “(a) the interruption of water supply used for downstream irrigation through the filling of sizeable pondage pools and other reservoirs; (b) the opening of dam gates to release stored water in excessive volumes in a manner that causes flooding downstream; and (c) the rapid, mass release of sediment impacting rivers, land, infrastructure and people living downstream” ([PCA case No. 2023-01, Supplemental Award on the Competence of the Court, 27 June 2025](#), para 40). As documented in conflicts in the Middle East and Africa, such as in Syria, Iraq, Nigeria, and Somalia, these practices intensely magnify civilian suffering and destabilize entire regions ([King, 2024](#); [Sers, 2025](#)).

The weaponization of water in the Occupied Palestinian Territory (OPT) is no less dramatic and carries unique complexities. As detailed by one of the present authors in the recent Spot Report by the Geneva Academy of International Humanitarian Law and Human Rights, this practice is evidenced by a deliberate and sustained pattern of targeting and depriving civilian populations of access to water in both the Gaza Strip and the West Bank. For example, in the Gaza Strip, the report documents the destruction of at least one-third of water infrastructure—including the bombing and bulldozing of water wells, reservoirs, and desalination plants—as well as the disabling of all six major wastewater treatment plants ([Spot Report](#), pp. 6–8). Satellite imagery and open-source videos further show Israeli forces laying explosives inside water reservoirs and bulldozing solar panels that power water facilities.

In the West Bank, a different, but equally coercive, method emerges: legal-administrative barriers. These include bureaucratic obstacles that function as silent instruments for controlling Palestinian access to water resources. Of particular note is Israel’s near-total control over the Joint Water Committee—a body established under the Oslo Accords to coordinate water management between Israeli and Palestinian authorities. In practice, this allows for systematic vetoes of Palestinian water projects, while permits for new wells or even for maintenance are delayed indefinitely ([Spot Report](#), pp. 9–11).

Throughout this analysis, without attempting to offer a comprehensive legal commentary, we reflect on some of the key findings related to international humanitarian law (IHL) highlighted in the Geneva Academy’s report.

Gaza: Water as a Weapon in Ongoing Hostilities

It is now uncontroversial that water installations and supplies indispensable to the survival of the civilian population enjoy special protection under IHL. Article 54 of Additional Protocol I to the Geneva Conventions (AP I), along with customary international law ([Rule 54 of the ICRC Customary IHL Study](#)), explicitly prohibits

attacks against, destruction of, or rendering useless objects necessary for civilian survival—including drinking water installations and supplies. Such acts are strictly prohibited, irrespective of whether the aim is to deprive the civilian population of sustenance or to use water as a method of warfare. Starvation as a method of warfare is also prohibited under Article 54(1) AP I and customary international law ([Rule 53 of the ICRC Customary IHL Study](#)), thereby reinforcing the protection of water as an essential resource for life. This framework is not merely aspirational: it reflects binding legal obligations anchored both in treaty law and customary international law, as affirmed by state practice and international jurisprudence.

Acts that violate these protections—such as deliberately targeting or destroying water pipelines, sewage systems, or desalination plants—not only contravene the prohibition on starvation and the protection of civilian objects, but may also breach rules protecting the natural environment during armed conflict. Such violations may amount to war crimes under Article 8(2)(b)(ii) and (iv) of the Rome Statute of the International Criminal Court, which prohibit “intentionally directing attacks against civilian objects” and “intentionally launching an attack, in the knowledge that such attack will cause ... widespread, long-term and severe damage to the natural environment.” Moreover, depending on the specific context and intent, such acts may also support allegations of other international crimes, including crimes against humanity when the deprivation of water forms part of a broader, systematic attack on a civilian population, and of genocide if the requisite genocidal intent can be demonstrated.

In Gaza, the targeting of water infrastructure, compounded by the denial of electricity and fuel, has precipitated catastrophic humanitarian conditions. The destruction of one-third of water infrastructure and the denial of access to humanitarian assistance have led to a collapse in water availability. Particularly alarming is the cumulative impact of multiple forms of deprivation—of water, food, electricity, fuel, and humanitarian access—which has triggered a public health crisis, as indicated by spikes in diarrhoeal disease, hepatitis, and child malnutrition ([Spot Report](#), p. 7).

Much of this destruction appears not to be accidental. Rather, the available evidence and the recurring pattern of attacks suggest that these act reflect a well-defined policy. According to both the Spot Report and corroborating sources, some incidents indicate deliberate targeting of water infrastructure. In other cases, the combined effects of military actions and restrictions have predictably devastated civilian access to water, reflecting a potential strategy of punishment and collective pressure on Gaza’s civilian population ([Spot Report](#), p. 14).

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The humanitarian concern underscored in the report prompts a re-examination of the principle of proportionality in military attacks. Even if a legitimate military objective exists close to a water facility, the foreseeable medium- and long-term effects—ranging from disease outbreaks to ecosystem collapse and mass displacement—should be weighed heavily against the anticipated military advantage. The report highlights the concept of “reverberating harms,” in line with ICTY and ICC jurisprudence, recognizing that the proportionality analysis must account not only for immediate civilian casualties but for systemic threats to civilian life and health ([Spot Report](#), p. 12). Scholars and practitioners have argued that ‘expected incidental harm’ should also encompass secondary effects driven by health and environmental factors (such as cholera outbreaks or famine) that may emerge long after the initial strike. These predictable outcomes call into question the compliance of repeated Israeli strikes against dual-use water infrastructure in densely populated areas with the principle of proportionality under international law.

The Weaponization of Water in Gaza and the Law of Occupation

The humanitarian damage resulting from these policies must also be assessed under the legal framework of belligerent occupation. The Spot Report adopts the view—widely shared among international legal experts—that Gaza remains occupied territory for most purposes, as Israel retains effective control over key aspects of life in the Strip, including its borders, airspace, and the supply of essential services such as electricity and water ([Spot Report](#), p. 13). This legal classification triggers the applicability of the Fourth Geneva Convention and relevant rules of customary international law, with the corresponding obligations of the occupying power.

Within this framework, the report identifies multiple grave violations of the law of occupation in relation to the water crisis. Firstly, the destruction of water infrastructure—combined with denial of the fuel and electricity required for its functioning, and obstruction of repair efforts—may constitute a breach of Article 56 of the Fourth Geneva Convention, which imposes a duty on the occupier to ensure and maintain public health and hygiene in the territory. Secondly, the systematic obstruction of humanitarian relief, including attacks on water utility workers and restrictions on the entry of essential spare parts and convoys, engages Israel’s obligations under Article 59 of the Convention. Finally, the cumulative effect of these measures—which together deprive the entire civilian population of access to water—may amount to collective punishment, explicitly prohibited by Article 33.

Taken together, these violations reflect not only the illegality of certain individual acts, but also a structural failure to uphold the elementary duties of an occupying power towards a protected population. The situation in Gaza is made particularly

power towards a protected population. The situation in Gaza is made particularly acute by the speed and intensity with which water and sanitation infrastructure have collapsed under the pressure of ongoing hostilities. Experts note that, in a matter of weeks, a densely-populated urban area has seen the effective destruction of its water and hygiene systems—not merely as a side-effect, but as a foreseeable and at times deliberate outcome of strikes, siege, and blockade.

The inability to restore even a minimum standard of water access—due to fuel restrictions and repeated obstruction of humanitarian missions—means the population is left without any margin of resilience. In this sense, the violations of the law of occupation in Gaza are both acute and structural: they arise in the midst of active hostilities but also implicate the long-term obligations of the occupying power to ensure life-sustaining services, which Israel, under current policies, is not fulfilling, and, arguably, cannot fulfill.

Structural Control in the West Bank: Law as Weapon

As mentioned above, in the West Bank, water denial is largely implemented through legal and administrative mechanisms. Israel's near-absolute control over the Joint Water Committee—a body originally designed to manage joint Israeli-Palestinian water issues—effectively enables a persistent veto over Palestinian water infrastructure projects. The Spot Report highlights how this has resulted in years-long delays or outright denials of permits for drilling new wells, rehabilitating existing water facilities, or constructing sewage treatment plants in Palestinian communities.

Concurrently, requests from the Palestinian Authority to access water in Area C and the Jordan Valley are frequently rejected by the Israeli Civil Administration. Furthermore, unlicensed infrastructure—such as wells and cisterns built without Israeli permits, which are difficult or impossible for Palestinians to obtain—routinely becomes the target of demolition orders.

This regime of control illustrates a form of weaponization of water that does not require the physical destruction of infrastructure; rather, access is denied through bureaucratic procedures. The use of discretionary, opaque permitting and frequent demolitions creates a chronic condition of underdevelopment, disproportionately impacting rural and marginalized Palestinian communities. This bureaucratic violence normalizes the deprivation of basic services, fragments accountability, and renders effective legal remedies inaccessible. The cumulative impact of these regulatory restrictions is the paralysis of Palestinian water development, forcing communities to rely on expensive water trucking or to make do with inadequate supplies. Frequent settler violence targeting water infrastructure compounds these effects, further impairing community resilience

([Spot Report](#), pp. 9–11; [B'Tselem](#), 2023).

These practices generate significant legal concerns. The report identifies violations of Israel's obligation to ensure and maintain public hygiene and health under Article 56 of the Fourth Geneva Convention. It further notes that systematic exploitation and pillaging of water resources contravenes Article 33 GC IV and customary IHL Rule 52, and violates the Palestinian right to permanent sovereignty over their natural resources, as recognized by various UN resolutions and the International Court of Justice (ICJ, [Legal Consequences arising from the Policies and Practices of Israel in the Occupied Palestinian Territory, including East Jerusalem, Advisory Opinion of 19 July 2024](#), para 240; [Al-Haq](#), 2022). The discriminatory allocation of water between Israeli settlers and Palestinian communities—in violation of the principle of equality and non-discrimination—adds a further dimension of structural exclusion and segregation.

Hands Off Water in War: A Legal Mandate

The overall picture painted by the Geneva Academy Sport Report is one of profound legal and humanitarian concern. As documented, Israeli practices during hostilities in Gaza and the administration of the West Bank reflect a recurring pattern of weaponization of water—whether through the destruction, obstruction, or denial of access to water resources.

These practices, as examined, constitute violations of core international humanitarian law obligations. They implicate not only the prohibitions of starvation and the protection of civilian objects, but also the responsibilities of an occupying power to ensure public health and hygiene, facilitate humanitarian relief, and refrain from collective punishment. Depending on the wider context and specific intent, such practices may also breach other international obligations including—where the requisite criteria are met—prohibitions on genocide.

Against this background, the Spot Report advances the position that existing international humanitarian law already provides a normatively adequate framework to prohibit and regulate such conduct. In other words, the problem is not a lack of legal rules, but the failure to implement and enforce those already in place. The violations documented in both Gaza and the West Bank constitute clear breaches of existing legal obligations, not gaps in the law.

Accordingly, the report calls for lawful and effective measures by all States to induce compliance with international law, put an end to ongoing violations, and ensure reparation. These are not discretionary policy choices but legal obligations arising from the structure of IHL—particularly given the *erga omnes* character (i.e., owed to the international community as a whole) of the most fundamental

obligations at stake.

At the same time, it should be recognized that while the existing legal framework is normatively robust, it is shaped by a logic that seeks to balance military necessity and humanitarian protection. As such, it does not always fully capture the enduring environmental and public health consequences of attacks on water infrastructure. This limitation is especially relevant to the principle of proportionality, whose conventional application tends to focus on immediate civilian casualties and tangible damage, without systematically accounting for wider, indirect, or temporally-extended effects.

While the report itself does not dwell explicitly on this point, its findings contribute to a broader legal discourse that has questioned the ability of current IHL rules to prevent or provide remedy for the cumulative and “reverberating” harms of modern warfare. International jurisprudence—such as the ICTY’s Galić and Gotovina decisions—has affirmed the necessity of considering foreseeable civilian harm in proportionality analyses. Likewise, recent years have seen growing recognition of the pressing need to more systematically incorporate environmental protection into the legal frameworks governing armed conflict (see for instance the ICRC [Guidelines on protection of natural environment in armed conflict](#), 2020 and the ILC [Draft principles on the Protection of the Environment in Armed Conflict](#), 2022). These conversations intersect with growing recognition—both legal and normative—of environmental crimes in warfare, including the systematic targeting of ecosystems and essential life-support systems. International criminal law has thus far addressed such conduct only marginally, but recent developments point toward an increasing awareness that grave, unlawful environmental destruction may constitute an international crime (see for instance the ICC OPT [Draft Policy Paper on Environmental Crimes](#), 2024).

In this light, the need to develop clearer, more categorical prohibitions on attacks against water supplies and resources is increasingly evident. Although current IHL prohibits certain attacks on water infrastructure—specifically when water is indispensable to civilian survival—there is not yet a general, unconditional legal norm outlawing such attacks, even where they predictably cause public health crises or environmental collapse. The Spot Report spotlights the environmental degradation resulting from systematic attacks and neglect: for example, the ruin of Gaza’s wastewater treatment facilities has aggravated the salinization of groundwater and caused the uncontrolled discharge of untreated sewage into the sea and farmland, with severe and lasting impacts on public health and entire ecosystems ([Spot Report](#), p. 19).

Developing a clear and unconditional prohibition against attacks on water resources would not only strengthen protection for civilians and the environment

but could also help extend accountability under international criminal law. At present, the threshold for environmental war crimes under Article 8(2)(b)(iv) of the Rome Statute is set extremely high—requiring “widespread, long-term, and severe” damage—which is rarely met in practice and excludes many serious forms of environmental harm common to contemporary warfare. Greater clarity regarding the illegality of targeting water infrastructure, and formal recognition of this conduct as a serious IHL breach, would support its classification as a war crime, even where environmental impacts do not reach the current Rome Statute threshold.

“Hands off water in war” must therefore be not only a normative demand but a legal imperative for the present and the future. Strengthening the legal protection of water in armed conflict—via interpretive evolution and, where necessary, new normative developments—is essential to ensure that the weaponization of water is recognized for what it is: a method of warfare fundamentally incompatible with the basic premises of humanity, legality, and environmental sustainability.



Paola Gaeta



Etienne Henry
