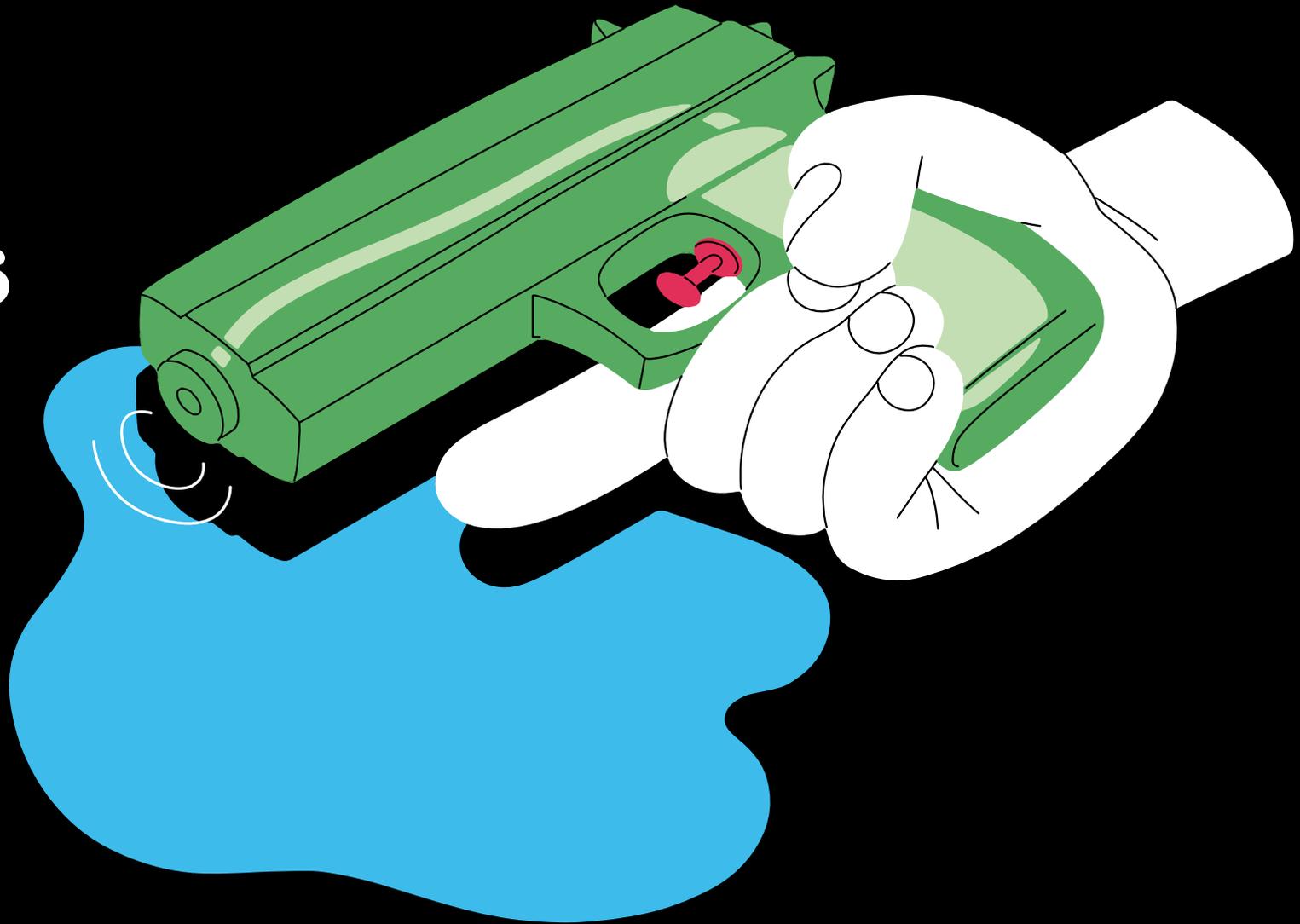


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Water Wars

In the future, water may become an increasingly scarce resource and a source of violent conflict. But history teaches us that the scarcity of water is often a tool for brokering peace.



Around 4,500 years ago, the Sumerian city-states of Lagash and Umma went to war over the water of the Tigris River. Scant rainfall meant that agriculture in both states relied heavily on irrigation from the Tigris through an intricate system of canals and levees. When the king of Lagash partially destroyed a border canal and diverted it into his region, it deprived Umma of fresh water, leading to successive military confrontations and later, a full-blown war, considered the first in history to be fought over water. It is also considered the last.

While violent conflict was the initial response to their disputes, Lagash and Umma eventually crafted what is thought to be the first boundary water agreement — the Mesilim Treaty — putting an end, for a time, to their dispute over the waters of the Tigris and providing a blueprint for international arbitration for millennia to come.

While war has been the exception, tensions and disputes over water are commonplace. The word “rivalry” comes from the Latin *rivalis*, “one using the same river as another.” But not all tensions become

disputes, not all disputes turn violent and not all violent disputes escalate into wars. Water is fundamental to life, and as the magnitude of water scarcity grows, so too do the global concerns over how it will be managed in an uncertain future. One fear that has taken hold is the idea that future water shortages will lead to states going to war over water.

More people and greater consumption, less available clean and fresh water, more demands from agriculture and industry and less reliable water sources from climate wildcards together make an intuitive case that, as water becomes increasingly scarce, tensions will spark conflicts that erupt into interstate wars. That these factors will lead to water scarcity is extremely likely, whether that scarcity leads to violent conflict is far from inevitable.

“There is limited to no evidence on water causing the start of conflict, historically,” says Geoff Dabelko, professor of environment, peacebuilding and security at Ohio University. The caveat, he says, is that the future might not look like the past.

For many, water is already a matter of life and death: 785 million people lack access

to clean water, nearly one million people die each year from water-related diseases and another million deaths are attributed to unclean births. If you know where to look, there is ongoing social tension, political instability and violence over water happening at a local level — from Iraq to Yemen, China to the United States and far beyond. There have yet to be any wars.



The “water wars” idea emerged in the 1980s and was taken up by high-profile figures including former UN secretary-generals Boutros Boutros-Ghali, Kofi Annan and Ban Ki-moon respectively. The idea has inspired a large body of “water war” literature, and is alive and well today. But its overly simplistic narrative contributes to misconceptions, triggers tensions, ignores the complexity of reality and masks our adaptation strategies, not to mention overlooking the inherently cooperative nature of humanity. It also influences how we conceptualise water scarcity and seek to resolve it. In the absence of scientific evidence, this could lead to the unnecessary militarisation of water management, as fears of “water wars” result in the security and military communities taking control at the expense of development partners and non-militarised responses.

“There is a temptation to put things in security terms because security is often synonymous with priority or concern,” explains Dabelko. The danger is that this privileges tools that come with the traditional

notion of security — the default being the use of force — which are not well placed to solve the problem. “Neither conflict nor violence are efficient means to resolve water scarcity, and actually make it harder to do the cooperation that is necessary.”

The extent to which humanity shares water throws into sharp relief the importance of cooperation. Worldwide, over 310 lakes and river basins cut across political borders, the waters of which are shared by 52% of the world’s population in 150 countries and disputed areas. Some 592 aquifers cross at least one political border, and are shared by as many as six countries. By 2025, half of the world’s population will live in water-stressed areas.

Exhaustive research on transboundary water conflict and cooperation by Aaron Wolf, professor of geography at Oregon State University, shows that states have cooperated over water resources far more often than they have fought over them. From a dataset of more than 1,800 water-related events, Wolf found cooperation was more than twice as common as conflict: 1,228 versus 507, respectively. Of the 37 events involving small-scale or extensive military attacks, 30 took place between Israel and one of its neighbours before 1970. ▶

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Since 1820, over 650 water-related treaties or agreements have been signed. Many scholars and researchers contend that greater dependence on water resources makes cooperation more likely. Wolf and Dabelko, among others, have previously argued that because water is so important, countries cannot afford to fight over it. This has held true even when countries have gone to war over other issues, as seen with the 1960 Indus Waters Treaty, signed after nine years of negotiations between Pakistan and India with the help of the World Bank. The agreement allocates the waters of six rivers in the Indus Basin and lays out procedures to handle questions, differences and disputes that may arise. It is hailed as a success, having proven resilient throughout persistent ongoing tensions and three wars.

Changing the narrative, from one of scarcity-bred conflict to one where water can be a tool to foster cooperation or a catalyst for peace, makes a difference to how we move

forward. For example, through virtual water trade, the hidden flow of water-rich resources through international trade, countries are already adapting to water scarcity, importing food and other water-intensive goods to conserve their scarce water resources for more productive and profitable uses. “Not a lot of people appreciate how food is really a trade in water, and so a greater understanding there might put us at ease,” says Dabelko.

“We must be better at spreading the word about successful cooperation and the benefits it brings, from mitigating the impacts of floods and droughts to sustainable water access to increased regional stability,” says Maria Vink, director of the Transboundary Water Cooperation department at the Stockholm International Water Institute (SIWI).

In the Nile Basin, one of the most water-stressed river basins in the world and a frequent subject of the “water war” framing, SIWI has been training journalists and supporting networking to try to create ►



awareness of the benefits of cooperative approaches. Ensuring access to factual information, Vink says, has created a culture where journalists support each other in fact-finding and mitigating the spread of disinformation.

“We cannot continue treating the challenges of water, climate change, biodiversity loss, global health and political instability as separate issues. They are interlinked and to tackle them requires solutions based on holistic approaches,” she says.



Identifying those solutions demands inclusive processes involving a multitude of actors from different levels: water users, political leaders, academics, journalists. Water cooperation will be as effective as it is inclusive of those to whom water is relevant. Diverse perspectives, shared visions, promotion of benefits and information to reconcile conflicting agendas are but a few of the benefits of inclusive processes.

Inclusion of women is especially critical because their distinctive hygiene and sanitation needs during menstruation, pregnancy and child-rearing, and responsibility for managing household water supply, sanitation and health, lend them differentiated perspectives and knowledge vital to equitable access and sustainable resource management. Though their knowledge has been found to enhance the quality and durability of agreements, women have been persistently shut out

of decision-making processes on water management and cooperation, especially at the transboundary level.

Above all, effective water cooperation requires institutions that are capable of juggling competing interests, managing water scarcity and responding to rapidly changing political and environmental realities. According to Wolf, it is not a shortage of water that leads to conflict, but how that water is governed and managed. When countries are not clear on their rights and responsibilities concerning shared waters, the chance of conflict increases. Building institutional capacity — reaching agreements, signing treaties, establishing river basin organisations — is, in Wolf’s view, the single most important method for reducing the likelihood of water conflict.

The debate on the increasing corporate control of water is less conclusive. “The public sector can manage resources poorly, too. And not all corporate players are equal,” explains Dabelko. With some there is room for stockholder pressure, naming and shaming or transparency requirements. With others, not so. “But if the private sector only has the bottom line in mind, it may precipitate conflict, and it will certainly precipitate inequitable outcomes.”

For Doug Weir, research and policy director at the UK-based Conflict and Environment Observatory, corporate control is ultimately a question of accountability to those who will be directly impacted by scarcity. “While there are many water-stressed areas around the world with governments and administrations that are

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unresponsive to the needs of communities, multinational corporations are even further divorced from their needs. Where people have no say over their access to a critical resource — whether this is on the grounds of cost or availability — this can create the conditions for conflict.”

The danger of private sector participation can be seen in the case of Cochabamba. The privatisation of water was a structural adjustment condition imposed on Bolivia by the World Bank and International Monetary Fund, and in 1999, an international consortium led by American Bechtel Corporation was awarded a 40-year concession to provide water services to Cochabamba, the country’s third largest city. Water tariffs rose — 35% on average, some by twice that — and access to piped water decreased, sparking mass protests that lasted months, ending in violent clashes and a state of siege. In a public referendum,

96% of citizens voted against privatisation, and in 2000 the government cancelled the concession.

The Cochabamba water revolt illustrates the power of social movements against the creeping privatisation of water multinationals, the necessity of representative participation and that, without equity, peace will remain elusive. A future where cooperation prevails over conflict must ensure equitable access for all, and that everyone is guaranteed the ability to meet basic human needs around water. And from there, says Dabelko, finding ways to value water as if it matters. “We have to redefine the good life.”

It is unclear to what extent the historical precedents of water cooperation will be tested by the future. As we approach it, we would be wise to embrace our cooperative, altruistic instincts and avoid the urge to wage war over a natural resource over which humanity has brokered peace for so long. ●