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The Geopolitics of Water Conflict and Cooperation in the Euphrates-Tigris River Basin

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ABSTRACT: This article examines the geopolitics of water conflict and cooperation in the Euphrates-Tigris River Basin from 1948 to 2023. Drawing on a newly constructed database of water-related interactions, it traces how hydropolitical interactions have been shaped by multi-scalar dynamics involving state, non-state and transnational actors. Conflict and cooperation in the basin often co-exist. Interstate cooperation has persisted at the technical level even as high-level cooperation has been stalled during periods of broader political instability; similarly, even during periods without interstate conflict, high-intensity water conflict has persisted at a more local scale as armed groups embroiled in regional conflicts utilised water as a weapon of war. The last two decades, however, have also seen broadened participation in water governance due to increasing involvement of NGOs and civil society initiatives. The analysis offered in this paper highlights the importance of taking a multi-scalar approach to the study of water conflict and cooperation and the role of geopolitics in shaping hydropolitics.

KEYWORDS: Hydropolitics, transboundary water, conflict and cooperation, Euphrates-Tigris, Middle East

INTRODUCTION

Water's fluid nature means that it often increases interdependencies between users, especially when it crosses political boundaries. These interdependencies, and the fact that water is essential to nearly every aspect of life, mean that how states interact over their shared water resources is contingent upon several factors, including their respective absolute and perceived water scarcity, the relative power of the parties, the availability of alternative sources, and the underlying geopolitical dynamics that are at play between the riparians. There is a general consensus in the hydropolitical literature that the broader context in which transboundary water interactions occur is a central element in understanding hydropolitical dynamics (see, for example, Gleick, 1993; Lowi, 1993; Dinar, 2000; Zeitoun and Warner, 2006); however, despite repeated claims that "water resources management is inherently political" (Mollinga, 2008: 8), few attempts have been made to explicitly tease out the ways in which water conflict and cooperation are connected to the broader geopolitical climate.

State-level negotiations over transboundary water resources take place on multiple geopolitical fronts. Putnam's (1988) concept of 'two-level games' highlights how decisionmakers wrestle simultaneously with domestic and international imperatives that are often rooted in conflicting interests. In such circumstances, what makes sense at the domestic level may not be intuitive in the international arena; furthermore, transnational institutions such as regional organisations may add a third level to the playing field on which transboundary water interactions play out (Warner and Zawahri, 2012). Actors play something akin to a multi-board game of chess that can engage them in horizontal, vertical and diagonal relations. State preferences for the outcomes of negotiations are crafted in the domestic arena (Dinar, 2000; Feitelson, 2000), while domestic politics itself is influenced by international power games (Warner and Zawahri, 2012). At the same time, non-state actors such as local and international NGOs, armed groups, and transnational corporations exert influences in domestic and international political arenas.

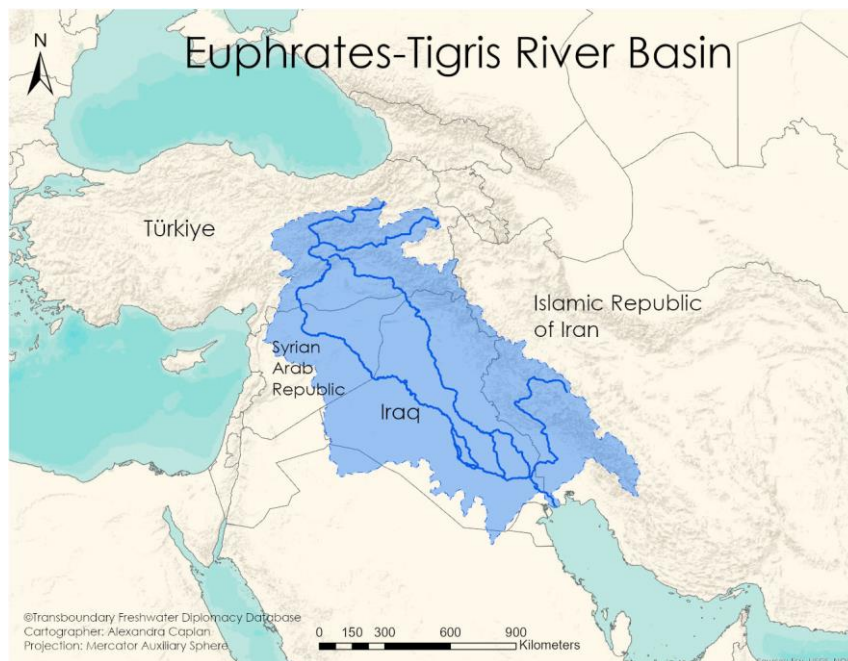
The outcome of negotiations is determined by a state's ability to meet internal expectations and balance the pressures emanating from the multiple chessboards.

Drawing on critical hydropolitics and, by extension, critical geopolitics, this article argues that hydropolitical relations and the resulting patterns of water conflict and cooperation are the result of multi-scalar interactions between state and non-state actors. Conventional approaches to hydropolitical analysis are rooted in state-centric realist and neoliberal institutionalist frameworks that attempt to rationally explain state behaviour (see, for example, Allan, 2002; Lowi, 1993; Sosland, 2007). While providing a rational way to think about how conflict or cooperation may result, they obscure the discursive processes through which transboundary river basins are engineered into spatially fixed entities and they give insufficient weight to the interactions that occur between stakeholders at different scales within a basin. Insights from critical geopolitics can help centralise the discursive aspects of power dynamics that underpin hydropolitical relations (Clarke-Sather et al., 2017; Kuus, 2017). In doing so, critical geopolitics moves beyond the so-called 'territorial trap' (Agnew, 1994) by revealing how social reality is shaped by the political activity of actors who operate within and beyond the limits of the state. Similarly, a critical hydropolitics approach encourages the analyst to undertake an examination of the discursive means through which social relations of power are manifested and codified in joint management institutions and everyday interactions. It also frames conflict and cooperation as co-existing phenomena that are the result of political processes which are themselves significantly influenced by power relations (Mirumachi, 2015; Zeitoun and Mirumachi, 2008). This framing is important, not only because it avoids simplifying the complexity of transboundary water interactions, but also because it recognises that not all cooperation is good and not all conflict is bad. In situations of extreme power asymmetries, for example, typical indicators of cooperation such as the signing of a treaty may well be an example of "domination dressed up as cooperation" (Selby, 2003: 96). Finally, critical hydropolitics sheds light on how river basins exist as part of a broader waterscape, one that is continuously produced and reproduced by human-environment interactions that occur at multiple political, ecological, economic and cultural scales that extend from the household to the global (Budds and Hinojosa, 2012). Critical hydropolitics, in other words, places the multi-scalar nature of water co-production, management and governance at the centre of analysis. This article will chart the multi-scalar nature of transboundary water interactions in the Euphrates-Tigris (ET) River Basin and will examine changes in water conflict and cooperation there over time.

A history of uncoordinated hydraulic development and tense political relations has contributed to long-standing water conflicts between the basin states of Iraq, Iran, Syria and Turkey.

Capitalising on its upstream position and mobilising significant technical and financial resources, Turkey has engaged in extensive hydraulic development through its Southeast Anatolian Project (Güneydoğu Anadolu Projesi, or GAP), which aims to bring irrigation, hydropower and enhanced socio-economic development to the country's underdeveloped southeast (Safaei et al., 2026). This project is a source of ongoing tension with downstream Syria and Iraq, who frequently accuse Turkey of cutting their water supply. It also causes tension with activists across the basin who protest the GAP's environmental, cultural and human rights impacts (Bilgen, 2018; Warner, 2012). Even against this backdrop of hostility, however, cooperation has persisted, at least at the technical level, and the linking of security issues with water has opened the door to new opportunities for higher-level cooperation. Bilateral state-to-state negotiations have dominated hydropolitical relations for two main reasons: a lack of third-party (including private sector) involvement in negotiations, and weak domestic influence on water policy. Over the past three decades, however, the privatisation of the Turkish water sector and the resulting acceleration in dam building programmes across the basin have opened up new spaces for the involvement of NGOs, private sector companies, and general civil society. This has been accompanied by the promotion of certain new water policies and the pushing back against others.

Figure 1. Map of the Euphrates-Tigris River Basin



This article analyses how water conflict and cooperation in the ET Basin take place in a waterscape that is shaped by both the broader geopolitical relations between basin riparians and by regional and global geopolitics. In the first section of the article, I briefly describe the methodology used to compile a database of multi-scalar water interactions in the ET Basin. This must be viewed against a broader political context that, for much of the past century, has been defined by four main issues: 1) historically poor relations between Syria and Turkey until the late 1990s, which have been influenced by the broader East/West divide; 2) the Kurdish question; 3) rivalry between the Iraqi and Syrian Ba'ath parties; and 4) regional conflicts, mainly the 1990 Gulf War and the American invasion of Iraq in 2003. Transnational activist networks have campaigned against the construction of large dams that pose threats to the region's rich ecological and cultural heritage. I conclude the article by offering some final thoughts on water conflict and cooperation dynamics in the basin.

METHODS

To help understand the extent to which broader geopolitics has influenced – and can explain – the different levels of hydropolitical relations in the ET Basin, I constructed a database of water-related events. Events data is widely used in quantitative political science analysis to document conflict and cooperation between states. Newspaper reports and other media articles on day-to-day interactions between states form the basic unit of analysis for events-based research (Schrodt, 1993). To construct a dataset of water-related events for the ET Basin, I followed the methodology developed by Shira Yoffe and other researchers at Oregon State University as part of the Basins at Risk (BAR) project, which sought to conduct a global-scale analysis of the relationship between water resources and conflict.¹ The BAR project defined water events as instances of conflict and cooperation that occur within an international river basin, involve the nations riparian to that basin, and concern freshwater as a scarce or consumable resource (that is, its quality and/or quantity) or as a quantity to be managed (flooding or flood control,

¹ For a detailed overview of the BAR project methodology, see the second chapter of Yoffe's (2001) doctoral dissertation; for an overview of findings from the project, see also Yoffe et al. (2003) and Wolf et al. (2003).

or the management of water levels for navigational purposes) (Yoffe, 2001). In accordance with that definition, the BAR project compiled a global dataset of water events. For the purposes of this article, I define water events similarly, but extend the scope of my analysis to include events that involved non-state actors and third-party countries (those not part of the basin). The time period covered by the database is 1948 to 2023. Many of the events in my database that occurred in or before 2008 are sourced from the International Freshwater Events Database, which over 6400 freshwater-related interactions that took place between 1948 and 2008 (TFDD, 2025). The entries from 2009 onwards were sourced using the search method described below.²

Events data was sourced from Nexis Uni, a search engine that contains more than 17,000 news, business and legal sources. Using search terms specific to the basin combined with those specific to water conflict and cooperation, I searched for water-related news articles in the Euphrates-Tigris River Basin that were published between 2009 and 2023. The search generated over 10,000 results.³ After removing duplicates and irrelevant articles, I selected articles manually according to the protocol described in the next section. Using the same search protocol, I retrieved additional articles from BBC Monitoring's subscription news service. While there was significant overlap between the results returned by Lexis Uni and BBC Monitoring, the latter also returned articles that Nexis Uni had not captured.

Coding protocol

I based my coding protocol on that used by the BAR project and the International Freshwater Events Database. The BAR scale, which is derived from Azar's (1980) Conflict and Peace Databank (COPDAB), was created to measure the conflict/cooperation intensity of individual interactions on a scale of -7 to +7, where -7 denotes the highest level of conflict (formal declaration of war) and +7 denotes the highest level of cooperation (unification into one nation). Given that the purpose of this study is to reconstruct a timeline of water-related interactions and plot the conflict/cooperation intensity of each individual interaction, the BAR scale methodology is used in this article.

There are other methods of measuring the conflict/cooperation intensity of water interactions, particularly Mirumachi's TWINS matrix (Transboundary Water Interaction NexuS), which provides a useful way of visualising how conflict and cooperation can co-exist and change over time (Mirumachi, 2015; Zeitoun and Mirumachi, 2008). The two-dimensional nature of the TWINS matrix highlights the dual nature of hydropolitical interactions and centralises the question of *how* conflict and cooperation are able to co-exist in the first place; however, it is better suited for analysing broad trends in relationships over time rather than measuring the conflict/cooperation intensity of single discrete interactions.

Interactions involving non-state actors were not considered in the original BAR scale; I therefore created a modified BAR scale (Table 1) that includes them in my coding of events data. I also removed the neutral ranking from the BAR scale (denoted by 0) because interactions are never truly neutral; even rhetorical policy statements or non-governmental visitors – which are categorised as neutral in the original BAR scale – can be perceived as acts of conflict or cooperation. I also added additional water-related actions that were not originally captured by the BAR scale.

² Throughout this article, I refer to water events and water-related interactions. 1) A *water event* refers to the particular incident described in the data source; it is a single event regardless of the number of (state and non-state) actors involved and the number of actual interactions. A water event could take place, for example, between a single country-pair (dyad) in a single interaction, or it could occur over a period of time and between numerous state and non-state actors including NGOs. 2) Every *interaction* is represented by a row in my database. Each row refers to a single dyad and everything that took place between them within an 'event'. If more than two actors were involved in an event, then that event will have multiple rows – one for each dyad. An event that involved three different actors, for example, would have three associated rows to represent all possible actor pairings. To help distinguish between events and interactions in the database, each is associated with a unique ID.

³ For a full list of the search terms, see Chapter 1 of Turgul (2025).

Table 1. The modified Basins at Risk (BAR) scale that was created to rate the conflict/cooperation intensity of each interaction in the study

BAR scale	Description
-7	<i>Formal declaration of war</i>
-6	<i>Extensive war acts causing deaths, dislocation or high strategic cost:</i> Use of nuclear weapons; full-scale air, naval or land battles; invasion of territory; occupation of territory; massive bombing of civilian areas; capturing of soldiers in battle; large-scale bombing of military installations; chemical or biological warfare
-5	<i>Small-scale military acts:</i> Limited air, sea or border skirmishes; border police acts; annexing territory already occupied; seizing material of target country; imposing blockades; assassinating leaders of target country; material support of subversive activities against target country; capture of water infrastructure by a state or quasi-state actor; large-scale destruction of water infrastructure by state actor or quasi-state actor
-4	<i>Political military hostile actions:</i> Inciting riots or rebellions (training or providing financial aid to rebels); encouraging guerilla activities against a target country; engaging in limited and sporadic terrorist actions; kidnapping or torturing foreign citizens or prisoners of war; giving sanctuary to terrorists; breaking diplomatic relations; attacking diplomats or embassies; expelling military advisors; executing alleged spies; nationalising companies without compensation; local (village-level) destruction of infrastructure by a state actor; intervention in small-scale protests by the state; mobilisation of troops; violent protests
-3	<i>Diplomatic-economic hostile actions:</i> Increasing troop mobilisation; boycotts; imposing economic sanctions; hindering movement on land, on waterways or in the air; embargoing goods; refusing mutual trade rights; closing borders and blocking free communication; manipulating trade or currency to cause economic problems; halting aid; granting sanctuary to opposition leaders; mobilising hostile demonstrations against a target country; refusing to support foreign military allies; recalling an ambassador for emergency consultations regarding the target country; refusing visas to other nationals or restricting movement inside a country; expelling or arresting nationals or press; spying on foreign government officials; terminating major agreements; seizure of property by the state; halting negotiations; engaging in small-scale non-violent protests; withdrawing from an agreement; local-level vandalism/property destruction by a non-state actor; cutting off water access; unilateral construction of a dam or other infrastructure; reducing the flow of water to another country; abrogating a water agreement; legal proceedings; a threat to destroy water infrastructure from a state actor
-2	<i>Strong verbal hostility:</i> Withdrawal of support; official statements that threaten further discord; official letters of complaint; threats to withdraw from a treaty; face-to-face disagreement
-1	<i>Mild verbal expressions of opposition or discord:</i> Statement of disagreement in an interview with a news outlet; disagreement expressed by a non-state actor; failing to reach an agreement; communicating dissatisfaction through a third party
1	<i>Dialogue, mild verbal exchanges:</i> Meeting of government officials to discuss water sector issues; hosting of a conference or other platform for multi-party dialogue; visits by officials; request for a meeting; meeting of non-state and state actors; comments about cooperation expressed in an interview

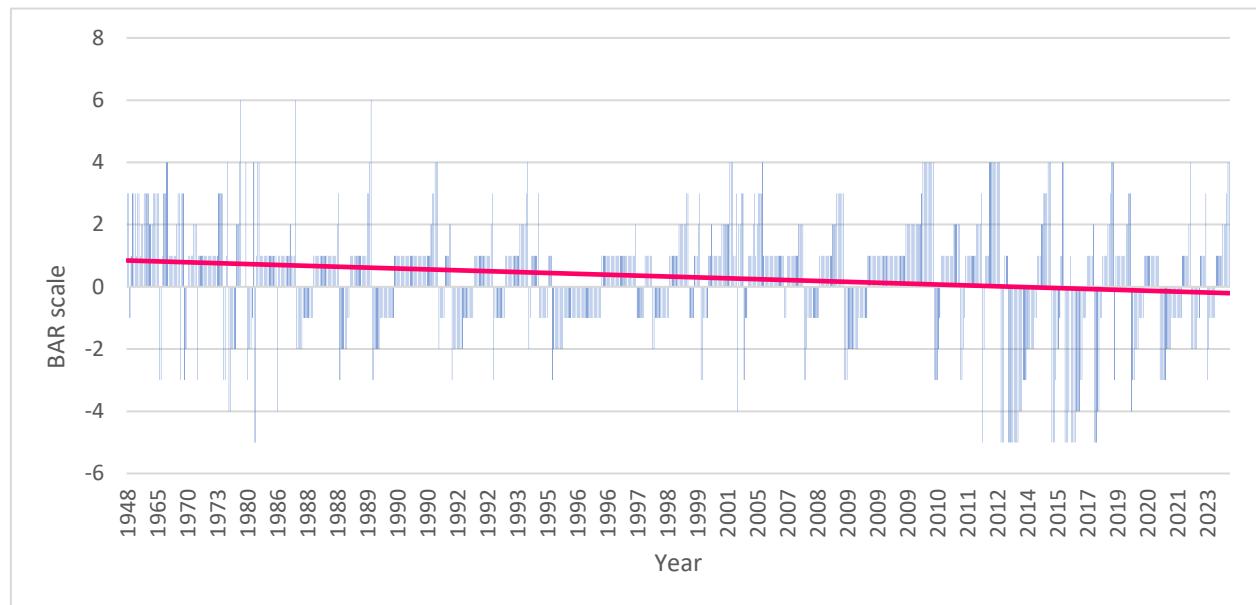
2	<i>Strong verbal support:</i> Statements of agreement or cooperation; raising a legation to an embassy; reaffirming friendship; asking for help against a third party; apologising for unfavourable actions or statements; allowing entry of press correspondents; asking/thanking for aid; resuming broken diplomatic or other relations; parties agree to enter into negotiations; joint site visits; report issued by non-state actor
3	<i>Cultural or scientific agreements:</i> Initiating diplomatic relations; establishing technological or scientific communication; proposing or offering economic or military aid; recognising a government; opening borders; conducting or enacting friendship agreements; conducting cultural or academic agreements or exchanges; agreements to set up cooperative working groups between states; financial agreements involving a country outside of the basin (foreign aid to water sector); any other agreement involving a non-state actor; agreement between non-state actors; signing of meeting minutes
4	<i>Non-military economic, industrial, technological agreement:</i> Making economic loans or grants; agreeing to economic pacts; giving industrial, cultural or educational assistance; conducting trade agreements or granting most-favoured-nation status; establishing common transportation or communication networks; selling surplus industrial/technological supplies; providing technical expertise; ceasing economic restrictions; repaying debts; selling non-military goods; giving disaster relief; financial agreement involving countries within the basin; agreement (even if only verbal) to undertake a cooperative watershed management project; water sales agreements; any other agreement between state actors; increasing water flow
5	<i>Military economic or strategic support:</i> Selling nuclear power plants or materials; providing air, naval or land facilities for bases; giving technical or advisory military assistance; granting military aid; sharing highly advanced technology; intervening with military support at the request of a government; concluding military agreements; training military personnel; joint programmes and plans to initiate and pursue disarmament.
6	<i>International freshwater treaty; major strategic alliance (regional or international):</i> Fighting a war jointly; establishing a joint military command or alliance; conducting joint military manoeuvres; establishing an economic common market; joining or organising international alliances; establishing a joint programme to raise overall quality of life
7	<i>Voluntary unification into one nation:</i> Merging voluntarily into one nation (state); forming one nation with one legally binding government

Each relevant article collected was coded according to the above modified BAR scale to determine the conflict and cooperation intensity of the interaction(s) described in the article. After coding all events, I created a timeline of multi-scalar water conflicts and cooperation that facilitated analysis of the relationships between water-related events and domestic pressures such as changes in the ruling political party, as well as analysis of the influence of broader international relations on water-related events. Analysis of events data was supplemented by interviews with academics, government officials and NGO workers from across the basin.

PRESENTING THE WATER INTERACTIONS DATABASE FOR THE EUPHRATES-TIGRIS BASIN

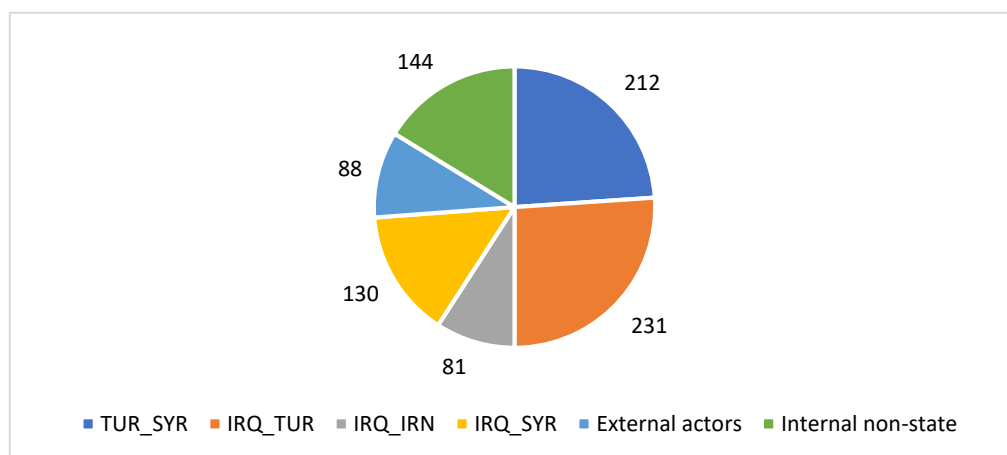
Between 1948 and 2023, 838 documented interactions over water took place in the Euphrates-Tigris River Basin (Figure 2). Most of these interactions took place between three country dyads: Iraq-Turkey, Syria-Turkey and Iraq-Syria (Figure 3).

Figure 2. Conflict/cooperation intensity of water-related interactions in the Euphrates-Tigris River Basin between 1948 and 2023



Note: The red trendline depicts a general trend towards conflict between states.

Figure 3. Total number of interactions in the Euphrates-Tigris River Basin by actor dyad between 1948 and 2023



Note: 'External actors' refers to actors from outside the basin, for example a third-party state providing aid; 'internal non-state actors' refers to non-governmental actors from inside the basin, as in, for example, a non-governmental organisation.

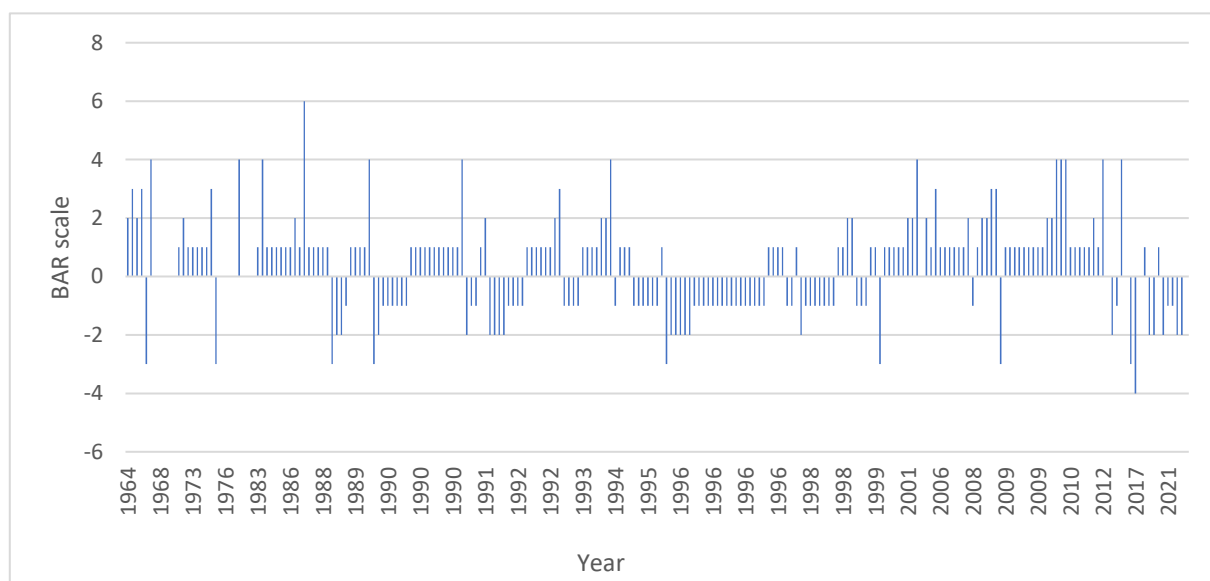
As seen in Figure 3, a significant number of interactions ($n = 81$) also occurred between Iraq and Iran. These interactions occurred mostly over the Shatt al-Arab River, which forms the border between the two countries for 50 miles (80 kilometres) before discharging into the Persian Gulf. This border stretch of river forms Iraq's only access point to the Persian Gulf; as such, it is of great strategic importance to the country and has served as a significant bone of contention between Iraq and Iran. Of the total interactions between the two countries, 35.9% have centred around ongoing disputes regarding sovereignty over that

stretch of river. Indeed, these struggles over sovereignty contributed directly to the 1980 outbreak of the Iraq-Iran War, which caused devastating economic, humanitarian and environmental consequences for the region (Islam et al., 2025).

Over the past seven decades, the ET Basin has experienced alternating patterns of conflict and cooperation, with a general trend towards conflict. Until, 1964; the riparian states did not interact over water; they elected instead to focus on internal nation-building programmes in the post-independence period and pursue unilateral hydraulic development in support of those goals. The relatively high level of cooperation that persisted throughout this period (Figure 2) is due to contributions from external donors in support of water development programmes. As unilateral development accelerated, cooperation became less frequent. In 1966; Turkey announced the start of construction on the Keban Dam, and in 1968, Syria began building the Tabqa Dam; both dams are on the Euphrates River and their construction led to the emergence of conflict. Alternating patterns of conflict and cooperation persisted in the 1970s and 1980s as Turkey and Syria continued their dam-building programmes. In 1971; Syria and Iraq began talks on the use of Euphrates water, and the following year Turkey, Syria and Iraq agreed that a tripartite joint technical committee (JTC) should be formed to discuss technical issues relating to dam construction. Although the JTC was not formally established between all three riparians until 1983, numerous trilateral meetings were held in 1972 and 1973, during which visits were made to various project sites and discussions took place with regard to how to fill the Keban and Tabqa reservoirs while also meeting downstream irrigation needs (Figure 2). During this time, interactions were mostly limited to state actors within the basin; an important exception, however, was Saudi Arabia's 1975 mediation (and averting of a violent conflict) in a dispute between Iraq and Syria that erupted when Syria and Turkey began to impound the Tabqa and Keban reservoirs. During the 1960s and 1970s, ongoing border disputes between Iraq and Iran over the Shatt al-Arab also contributed to patterns of conflict. The Algiers Agreement was signed in 1975 with the intended goal of resolving this dispute, however Iraq abrogated this agreement when it invaded Iran in 1980.

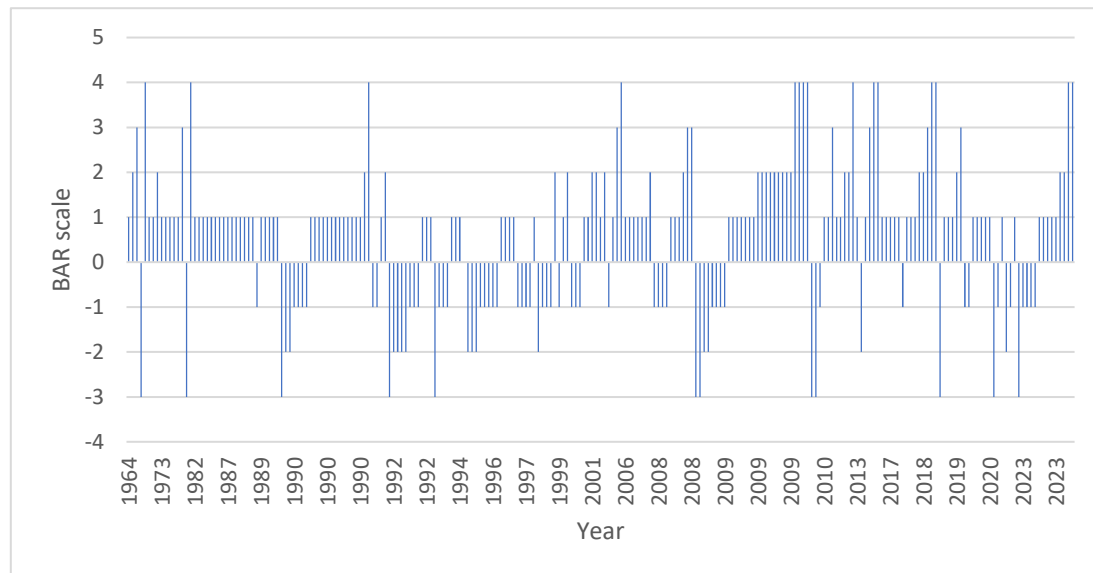
Throughout the 1990s, water interactions continued to fluctuate between low levels of conflict and low-to-medium levels of cooperation. The 1998 signing of the Adana Protocol between Turkey and Syria marked a turning point in hydropolitical relations between the two riparians. As the Figure 4 graph of Turkish-Syrian water interactions shows, cooperation persisted until the 2011 outbreak of the Syrian civil war.

Figure 4. Conflict/cooperation intensity of Turkish-Syrian water interactions between 1948 and 2023



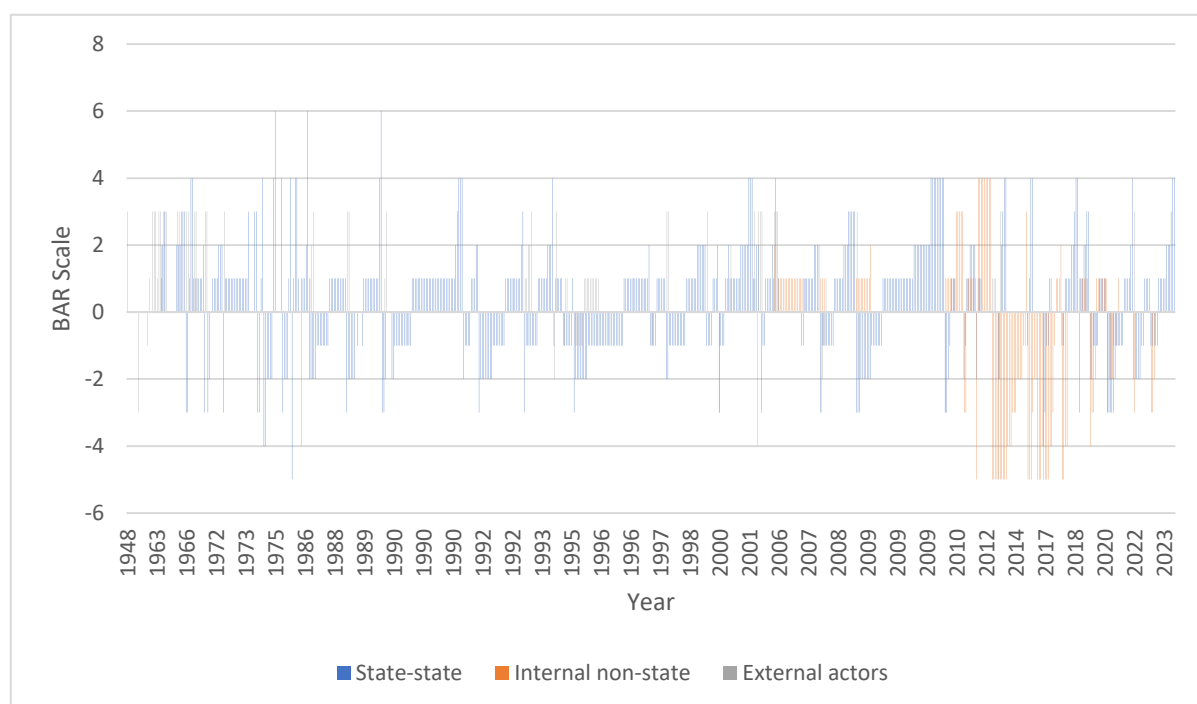
Hydropolitical relations between Turkey and Iraq, on the other hand, continued to fluctuate quite significantly until the early 2000s; at that point, as the political situation in Iraq improved, they began to trend towards cooperation.

Figure 5. Conflict/cooperation intensity of Turkish-Iraqi water interactions between 1948 and 2023



From around 2005 onwards, non-state actors began to become more involved in water-related interactions in the basin.

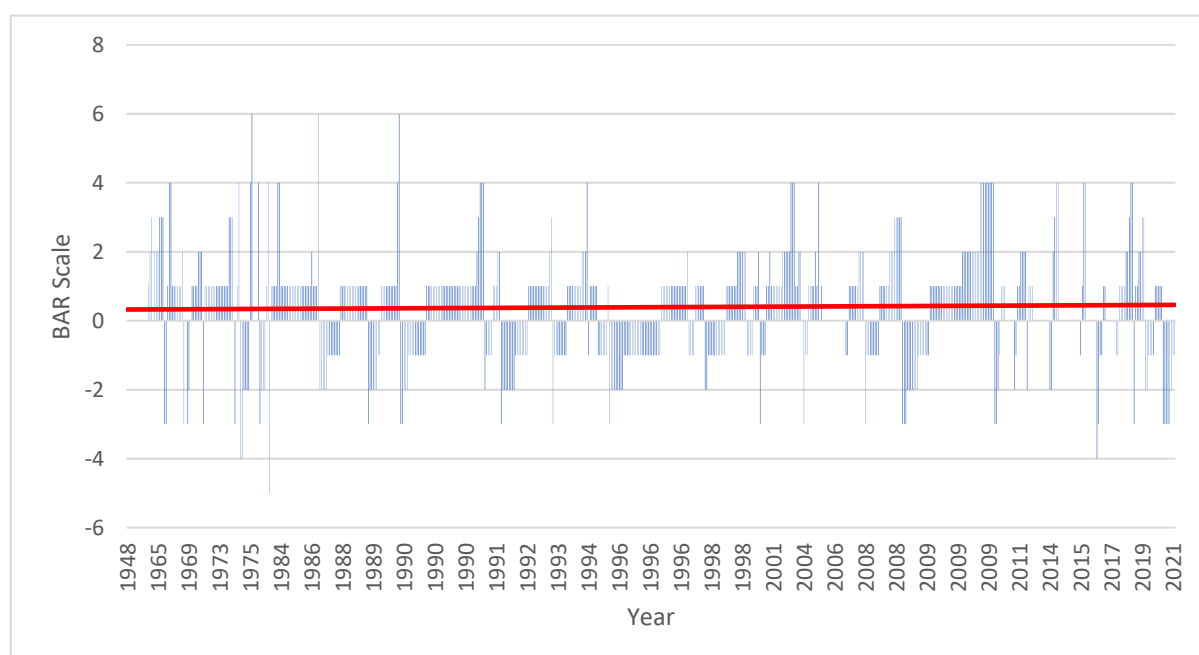
Figure 6. Conflict/cooperation intensity of water-related interactions in the Euphrates-Tigris River Basin between 1948 and 2023, disaggregated by actor type



The graph in Figure 6 shows the important influence of non-state actors on patterns of conflict and cooperation in the basin, particularly at low intensities of cooperation and in highly conflictive interactions. Low-intensity cooperation is common when non-state actors are included in the analysis; this is due to the role that civil society organisations play in bringing people from across political and sectoral boundaries together in conferences and capacity-building workshops. On the other end of the spectrum, however, higher-intensity conflict has occurred almost exclusively in situations involving non-state actors. This observation reflects the dynamics of conflicts with the Islamic State of Iraq and Syria (ISIS) in Syria and Iraq, and the activity of various rebel groups in Syria such as the Syrian Democratic Forces (SDF). Fighting between factions embroiled in the conflicts in Syria and Iraq was included in the database when it involved the use of water resources as either a weapon or a strategic military target. ISIS, for example, temporarily seized control of large dams such as the Tabqa Dam in Syria and the Mosul and Fallujah Dams in Iraq; while in control of these dams, it frequently weaponised water by cutting off water supplies to key cities and threatening to destroy water infrastructure (Daoudy, 2020). The dams held by ISIS were eventually recaptured by Kurdish forces allied with American and Iraqi security forces.

A striking contrast can be observed between what conflict and cooperation look like in Figure 6 compared to what these patterns look like when the analysis is limited to the state-to-state level (Figure 7).

Figure 7. Conflict/cooperation intensity of water-related interactions that occurred between state actors in the Euphrates-Tigris River Basin



Note: The red trendline depicts a general trend towards cooperation between states.

Comparing Figures 6 and 7, we can see that the latter does not show significant conflicts that occurred between 2012 and 2021. Limiting an analysis of water interactions to interstate relations thus has the effect of making it seem that more cooperation is happening than really is. Indeed, when a linear trendline is added to Figure 7, hydropolitical relations appear to show a slight trend towards cooperation. As seen in Figure 2, however, this clearly is not the case as conflict between state and non-state actors in the basin has intensified since 2012. Aside from significantly influencing patterns of conflict, non-state actors have also made important contributions to cooperation in the basin. Beginning in 2005, NGOs,

epistemic communities and other civil society initiatives became active. Among the first of these was the Euphrates-Tigris Initiative for Cooperation (ETIC), an epistemic community of academics and other experts from Syria, Iraq and Turkey. Until conflict in Syria forced a halt to their activities, they worked to enhance dialogue around water resources by hosting study tours and capacity-building workshops (Kibaroglu, 2019). Other similar work was conducted by Blue Peace Middle East and by advocacy platforms such as Save the Tigris, which have continued to persist throughout periods of recent political instability, albeit at a smaller scale. A multi-scalar approach to hydropolitical analysis is necessary to capture these 'hidden' elements of basin conflict and cooperation.

The remainder of this article will turn towards a discussion of the different factors that have shaped patterns of conflict and cooperation in the ET Basin. A detailed analysis of the domestic drivers that shape transboundary water policies is beyond the scope of this article, even though they certainly influence water conflict and cooperation. These drivers include internal pressures such as Turkey's accession to the EU, and a historical emphasis on agricultural expansion to achieve food security in Turkey, Syria and Iraq. Attention will instead be placed on how the broader non-domestic political relations may have influenced water interactions in the basin. The emphasis will be placed on factors such as the Iran-Iraq War, inter-Ba'ath party rivalry between Syria and Iraq, the international implications of the ongoing struggle for Kurdish statehood, and the impacts of the Syrian civil war on water relations.

INTERSTATE RELATIONS AND INTERSTATE HYDROPOLITICS

The securitisation of water resources by the three main riparians in the ET Basin has caused the fate of water resources to be intertwined with security considerations, such that the two are often viewed by policymakers as one and the same.⁴ As this article will show, this is particularly true in the case of ongoing conflicts with armed Kurdish groups both within and across country borders. Other flashpoints in international relations that have had an influence on the trajectory of water conflict and cooperation include the Iran-Iraq War, the Gulf War, the Syrian civil war, and the increasing involvement of non-state actors in transboundary water issues.

1960 to 1980: Unilateral development and increasing conflict

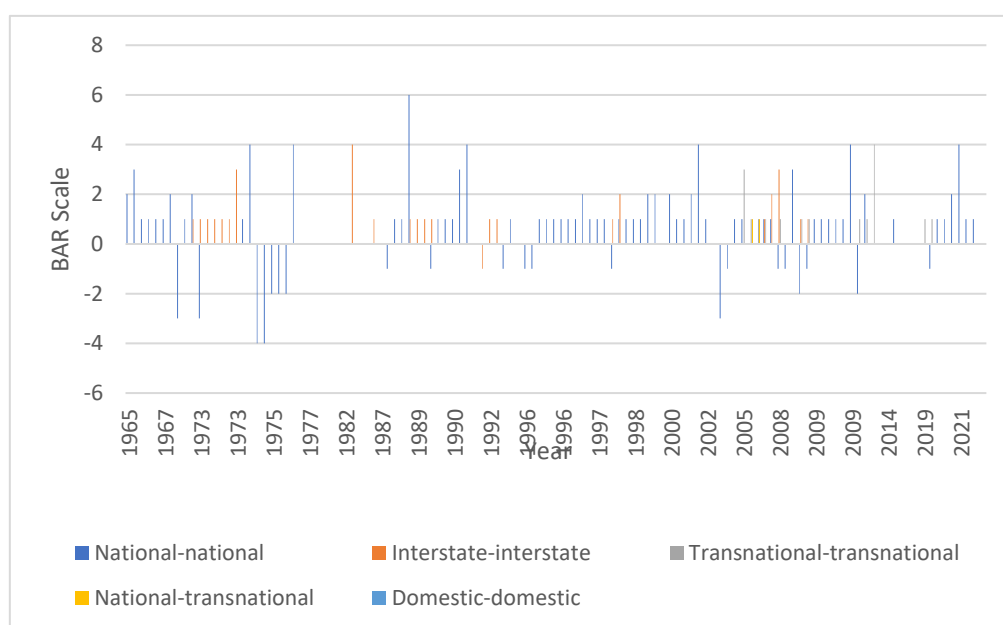
Prior to the 1960s, water cooperation prevailed in the ET Basin. This was mostly due to activities by external donor countries such as Germany and the Soviet Union who provided funding for the construction of dams (Figure 6). During that period, states were busy establishing hydrocracies in which state control over land and people was being expanded through hydraulic development and the "taming" of water resources (Wester et al., 2009), and through improving the water supply to urban and rural populations. Interest in transboundary waters was mainly limited to their relevance to the domestic policy agenda, and transboundary waters provoked little interaction among the states. Hydraulic development increased in response to the coupling of national prestige with the construction of infrastructure and in tandem with the priority placed on achieving food self-sufficiency. With these came an increase in interactions over transboundary waters as the uncoordinated nature of development in the basin led to disagreements about water use.

The Ba'ath party's rise to power in Syria and Iraq contributed further to an increase in water conflict. A series of military coups led to the 1963 seizure of power by the Ba'ath party in both Syria and Iraq. Founded in Syria in 1947, the Ba'ath party advocated for Arab unity based on economic and social justice. Its emergence as a dominant political force had several implications for transboundary water interactions. First, its ideology of pan-Arab unity and Arab nationalism changed how Turkey was viewed

⁴ One interviewee noted, for example, that while water had not previously occupied a high-priority position on the Iraqi national political agenda, it was now viewed as a security issue by the Iraqi government (Participant 10, personal communication, 9 September 2023).

by the Syrian and Iraqi regimes. As a member of NATO and playing host to a number of US military bases, Turkey was viewed as a close Western ally and was therefore regarded with some degree of suspicion by its Arab neighbours (Kibaroğlu and Sayan, 2021). Turkey's NATO membership positioned it in opposition to Soviet-sponsored Syria and Iraq, a political configuration that shaped water relations and for decades precluded significant cooperation beyond the technical level. Second, Ba'athist policies that promoted food security and elevated the prestige of agriculture contributed to unsustainable water use and water scarcity, particularly in Syria (Barnes, 2009). Third, rivalry between Ba'ath party factions in Syria and Iraq contributed to increased tensions between these countries, both water-related and otherwise. After a 1966 military coup deposed members of the party's National Command in Syria and replaced them with members of the party's Military Committee and Regional Command, the Ba'ath party split into a Syria-dominated movement and an Iraqi-dominated movement (Hinnebusch, 2015). At the root of the rivalry between the two factions was a power struggle between Hafez al-Asad (who came to power in 1970) and Saddam Hussein (who came to power in 1968), as well as increasing nationalist sentiments oriented around the nation-state rather than pan-Arabism. This power struggle contributed to increasing distrust between the Syrian and Iraqi regimes, which in turn affected hydropolitical relations that had previously been overwhelmingly cooperative (Figure 8).

Figure 8. Conflict/cooperation intensity of Iraqi-Syrian water interactions between 1948 and 2023

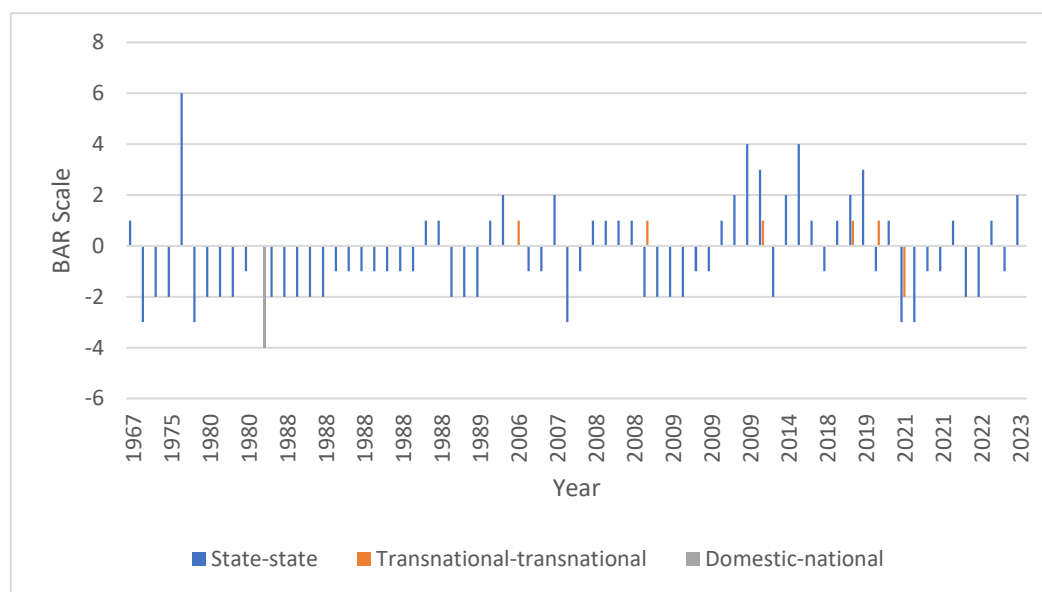


In 1975, the two states faced a water crisis that was precipitated by drought and the simultaneous filling of the Keban and Tabqa Dams in Turkey and Syria. This situation provided the perfect excuse for declaring war and would have come to blows had it not been for Saudi Arabian mediation.

The time between 1960 and 1980 also saw increasing water conflict between Iraq and Iran, which directly contributed to the 1980 outbreak of the Iran-Iraq War (Figure 9). Iran contributes about 10% of the Tigris water flow through various tributaries, and the Shatt al-Arab (formed at the confluence of the Euphrates and Tigris Rivers) forms the border between Iran and Iraq for the last 80 kilometres of its course. Dam construction by Iran on the Tigris River's tributaries have posed a significant concern for Iraq, which is directly downstream (Chomani and Bijmens, 2016; Keynough, 2021). Sovereignty over the Shatt al-Arab has been a source of disagreement between Iraq and Iran as the river is Iraq's only point of access to the Persian Gulf and is an important transport route for Iranian crude oil (Climate Diplomacy,

n.d.). In 1975; after years of disputes concerning borders and sovereignty over the Shatt al-Arab, the two countries signed the Algiers Agreement in which Iraq recognised Iran's sovereignty over half of the river in exchange for an end to Iran's support of Kurdish rebels. Tensions over the river came to a head in 1979, just prior to the start of the Iran-Iraq War, when Iraq withdrew from the agreement, which was largely seen within Iraq as a humiliating concession. Iraq's withdrawal from the treaty fanned the flames of budding tensions over broader territorial disputes and over fears that the Iranian revolution would foster rebellion among Iraq's Shi'a majority. The start of the Iran-Iraq War shortly thereafter further undermined water relations between the two countries, and over the next decade only 2 of the 19 documented water interactions were cooperative (Figure 9).

Figure 9. Conflict/cooperation intensity of Iraq-Iran water interactions between 1948 and 2023



1980 to 1998: Strained relations over strained waters

Iraq-Syria water relations

Between 1980 and 1998, political tensions continued to insinuate themselves into all aspects of water interactions between the riparians of the ET Basin. From 1980 to 1988, the Iran-Iraq War wreaked havoc on the region and on Iran-Iraq water relations and impacted water relations between other riparians. Competition between rival Ba'ath party factions in Syria and Iraq led the former to take Iran's side during the war. Syrian support for the US-led coalition against Iraq during the Gulf War led to a further deterioration in political relations, and diplomatic and commercial ties between Syria and Iraq were cut until 1997; water interactions between the two countries also ground to a halt.

Between 1980 and 1988, only 14 water interactions occurred between Syria and Iraq (Figure 8); however, two observations about the nature of Syrian-Iraqi relations during this time must be made. The first is that interactions picked up in the 1990s, and the second is that most interactions (82.5%) during the 1980s and 1990s were cooperative. How is it that interactions over water persisted in a quite positive manner even while the two countries were on opposite sides in two regional conflicts and while political relations had, for all intents and purposes, stopped? This attests to Iraq and Syria's need to cooperate to mount an effective response to increasing development upstream in Turkey (Kibaroglu and Scheumann, 2013). All but a few of the interactions between Syria and Iraq in this period were related to Turkey's exploitation of the Tigris and Euphrates River as part of its GAP; furthermore, over half of the interactions

involved some degree of technical cooperation, suggesting that limiting discussions to technical issues such as methods for allocating water was a fruitful way to sustain dialogue. The Joint Technical Committee (JTC) established in 1983 between Iraq, Syria and Turkey provided a platform for the riparians to engage in dialogue even when broader political relations were frozen. The JTC met 16 times before negotiations were suspended in 1993 due to disagreement over whether the Tigris and the Euphrates should be considered separately or as a single system (Kibaroglu, 2002). Even after the JTC stopped meeting, however, Iraq and Syria continued to conduct talks at the highest political level, indicating that reaching a solution to the question of aggressive upstream development was critical (Figure 8). Indeed, in 1989,⁵ Iraq and Syria signed an agreement allocating Iraq 58% and Syria 42% of the water from the Euphrates River that passes through the Syrian border with Turkey (Law No.14 of 1990, Art. 1).

Turkish-Iraqi water relations

The effects of the Iraq-Syria rift were not limited to the water interactions of these two countries. As Figure 5 shows, water cooperation between Iraq and Turkey increased during this time, especially during the early 1990s, and between 1980 and 1998 cooperative interactions constituted just over half (51.9%) of all their interactions. While some of this increased cooperation is due to meetings that took place at the interstate level within the framework of the JTC, cooperation also increased between national governments due to mutual trade and security dependencies. Prior to the escalation in hostilities between Syria and Iraq during the Iran-Iraq War, Iraq exported just under half of its petroleum to Syria, equivalent to about 900,000 barrels a day (*Washington Post*, 1982). When Syria closed its border to Iraq in 1982, the latter became dependent on Turkey as its only oil outlet. Lacking large oil reserves, Turkey depends heavily on Iraq as one of its main oil suppliers (the other being Russia). Throughout the 1980s, this mutual dependency contributed to patterns of sustained Iraqi-Turkish water cooperation and it has continued to promote water cooperation to this day (Participant 8, personal communication, 11 August, 2023). After Iraq invaded Kuwait in 1990, economic sanctions halted all Iraqi oil exports and severely damaged the Turkish-Iraqi trade relationship.

Water relations between Turkey and Iraq are also shaped by shared security issues. In the aftermath of the Gulf War, Turkey was greatly concerned by the prospect of increased attacks by the Kurdistan Workers' Party (PKK) from northern Iraq (Çarkoğlu and Eder, 2001). Against a backdrop of increasing power struggles between rival Kurdish factions and the lack of a stable government in the region, Saddam Hussein had launched a bloody campaign against the Kurds in northern Iraq. This campaign displaced approximately 1.5 million Kurdish refugees into Turkey and Iran. Creation of a humanitarian 'safe haven' above the 36th parallel gave the PKK a stable base from which they could conduct attacks against Turkey. The confrontational nature of water interactions between Iraq and Turkey sharply increased during this turbulent period. Political relations between the two countries soured further when Turkey sided with coalition forces during the Gulf War and severed economic ties with Iraq. As a result, Iraq began to ally itself more with Syria over water issues, particularly in opposition to GAP and construction of the Atatürk Dam. Iraqi-Turkish water talks were suspended in 1993, and between 1993 and 1997 Iraq asked for Arab League support in presenting a united Arab front against Turkish water aggression.

Turkish-Syrian water relations

The Kurdish conflict is one of the most significant shapers of water conflict and cooperation between Turkey and Syria. Its influence on Turkish-Syrian water relations is most apparent in the 1990s. Throughout the 1980s and 1990s, Syria acted as a home base for the PKK and its leader, Abdullah Öcalan, who conducted numerous attacks against Turkey from Syrian soil. As attacks by the Syrian-supported PKK intensified in the late 1980s, water conflicts also became more frequent. It was against this backdrop that

⁵ The Joint Minutes were signed in 1989 and ratified in 1990.

water and security issues were linked for the first time. In 1987, Turkey and Syria signed an agreement in which Turkey pledged to maintain an annual average flow of 500 million metres per second (Mm^3/sec) at the Turkish-Syrian border. A parallel mutual security accord was signed which obligated both sides to prevent activities that harmed the other country from originating in their own territory, and which committed both countries to allowing extradition of criminals responsible for such activities (Kibaroglu, 2019). The water-security linkage continued throughout the 1990s as Turkey used its position upstream on the Euphrates as leverage over Syria and reduced flow whenever Syrian support for the PKK intensified. The increasing frequency of Turkey-Syria water conflict from 1995 onwards corresponds to an intensification of Turkey's conflict with the PKK. Intensification of both conflicts continued until 1998, when Turkey threatened Syria with military action if it did not do something about Öcalan and the PKK. Not wanting war, Syria signed the Adana Protocol, in which it formally ceased support for the PKK. Öcalan was subsequently expelled from the country and captured by Turkish security forces in Nairobi. The signing of the Adana Protocol ushered in an era of renewed Turkish-Syrian water cooperation that lasted until the outbreak of the civil war in 2011 (Figure 4).

Events in the global geopolitical arena, namely the collapse of the Soviet Union and the end of superpower bipolarity, also influenced water relations in the ET Basin. In the post-Cold War period, Syria sought to improve its relations with the West; it first became involved in the Madrid peace process⁶ and then later began direct peace talks with Israel. The collapse of these talks in the early 2000s, along with other international events such as the 9/11 attacks and Syria's opposition to the invasion of Iraq, caused the US to put increasing pressure on Syria (Conker, 2014). Cooperation with Turkey, a Western ally, thus therefore, became strategically important to Syria as a way to gain a foothold in the West. For its part, Turkey saw an opportunity to expand its reach once its eastern flank was free of Soviet influence, and pursue a more active foreign policy in the Middle East (Conker and Hussein, 2019). As a result, Turkish-Syrian hydropolitical relations gained a momentum that persisted into the 2000s.

1998 to the present: The increasing influence of non-state actors on water conflict and cooperation

As evidenced in Figure 6, non-state actors did not become heavily involved in water interactions until the early 2000s. The first decade of the 2000s saw the creation of opportunities for involvement in water interactions by NGOs and other non-state actors due to the stabilisation of the political situation throughout the basin that followed the ousting of Saddam Hussein and the warming of Turkish-Syrian relations after the signing of the Adana Protocol (Kibaroglu and Sayan, 2021). Figure 6 shows the generally positive effect that civil society organisations and transnational advocacy networks had on the nature of water interactions in the basin. Between 2000 and 2010, of the 47 interactions that involved non-state actors from the basin only one was conflictual, and it involved conflict between Turkish forces and PKK clusters based in northern Iraq. The outbreak of war in Syria in 2011 dramatically changed how non-state actors interacted with water in the basin. Between 2011 and 2023, of the 95 interactions involving non-state actors from the basin, 58 (61.1%) involved conflict, usually at a high intensity. The sharp increase in overall basin conflicts and in interactions that specifically involved non-state actors is due to two broader political conflicts: those between state or rebel forces and ISIS, and those between Turkish forces and Kurdish coalition groups in Syria such as the SDF and its primary military arm, the Kurdish People's Protection Units (YPG). While cooperative interactions did occur, the scope and impact of such cooperation was more limited.

⁶ The 1991 Madrid Conference launched a diplomatic initiative co-sponsored by the United States and the Soviet Union whereby Israel and its Arab neighbours undertook direct bilateral and multilateral negotiations

Civil society and transboundary waters

The end of the Cold War presented an opportunity for people from other countries to learn from, and work with, each other on pressing issues such as water (Participant 5, personal communication, 24 July, 2023); however, due to a volatile political situation in the basin that lasted until the early 2000s, forming such transnational ties proved difficult and hydropolitical relations remained almost exclusively the purview of the state.

The Euphrates-Tigris Initiative for Cooperation (ETIC) was one of the first and most active civil society organisations involved in transboundary water issues in the ET Basin. Established in 2005 by scholars and professionals from Syria, Turkey and Iraq as an unofficial Track II diplomatic effort that was unaffiliated with any state government, its mandate was to promote technical, social and economic cooperation and development in the ET Basin. To advance its goal of increasing cooperation between the riparians, ETIC employed a unique approach that extended beyond the water rights debate at the centre of much of the interstate conflict in the basin to focus was on issues relating to environmental protection, gender equity, and grassroots participation in decision-making (Kibaroglu, 2008).

The organisation's first activities in 2005 and 2006 focused on convening sessions at international conferences such as the World Water Forum to explain the initiative and grow its network (Participant 5, personal communication, 24 July, 2023). As ETIC's network grew and as it obtained funding from donors such as the FAO and USAID, it began to host capacity-building workshops with experts from all the basin states, including Iran. These activities included a dam safety workshop in 2006 and a 2007 stakeholder workshop on Technical Cooperation for Regional Development in the Euphrates and Tigris Region. In 2009; among other activities ETIC launched a four-year project on collaborative planning and knowledge development in the ET Basin; this project was aimed at building confidence among practitioners and establishing a data bank for the basin. During the first decade of the 2000s, as evidenced in Figure 6, ETIC engaged in many cooperative initiatives. While their work did not directly influence interstate water relations, which were already quite cooperative during this period, their work was significant in that it brought together stakeholders – including government officials – from all riparians to work together in the same room at a time when most water interactions were conducted bilaterally. In 2011; after war broke out in Syria, ETIC faced the major challenge of lack of Syrian participation. Ongoing conflicts in both Syria and Iraq, along with a lack of governmental support, have since brought ETIC's programming to a halt (Participant 5, personal communication, 24 July, 2023).

Blue Peace Middle East

Blue Peace Middle East is one actor that is continuing to implement activities to promote cooperation in the basin, even against the broader context of ongoing violent conflict. Blue Peace is a regional non-governmental initiative that works with water experts, politicians, academics, journalists and youth to promote water as a tool for peace in the ET Basin and throughout the Middle East. Although Blue Peace involves government officials in some of its programming, it is a regionally owned platform and its members' decisions are unofficial (Participant 9, personal communication, 15 August, 2023). The initiative was launched in 2010 by country representatives from Iraq, Jordan, Lebanon and Turkey, with initial programming focused on technical issues such as implementing agricultural projects to build common dialogue. Unlike ETIC, Blue Peace has continued to function even as violence engulfed much of Iraq and Syria; this has been due in large part to substantial government support and financial support from diverse donors (Participant 5, personal communication, 24 July, 2023).

Transnational advocacy networks

Transnational advocacy networks are the third set of non-state actors that have influenced patterns of water conflict and cooperation in the ET Basin in the last 25 years. These networks form around issues that are perceived as problematic by certain groups and include, "those relevant actors working

internationally on an issue who are bound together by shared values, a common discourse, and exchange of information and services" (Keck and Sikkink, 1998: 217). A case in point is the Ilisu Dam, which was completed in 2018. Situated on the Tigris River along the border of Mardin and Şırnak provinces in southeastern Turkey, the dam and its reservoir are not far from the Iraqi border. The reservoir has an operating capacity of 7.5 billion m³ and accounts for approximately half of the Tigris' annual flow (Warner, 2012). The dam was (and continues to be) perceived as problematic by many stakeholders and was the focal point of numerous networks and advocacy groups, with opposition to it centred around its ecological and humanitarian implications. Changes in streamflow caused by the dam worries scientists and environmental activists because of the impacts it will have on endangered species such as the Eurasian otter and the Euphrates softshell turtle (Hockenos, 2019). Other opponents of the dam argue that flooding of the land to create the reservoir will precipitate a cultural and humanitarian crisis.⁷ The impacts of the dam on the ancient city of Hasankeyf, which dates to the late Assyrian period and houses countless archaeological treasures, is a focal point of activist activity both within Turkey and abroad. Below is a brief explanation of some of the activities conducted by transnational advocacy networks that have had the greatest impact on water conflict and cooperation in the basin.⁸

Networks of anti-dam activists led by a coalition of local Turkish NGOs and international NGOs (INGOs) managed to delay construction of the dam and caused several private European funders to back out in the early 2000s (Hommes et al., 2016; Tezcür et al., 2021). Ironically, the conflict introduced by the involvement of these organisations was at odds with interstate water interactions, which were improving in the 2000s (this pattern again happened in 2008 and 2009, see Figure 6). Turkey was unable to secure funding from major institutions such as the World Bank, which require the consent of downstream riparians before funding infrastructure projects; it thus privatised the water sector in the mid-1990s in order to fund the Ilisu Dam and other GAP projects. This privatisation opened the door to private European construction companies such as Balfour Beatty and Impregilo and to export credit agencies (ECAs) that covered the cost of project-related risks (Warner, 2012).

Privatisation, however, also made foreign investors vulnerable to pressure by groups calling for foreign companies to be accountable for their corporate governance practices. In a privatised setting, advocacy groups were able to more easily exert their influence precisely because private companies were involved and decision-making was thus no longer confined to the state (Participant 2, personal communication, 6 February, 2023). Indeed, private European companies such as Balfour Beatty and Swiss UBS Bank pulled out from the Ilisu Dam venture shortly after the release of a 2001 environmental impact assessment that failed to meet credit guarantees; their withdrawal effectively stalled the project for several years (Eberlein et al., 2010). Furthermore, the portrayal of the Ilisu Dam as an ecological and humanitarian disaster by local and international anti-dam activists such as the Initiative to Keep Hasankeyf Alive and Friends of the Earth helped internationalise the struggle against the Ilisu Dam and even led to the involvement of the European Court of Human Rights when an application opposing the dam was submitted (Kart and Özerkan, 2006).

The Ilisu project was revived in 2005 after the formation of a consortium of German, Swiss and Austrian companies. Since Turkey was unable to cover costs upfront, these companies applied to their ECAs for export risk coverage (Eberlein et al., 2010). The Initiative to Keep Hasankeyf Alive was formed in response to the establishing of this second funding consortium. Composed of a coalition of activists and 86 organisations, the Initiative to Keep Hasankeyf Alive became the region's biggest civil society platform dedicated to protecting the ecosystems and cultural heritage of southeast Anatolia (Participant 6,

⁷ A detailed account of the Ilisu Dam's many impacts, both positive and negative, is beyond the scope of this article. For an overview of its humanitarian and cultural impacts, consult, among others, İlhan (2010), PACE (2001), and Tezcür et al. (2021); for a review of its ecological impacts, see Hockenos (2019) and Kitchen and Ronayne (2002).

⁸ For more information about the various transnational advocacy networks that have advocated against the Ilisu Dam and impacted its construction, see Eberlein et al. (2010), Hommes et al. (2016), and Warner (2012).

personal communication, 31 July, 2023). At the same time, the European branch of the anti-Ilisu campaign was also being revived. It was composed of various NGOs, including the Berne Declaration Group, which advocated to ensure that the ECAs funding the Ilisu Dam held themselves and the Turkish government up to the highest environmental and social standards to protect the region's environment, culture, history and people. The pressure exerted on the Turkish government by these NGOs and the ECAs to meet said standards resulted in the withdrawal of export cover for the project and the withdrawal of the German and Swiss companies from the consortium after it became clear that the Turkish government was unable or unwilling to meet its contractual obligations (Eberlein et al., 2010). The Turkish government thus decided to finance construction of the dam on its own, which resulted in a more limited impact by advocacy platforms such as the Initiative to Keep Hasankeyf Alive (Participant 6, personal communication, 31 July, 2023).

Not all the transnational advocacy networks operating in the ET Basin have had an exclusive focus on saving Hasankeyf and stopping construction of the Ilisu Dam. Save the Tigris, for example, is a civil society advocacy platform that promotes the exchange of knowledge, ecological justice, and water as a tool for peace throughout the ET. Although originally begun with a focus on conducting campaigns against the Ilisu Dam, in the past decade the work conducted by Save the Tigris has become increasingly more regional (Participant 1, personal communication, 31 January, 2023). In a manner similar to ETIC, Save the Tigris has brought together activists from all four riparian states to develop a transnational advocacy network that promotes capacity building and awareness about regional water issues. In 2019 and 2020, Save the Tigris hosted the Mesopotamian Water Forum to provide an open space for stakeholders to engage in dialogue about the waters of the basin. It is important to highlight that the Mesopotamian Water Forum brought together actors from all countries of the basin during a period when cooperative water interactions at the interstate level were becoming less frequent. The Forum also provided another opportunity for multilateral dialogue in a region where most dialogue over water happens bilaterally.

The weaponisation of water in Iraq and Syria

In June, 2014; Abu Bakr al-Baghdadi, the leader of the Islamic State of Iraq and Syria, announced the establishment of a caliphate stretching from Aleppo in the west to Diyala on Iraq's eastern border. In capturing this territory, ISIS also gained control over vast swaths of vital water resources on which some 10 million people were dependent (BBC, 2018). These actions highlight the significant impact that non-state actors can have on patterns of water conflict and cooperation. Between 2014 and 2018, ISIS took part in 32 water interactions in Iraq and Syria, all but two of which involved the use of water as a weapon (see the concentration of orange bars between 2014 and 2018 in Figure 6). Although a relatively nascent field, the weaponisation of water has been conceptualised as the use of water as a military tool or target or otherwise using water to harm an adversary and/or fulfil strategic military or political objectives (Grech-Madin, 2025; King, 2015; von Lossow, 2016a). Daoudy (2020) provides a useful typology that reveals four ways in which water has been weaponised in the ET Basin; these include: its use to promote domination and legitimacy, its use as a military target, its use as a tool of war, and its weaponisation as a tool of cooperation. The capture of strategic dams enabled ISIS to cut off power and water supplies to key areas such as Ramadi and Mosul. After gaining control of the Ramadi Dam in 2015, for example, ISIS closed the dam gates to limit water supply to certain areas of Anbar province and lower water levels to make it easier to cross into pro-government areas such as Husaybah and Khalidiyah (Alkhshali and Smith-Spark, 2015). After capturing the Fallujah, Mosul and Samarra Dams, it enacted a similar strategy in order to deprive Shiite areas of water and disrupt agricultural production (von Lossow, 2016b). Aside from depriving key areas of water, non-state actors can also manipulate water resources under their control to strategically flood areas of opposition. When ISIS captured the Fallujah Dam in 2014, it closed the floodgates to flood government buildings upstream. The subsequent diversion of floodwaters damaged 200 km² of agricultural land, displaced 60,000 locals, and submerged the town of Abu Ghraib, which itself is just west of Baghdad (Lewis, 2014).

ISIS also used their control of the dams to stall enemy advances, threatening to flood major cities such as Baghdad and destroy the dams themselves. Maintaining control of large dams also enabled ISIS to expand its influence and resources by engaging in cooperation with the Syrian regime. In 2015; for example, ISIS and regime forces reached a deal in which ISIS agreed to supply electricity generated by the Tishrin Dam to all regime- and ISIS-held areas in Aleppo in return for the government continuing to supply the facility and pay its workers (von Lossow, 2016a). Recapturing these dams became a strategic priority, and by 2017 Iraqi forces and the US-backed SDF had regained control.

Not all the water interactions involving ISIS were conflictual. Interestingly, there were a few instances in which ISIS engaged in water conflict and cooperation as an actor in water diplomacy. It conferred with the Syrian government over the production of hydropower and operation of the Tishrin Dam near Aleppo, and it engaged in dialogue with Turkish authorities about maintaining water flow in the Euphrates. In 2014; Turkey had significantly reduced the flow of Euphrates water into Syria from 400 m³/sec to 150 m³/sec. Talks with Turkish officials included the de facto ISIS ambassador to Turkey; in those talks, agreement was reached for Turkey to restore the Euphrates flow in return for guarantees of its security and its safety from ISIS attacks (Speckhard and Shajkovci, 2019). These instances of cooperation emphasise the co-existing nature of conflict and cooperation in the ET Basin and highlight the quasi-state functions – such as provision of water and engagement in diplomatic negotiations – that ISIS performed during its engagement with water resources.

ISIS was not the only group to utilise water as a weapon and engage in conflictual water-related interactions. Between 2013 and 2023, 37 water interactions took place involving non-state actors other than ISIS such as the Free Syria Army (FSA), the SDF, and the Peshmerga (the standing military of Iraq's Kurdistan region). Early interactions centred on battles for ISIS-controlled dams, but after the 2017 territorial defeat of ISIS the SDF assumed control of much of northern Syria. As a Kurdish-led coalition, the SDF's territorial gains alarmed Turkey, which launched military campaigns against their forces, particularly in the de facto autonomous region of Rojava in northeastern Syria. Virtually all the conflictual water interactions that occurred from 2018 onwards were part of the wider military conflict between Turkish forces and the SDF; for instance, Turkey and allied rebels were accused of disrupting water supplies to Hasaka in 2021, which affected over one million people (HRW, 2023), and of cutting water to Afrin in 2018 by bombing a dam and public water facilities (*Reuters*, 2018). Clearly, the inclusion of interactions involving non-state actors in hydropolitical analysis highlights the important role they can play in shaping broader patterns of water conflict and cooperation.

CONCLUSION

This article provides insights into the complex geopolitics of the ET Basin region through presenting and examining a database of transboundary water interactions that took place there between 1948 and 2023. To present the most robust picture of water conflict and cooperation in the basin, it includes interactions that occurred between national, domestic and transnational actors. To that end, several observations can be made.

Conflict and cooperation in the ET Basin often co-exist. This coexistence can happen in three ways. First, it can occur simultaneously over different issues; for example, ET Basin riparians have historically come into conflict over issues relating to water quantity while having a parallel history of cooperating over technical issues; this was evidenced by the meetings of the Syria, Turkey and Iraq Joint Technical Committee which lasted from 1983 to 1993. Second, conflict and cooperation can coexist at different scales. Taking a multi-scalar approach to the study of transboundary water interactions helps shed light on how the nature of conflict and cooperation change depending on who is involved. Even as cooperation at the interstate level was persisting, high-intensity localised conflicts over water were happening as state military forces and opposition groups such as SDF fought for control over water, first with ISIS and then with each other (see Figure 6). Third, conflict and cooperation can co-exist at the same scale regardless

of what the interaction is about. Throughout the 1990s, for example, high-level bilateral and multilateral talks between Turkey, Syria and Iraq over water allocation were instances of cooperation; this cooperation, however, was also frequently interspersed with conflicts when the riparians engaged in verbal disputes over the same issues. Rather than necessarily being mutually exclusive, conflict and cooperation can be very clearly connected through a mutually constitutive relationship.

Until the 1990s, water-related conflicts played out within a conventional realist backdrop of state rivalry (Warner, 2012). Unilateral hydraulic development coincided with worsening political relations between Turkey and Syria and Syria and Iraq; the former were at odds over Syrian support of Kurdish insurgents, and the relations of the latter deteriorated after the Ba'ath party split in 1966. Turkey – fully engaged in fulfilling its own hydraulic mission – also faced opposition from downstream Syria and Iraq over fears that Turkish dams would significantly reduce downstream flow. While technical cooperation occurred between mid-level authorities from all three countries, hydropolitical interactions largely remained limited to the interstate level. Historically, Turkish-Iraqi interactions have been more cooperative due to strong bilateral trade ties and because of Iraq's focus on regional conflicts, which kept water off its political agenda. In the Turkish-Syrian relationship, however, water was consistently linked with security issues and therefore received more attention. This observation suggests that security issues may have been a primary driver of hydropolitics, not GAP-related tensions as is frequently cited.

In the past three decades, the conflict over the Euphrates and Tigris Rivers has become fundamentally transformed. The privatisation of the Turkish water sector in the 1990s invited the participation of new actors in water decision-making, profoundly altering the nature of water conflict and cooperation. Privatisation broadened the hydropolitical scene by attracting the attention of transnational actors who opposed Turkish dam construction and called for increased accountability from European investors. Domestically, pushback against dam construction had already been voiced since the 1980s, and the next two decades saw increasing involvement from anti-dam activists, epistemic communities, and other non-state actors protesting GAP. While interstate negotiations have been limited mainly to technical issues and have stalled in recent years, cooperation on social, technical and economic issues has continued through initiatives established under Blue Peace Middle East and ETIC. Other transnational organisations such as Save the Tigris have also promoted cooperation over water resources by providing spaces for open dialogue and engagement.

A multi-scalar analysis of water conflict and cooperation also highlights how non-state actors contribute to water conflict through the weaponisation of water resources. Throughout the course of the civil war in Syria and the rise and fall of ISIS, water has been used by non-state armed groups to advance their military goals. The capture of large dams in Iraq and Syria by ISIS enabled militants to selectively deprive opposition areas of water and electricity, threaten to destroy water infrastructure, and flood villages. At the same time, ISIS adopted state-like behaviour by providing strategic areas with basic services such as water and electricity. This weaponisation of water by ISIS, a non-state actor carrying out activities conventionally associated with the state, is an example of how non-state actors may employ different power strategies to contest hegemonic behaviour and create new spaces of hydropolitical engagement that themselves reconfigure power relations.

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