Peace Be Dammed? Water Power and Water Politics in the Tigris-Euphrates Basin

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Peace Be Dammed?

Water Power and Water Politics in the Tigris-Euphrates Basin

An Honors Paper for the Department of Government and Legal Studies

By Camille Elizabeth Wasinger

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Chapter 1: Introduction

“As it is fundamental to the social, economic, and environmental sustainability of every community and every political economy, water is a strategic resource.”

In 1991, soon before Boutros Boutros Ghali became Secretary General of the United Nations, he famously proclaimed, “the next war in the Middle East will be over water, not politics.” Although oil and Islamic sect differences beat water to the punch, Ghali’s comment represents an acknowledgement of the growing importance of water in international political and economic discourses worldwide. Today, the price of a bottle of water exceeds the spot price of oil, reflecting a coming age of unprecedented liquid scarcity.

Water is unlike any other natural resource. It is simultaneously a fundamental human right and a critical economic input. It has no substitutes and often transcends national boundaries, imbuing it with immense value and the potential for use as a potent weapon in its insufficiency. In May 2014, the United Nations declared water a “weapon of war in military conflicts.”

4,500 years ago, Mesopotamian city-states Umma and Lagesh fought the only known war exclusively over water for control of the Tigris and Euphrates rivers in the marshlands of the Fertile Crescent (present day southern Iraq). Since then, while armed conflict over water has been avoided, disputing claims and tension among states over control of, and access to, water resources are by no means unusual. The United States and Mexico have squabbled over the Rio Grande and the Colorado, India and Pakistan for the Indus, and Egypt and Ethiopia along the Nile. However, as if the landscape remembers the blood that

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1 Adams, Water and Security Policy: The Case of Turkey, 1.
2 Chellaney, Water, Peace, and War: Confronting the Global Water Crisis, xii.
3 Deen, “U.N. Decrees Water as Weapon of War in Military Conflicts.”
5 Chellaney, Water, Peace, and War: Confronting the Global Water Crisis, xii–xiii.
ran next to the water 4,500 years ago, it is in the arid Middle East that tempers run highest over transboundary water resources.

In a region already fraught with political and religious tumult, water seems more often to inspire predictions of dispute than extinguish them. In a 2013 Strategic Foresight Group study on worldwide water cooperation, the Middle East demonstrated the lowest trust and political will for cooperation among co-riparians, most systematic exclusion of one or more riparian state in negotiations, the least active cooperation, and, where treaties exist, least satisfactory mechanisms for dispute resolution. Among the international river basins of the Middle East, the Tigris-Euphrates, shared among Turkey, Iraq, and Syria is perhaps most cited as a hot spot for potential total water war.

The Tigris-Euphrates Basin is an interesting case as, unlike other water basins in the Middle East, it has historically had more than adequate water resources to support the populations of its three riparians. Yet it has been subject to equal, if not more, tension, dispute, and low-level conflict than many of the world’s other arid basins. In this project, I examine the tensions and disputes among the Tigris-Euphrates riparians over the Twin Rivers, their origins, changes over time, and the potential for conflict versus cooperation in the future. I argue that water was a low politics, cooperative issue between the end of the First World War and the early 1960s, the subject of conflictual high politics interactions between 1960 and the turn of the century, and from 2000–2010 remained in high politics but became the object of more collaborative engagement. I assert that the perception of scarcity and actual shortages serve to drive water from low to high politics and that the oscillation

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6 Strategic Foresight Group, *Water Cooperation for a Secure World: Focus on the Middle East*, 41, 48, 63, 82.
9 Strategic Foresight Group, *Water Cooperation for a Secure World: Focus on the Middle East*. 
from cooperative hydropolitics to conflictual and back follows the ebb and flow of wider politics dictated by diplomatic relations, influence of external actors, economic ties, and the saliency of ethnic and ideological similarities and differences. In this way, I show that water politics follow the pattern of overall bilateral and trilateral relations among the three riparian states.

This introductory chapter will outline the relevant literatures and theories relating to water conflict and cooperation and introduce my research question and analytical framework. The second chapter divides the history of the Tigris-Euphrates into three time periods and closely follows hydropolitics as they change among the riparians over time. The third chapter analyzes the change over time illustrated during chapter two and endeavors to explain why water politics have fluctuated in the Tigris-Euphrates Basin. The conclusion briefly applies my analytical framework to the events of present day and considers potential forms water politics may take in the basin in the future.

**Literature Review**

In a world of rapidly expanding population, growing consumption, and changing environment, questions about how environmental systems interact with issues of security, politics, economics, and social change are becoming increasingly pressing. Of particular interest is the question of how environmental changes, including depletion and degradation, may influence security. The field of environmental security has emerged to study the way that resources and the environment relate to security concerns and interactions among states. The most pressing question within this issue area is: are environmental changes and resource scarcity, degradation, and depletion more likely to stimulate conflict among affected actors or
encourage cooperation? The following literature review discusses how scholars have attempted to answer this critical question.

**Conflict and Cooperation: Definitions**

Throughout the scholarly literature, the uses and meaning of the terms “conflict” and “cooperation” are ambiguous and varied. They are both broad and multifaceted concepts that authors rarely define explicitly. I define the terms generally here, and utilize them throughout the literature review that follows as they are interpreted and employed by the scholars I discuss.

Drawing from Frey (1993) and Uitto and Wolf (2002) conflict occurs among “two or more entities, one or more of which perceives a goal as being blocked by another entity, [when] power of some sort [is] exerted to overcome the perceived blockage.”\(^\text{10}\) Conflict most often arises from competition and is associated with negative forms of interaction.\(^\text{11}\) As Grover (2007) discusses, conflict can be based on economic, social, political, and institutional blockages.\(^\text{12}\) Although the term is most often used to describe instances of violence, it also includes nonviolent or less organized violent engagement, such as social protest.\(^\text{13}\) Sosland (2007) suggests that conflict arises as a result of three different types of stimuli: deep, intermediate, and precipitating.\(^\text{14}\) Precipitating causes occur immediately before the onset of conflict; intermediate causes occur farther in time from the onset of conflict and may include a series of controversial events or an ongoing issue of dispute; and deep causes include historical points of contention and underlying prejudices.\(^\text{15}\)

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\(^\text{12}\) Ibid., 3.


\(^\text{15}\) Ibid.
Throughout the relevant literature, the term “cooperation” is also similarly used to describe a range of interactions among actors. According to Frey (1993), cooperation constitutes, “working together for common benefits …[and] implies coordination of behavior among actors to realize at least some common goals.”16 In contrast to conflict as a form of negative engagement, cooperation is generally regarded as a positive form of interaction. Cooperation among state or non-state actors ranges from “informal contact for consultation and information exchange” to treaties or codified legal agreements to joint ventures and authorities.17 These broad definitions drawn from the literature help to frame the forthcoming discussion of the theories of environmental conflict and cooperation.

**Environmental Warmongers: The Resource Conflict Thesis**

In recent years, world leaders, scientific experts, and scholars alike have expressed the concern that the earth’s finite resources will be at the heart of the 21st century’s conflicts. In 1987, the United Nations World Commission on Environment and Development published the *Our Common Future* report, widely regarded as the seminal work on environmental security. The report asserts, “Environmental stress is both a cause and an effect of political tension and military conflict. Nations have often fought to assert or resist control over raw materials, energy supplies, land, river basins, sea passages, and other key environmental resources. Such conflicts are likely to increase as these resources become scarcer and competition for them increases.”18 In support of such conclusions, numerous scholars concur that resources can serve as direct or indirect causes of violent conflict.

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Scholars argue that resources are often the direct cause of conflict when they are scarce. In such a “simple-scarcity” conflict, under conditions of a finite resource endowment, “conflict may arise between states over access to vital sources of supply, and within states over the distribution of the limited materials available.” Similarly, “Even in the absence of debilitating scarcities, conflict among states may arise from the belligerent, resource-expansionist claims of one or more states.” Simple-scarcity conflict most often applies non-renewable resources, such as minerals and oil. The 1991 Gulf War is an often-cited example of a “simple-scarcity” conflict motivated by the desire to gain control of oil reserves.

The environmental security literature also suggests that resources provide an indirect causal pathway to conflict. Günther Bächler and Thomas Homer-Dixon argue that, by causing or contributing to economic decline, migration, demographic pressure, or state weakness, environmental transformations (i.e. resource depletion, scarcity, and degradation) can exacerbate existing ethnic, social, political, or economic divisions within society and result in upheaval. According to Bächler, “Violent conflicts triggered by the environment due to degradation of renewable resources (water, land, forest, vegetation) generally manifest themselves in socioeconomic crisis regions of developing and transitional societies if and when social fault lines can be manipulated by actors in struggles over social, ethnic, political, and international power.” Environmental and resource degradation or scarcity can thus act as a “threat multiplier.” Changes in a resource stock or environmental quality “are stressors

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21 Elhance, Hydropolitics in the third World: Conflict and Cooperation in International River Basins, 4.
23 Ibid., 18.
26 Johnstone and Mazo, “Global Climate Change and the Arab Spring,” 11–17; European Commission, Climate Change and International Security, 2; United States Department of Defense, Quadrennial Defense Review Report, 84.
that can ignite a volatile mix of underlying causes that erupt into revolution”

or violent conflict. Stresses caused by resource scarcities, inequities in access, or environmental degradation can provide an additional grievance for an already aggrieved group that may tilt the scale towards conflict. Thus, as an indirect cause or threat multiplier, a resource or environmental condition may not provide the root cause of conflict, but rather acts as either an intermediary or the decisive factor that transforms other sociopolitical divisions or grievances into conflict or revolution. Recent work has suggested that the Arab Spring revolutions that shook the Middle East beginning in 2011 were partially attributable to droughts that impacted food prices and supply, providing the added stress necessary to transform deep political grievances into violent uprising. Thus, while the precise mechanisms vary, the above-discussed authors largely concur that environmental change and scarcity can and will play an increasingly critical causal role in the conflicts of the 21st century.

**Resource Peace Advocates**

In opposition to those who argue that the environment will serve as a source of conflict in years to come are those who argue that states, communities, and individuals are far more likely to cooperate over shared resources than they are to conflict. These theorists can be divided into three categories: 1) scarcity skeptics; 2) non-conflict theorists; and 3) environmental cooperation scholars.

While environmental conflict scholars take environmental change and eventual scarcity as a given, scarcity skeptics question the very idea that resource scarcity will a) ever exist, or b) come to be a cause for conflict. Economist Julian Simon forwards the argument

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28 Johnstone and Mazo, “Global Climate Change and the Arab Spring”; Werrell and Femia, “The Arab Spring and Climate Change: A Climate and Security Correlations Series.”
that population growth does not necessarily create pressure on finite resources. He posits that, in the long run, human ingenuity and market forces allow for technological advancements that can provide substitutes for nearly every natural resource supposedly threatened by scarcity. Daniel Deudney critiques the environmental conflict thesis on largely the same grounds. He argues that states will not war over resources because: 1) “the robust character of the world trade system means that states no longer experience resource dependency as a major threat to their military security and political autonomy;” and 2) “the world is entering…the ‘age of substitutability,’ in which industrial civilization is increasingly capable of taking earth materials such as iron, aluminum, silicon and hydrocarbons…and fashioning them into virtually everything needed.” Thus, these scholars suggest that because human ingenuity and material substitutability will overcome scarcity and resource degradation constraints, conflicts over resources are implausible.

Most environmental cooperation scholars acknowledge the existence of scarcity and environmental change as a challenge for environmental management, but suggest that conflict is not the rational response to such conditions. Jack Goldstone writes, “Where the problem faced by two groups, or two nations, is over the degradation or depletion of an environmental resource, war neither solves the problem (it cannot make more of the resource), nor is it an economically efficient way to redistribute the resource (the costs of war almost invariably far outweigh the cost of gaining alternative resources or paying more for a share of the resource).” When a state or group fears it will soon face resource scarcity because of the actions of another state or group, it is argued that the actor will take anticipatory precautions to safeguard resource access in order to either prevent it from

becoming a source of contention or keep it from being used as a form of coercion.\textsuperscript{33} Similarly, it is suggested that the modern state system is not conducive to resource conflict. Deudney argues, “The prospects for resource wars are diminished, since states find it increasingly difficult to exploit foreign resources through territorial conquest.”\textsuperscript{34} Thus, according to Erika Weinthal and Avner Vengosh, resources are more likely to create dispute on the sub-national level, where they raise issues of development, quality, equity, and public participation, rather than prompting violent interstate conflict.\textsuperscript{35} While newly formed, post-Soviet states in Central Asia have cooperatively managed their shared rivers,\textsuperscript{36} intra-state disputes about dam construction and displacement are commonplace, such as that in India’s Narmada valley,\textsuperscript{37} supporting this viewpoint.

The most optimistic cooperation theorists assert that the need to manage environmental degradation and depletion provides actors with an opportunity for cooperation. Proponents of this view suggest that, “resource scarcity based on environmental degradation tends to encourage joint efforts to halt such degradation…just as scarcity may lead to conflict among states, it is often due to scarcity that states tend to cooperate.”\textsuperscript{38} The inherent interdependences that arise when two or more actors share a resource create an imperative for cooperation of some kind.\textsuperscript{39} Stressing the immense historical precedence of environmental negotiations and agreements,\textsuperscript{40} Ken Conca, a leading theorist in the environmental cooperation field, asserts that “environmental peacemaking goes far beyond simply forestalling environmentally induced conflict…environmental cooperation can be an effective general catalyst for reducing tensions, broadening cooperation, fostering

\textsuperscript{33} Kelanic, “Black Gold and Blackmail,” viii.
\textsuperscript{34} Deudney, “The Case Against Linking Environmental Degradation and National Security,” 279.
\textsuperscript{35} Weinthal and Vengosh, “Water and Conflict: Moving from the Global to the Local,” 266–267.
\textsuperscript{36} Weinthal, From Environmental Peacemaking to Environmental Peacekeeping, 19.
\textsuperscript{37} Rajagopal, “The Violence of Development.”
\textsuperscript{38} Dinar, International Water Treaties: Negotiation and Cooperation along Transboundary Rivers, 10–11.
\textsuperscript{39} Elhance, Hydopolitics in the third World: Conflict and Cooperation in International River Basins, 6, 14.
\textsuperscript{40} Conca, “Environmental Cooperation and International Peace,” 225.
demilitarization, and promoting peace.” According to Conca, there are two pathways through which addressing environmental issues may encourage actors to cooperate: 1) “changing the strategic climate,” which amounts to trust-building and lengthening timelines, and 2) “strengthening post-Westphalian governance,” which entails creation of a shared identity that renders conflict unthinkable. It is argued that Canada and the United States’ successful collaboration to overcome uncertainty and address acid rain enhanced the two states’ overall relationship. While many scholars suggest that this particular thesis—that environmental factors can actually lead to greater overall cooperation among states—requires more research and empirical testing, all the above scholars form a consensus around the idea that actors are far more likely to cooperate over scarce and changing environments than they are to conflict.

Water Wars?

Erika Weinthal suggests that, whether intentionally or not, much of the environmental conflict and cooperation literature either directly discusses water conflict/cooperation in particular, or has water in mind when considering environmental and resource dynamics in general. There is no doubt that water, as both a life necessity and critical economic driver, is a powerful resource with the potential to both ignite dispute and inspire collaboration. Shared river basins and transboundary rivers are the most commonly discussed water body in environmental conflict and cooperation literature, as they create particularly interesting and problematic dynamics among competing riparian states. The following sections will examine the environmental conflict and cooperation theses as they pertain to water and transboundary rivers in particular.

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41 Conca, Environmental Peacemaking, 9.
42 Ibid., 10.
44 Weinthal, From Environmental Peacemaking to Environmental Peacekeeping, 19.
When Does Water Scarcity Lead to Conflict?

Water is a beloved subject of resource conflict literature. According to Thomas Homer-Dixon, water is the only renewable resource likely to be subject to simple-scarcity conflicts, and Joyce Starr proclaims, “water security will soon rank with military security in the war rooms of defense ministers.” The water wars thesis posits that, because “international water [is] a critical, nonsubstitutable resource, which flows and fluctuates across time and space, for which legal principles are vague and contradictory, and which is becoming relatively more scarce with every quantum or growth in population or standards of living,” the 21st century will be characterized by wars over water. To summarize, the fact that water is important, maldistributed, shared, and increasingly scarce gives it the potential to both directly and indirectly cause conflict.

In an effort to make this theoretical line of argument more nuanced, Peter Gleick has identified five distinct ways in which water plays a role in conflict: 1) water inequities as the root of conflict; 2) water condition as the root of conflict; 3) water or water systems as a strategic political or military goal; 4) water or water systems as a strategic political or military tool; and 5) water or water systems as a strategic military target. Under type one, individuals, groups, or entire countries may squabble over an unequal distribution of water, as occurred in the 1970s in China when upstream villages made excess withdrawals from the Zhang River, sparking downstream village militia attacks. Similar disputes may occur in the context of type two conflict, whereby one actor is perceived as having polluted or diminished the water quality faced by another. States or non-state actors employ type three

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50 Gleick, “Water Conflict Chronology List.”
water conflict when they attempt to gain control of another’s vital water resources or water infrastructure. The Islamic State in Iraq and Syria (ISIS) has used such tactics, prioritizing towns and infrastructure along the Tigris and Euphrates rivers to rapidly gain control of inner Syria and Iraq.\textsuperscript{51} Water can be used under type four as a coercive political or military tool by an upstream state to gain concessions from a downstream actor, such as in 1997 when Malaysia threatened to stop water flow to Singapore in retaliation for Singapore’s criticism of Malaysian policies.\textsuperscript{52} Type five is perhaps the most common: dams, canals, irrigation systems, and other water infrastructure are often targeted or attacked during conflict otherwise unrelated to water. During World War II, Germany purposefully destroyed over two thirds of Soviet hydroelectric systems in an attempt to weaken Soviet resistance.\textsuperscript{53}

While it is clear that water and conflict have a complicated and varied relationship, environmental conflict theorists certainly imbue water with the potential to make enemies of neighboring individuals, groups, and states. As climate change alters the planet’s weather dynamics, increasing precipitation in some regions, and starving others of rain, already precious freshwater resources in shared basins are almost certain to become more scarce, increasing the chances for those subscribing to the water wars thesis to see their theories become reality.

*The Proven Potential of Hydro-cooperation*

Environmental cooperation theorists also put in their two cents about the possibility of water wars. Scarcity skeptics like Bjorn Lomborg suggest, “the problem is not that there is too little water, but that it is used poorly”\textsuperscript{54} and argue that correct water pricing, which would drive more efficient use of the Earth’s finite water supply, would address perceived scarcity

\textsuperscript{51} Watkins and Yourish, “A Rogue State Along Two Rivers.”
\textsuperscript{52} Gleick, “Water Conflict Chronology List.”
\textsuperscript{53} Ibid.
\textsuperscript{54} Lomborg, “Resource Constraints or Abundance?,” 148.
and reduce the likelihood of dispute.\(^{55}\) J.A. Allan concurs with this hypothesis and suggests that technological and societal changes, such as trade in “virtual water” (goods that are water-intensive to produce, i.e. food), will keep scarcity at bay\(^{56}\) and thus eliminate any need for conflict.

Though recognizing rising scarcity as a major challenge for water management, other scholars suggest the implausibility of water wars based on the preeminence of other issues in foreign policy. Jon Barnett writes, “if there is a conflict over water, then that conflict is the result of failure of politics to negotiate a settlement over the shared use of water. The idea that a war over water, or any other resource, is not a war about politics is dubious.”\(^{57}\) Similarly, Aaron Wolf makes three arguments against the likelihood of water conflict on the bases of 1) strategic interests; 2) shared interests; and 3) institutional resiliency.\(^{58}\) His strategic interest argument states that the high costs and nebulous goals of a water war would rarely, if ever, be in the strategic interest of a state—upstream or downstream.\(^{59}\) Wolf’s shared interests approach argues that, whether it be for flood control, agricultural development, or mutual use of a boundary river, the very existence of a transboundary waterway creates interdependences and shared interests that disincentivize conflict.\(^{60}\) Finally, Wolf’s institutional resiliency argument suggests that efforts to cooperatively manage water are cumulative: “once cooperative water regimes are established...they turn out to be tremendously resilient over time, even between otherwise hostile riparians and even as conflict is waged over other issues.”\(^{61}\)

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\(^{55}\) Ibid.
\(^{56}\) Allan, The Middle East Water Question: Hydropolitics and the Global Economy, 32.
\(^{58}\) Wolf, “Conflict and Cooperation along International Waterways.”
\(^{59}\) Ibid., 259.
\(^{60}\) Ibid., 259–260.
\(^{61}\) Ibid., 260.
Such theories have led scholars to characterize water as a likely candidate for “low-profile” or “tactical functional” cooperation. According to Sosland,

States in a protracted conflict that are interdependent on an important functional issue, such as shared water resources, may cooperate tactically... Over time, the process of two parties in a protracted conflict meeting and discussing a divisive issue may lead to a change in a state’s preferences. A new idea—positive personal relationship among technocrats and elites—and a new sense of trust and confidence may move parties toward a common understanding of a problem and its solution.64

In such a way, Sosland, along with Dolatyar and Gray (2000), Conca (2001, 2002), Elhance (1999), and Dinar (2008) hint at the possibility that joint action over water may eventually lead otherwise conflictual states to cooperate, possibly not only on issues relating to water, but beyond. An example of such cooperation is the Israel-Jordan “Picnic Table Talks.” In the last 60 years, though the two states have moved in and out of political confrontation, the water managers have continued low-profile meetings several times a year to jointly manage their shared rivers.65 While some scholars are more optimistic than others—dreaming that Jordan and Israel’s picnic talks can be recreated in river basins the world over—at the heart of all water cooperation authors’ arguments is the assertion that active collaboration is more likely than conflict over shared water resources.

**Empirical Tests**

The preceding hypotheses regarding the potential for environmental, and in particular water, conflict have been the subject of cross-national empirical investigations worth mentioning here. In an examination of the link between environmental degradation and conflict, Wench Hauge and Tanja Ellingsen find that “countries suffering from environmental degradation...are more prone to civil conflict” (emphasis added) and that economic and political factors are more important than environmental ones in predicting the

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64 Ibid.
66 Hauge and Ellingsen, “Causal Pathways to Conflict,” 54.
incidence of civil conflict. While Hauge and Ellingsen do not examine the relationship between environmental factors and interstate conflict, their results do illustrate a link between environmental conditions and violence. In a different vein, Hans Petter Wollebaek, Nils Petter Gleditsch, and Håvard Hegre examine whether location on a shared river basin makes a country more prone to interstate violence. Their results find that, indeed, “shared river dyads have a higher frequency of dispute outbreak than contiguous dyads,” leading them to conclude, “there is something to shared rivers as a source of conflict. Whether that ‘something’ is mainly water scarcity is not clear.” To lend some support for the water cooperation theorists side of the argument, Aaron Wolf conducted an in-depth examination of “cases of international conflict where armed exchange was threatened or took place over water resources.” Reaching the conclusion that no war has ever been fought over water, Wolf suggests that the concept of a “water war” lacks any historical precedence. Thus, while efforts have been made to definitively determine the answer to the question of whether environmental conditions, specifically with regard to water, are more likely to provoke conflict or cooperation, even historical and empirical analysis leaves the question open. Empirical studies have made it clear that, to a certain extent, both theses are correct—water can provoke dispute under some conditions, and cooperation under others. There is ample room within the field to further specify what those conditions are that encourage cooperation and which motivate conflict.

**Under What Conditions?**

None of the above scholars argues that the pure existence of water, or another resource, results in either conflict or cooperation. Rather, they each suggest a wide variety of

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67 Ibid.
68 Gleditsch, Toset, and Hegre, "Shared Rivers and Interstate Conflict," 990.
69 Ibid., 992.
70 Wolf, “Conflict and Cooperation along International Waterways,” 254, 255.
71 Ibid.
intervening variables that make either conflict or cooperation more likely in a given circumstance. This section outlines those variables, answering the question: under what conditions is conflict or cooperation over shared water more likely?

**Scarcity**

Scarcity, and especially that which is perceived as induced by another actor (as opposed to the effects of growing populations or drought) can make conflict more likely. In the words of Michael Klare, “However divided [or undivided] two states or societies may be over matters of politics or religion, the likelihood of their engaging in mutual combat becomes considerably greater when one side believes that its essential supply of water, food, or energy is threatened by the other.”

Scholars also make a distinction between “perceived” and “real” scarcity, both of which are seen as having the potential to motivate conflict.

**Existing Political Context**

The existing political relationship between the two states is said to have a potent impact on the potential for conflict or cooperation. According to Sosland, “When riparians are engaged in an extended cold war, strained political and military relations make cooperation more difficult and outright conflict more probable.” Based on her analysis of the Jordan River Basin, Miriam Lowi takes this reasoning a step further to suggest that as long as a political conflict exists, a water dispute will not be resolved cooperatively. According to Lowi, the prerequisite for cooperative water management is the resolution of any and all protracted political conflicts. Thus, when two states have no protracted political conflict, they are more likely to engage collaboratively over transboundary water management.

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Historical Relations

States that have worked together historically, especially through joint management of a security issue, are more likely to cooperate when it comes to water challenges. Sosland writes, “states are more apt to have a cooperative strategy on functional issues if they have already improved their relationship by working together to balance a common security threat.”76 When states do not have a strong foundation of cooperation on other issues, water becomes more likely to provide a source of conflict.

Interdependencies

It is also suggested that the degree of interdependence among states play a role in their willingness to initiate conflict or pursue cooperation. High degrees of transnational contact encourage cooperation.77 Jon Barnett writes, “Military action to secure resources is unlikely given the interdependence among states in the global economy”78 and it is suggested that a high degree of interdependency among states makes them more likely to give up some degree of sovereignty.79 Conca highlights economic interdependence (i.e. high levels of trade) as one of, if not the, most important form of interdependence for encouraging cooperation among states that also share environmental challenges.80

Similarities Among States

Theorists also find the extent of similarity among states to be important in their predisposition toward cooperation or conflict over water resources. Common language, shared perceptions of the problem, similar uses of the river, and uses of the same technologies for water management make a cooperative outcome more likely.81 Additionally, Wolf suggests

79 LeMarquand, “Politics of International River Basin Cooperation and Management,” 164.
that the thesis asserting that democracies do not go to war with each other also applies to
democratic states that share a river,\(^82\) thus implying that similarities in regime type may engender cooperation among riparians.

*Existing Ethnic and Ideological Divides*

The ethnic and ideological makeup of a river basin can influence the likelihood of conflict or cooperation. According to Conca, “Environmental problems are most combustible when they exacerbate existing social tensions based on class, religion, or ethnicity. When such tensions are triggered in the absence or weakness of social institutions that otherwise could mediate disputes or in the context of ‘failing’ states, it is said, violent conflict may be triggered or worsened.”\(^83\) Ethnic or religious divisions thus have the potential to encourage a more negative, conflictual outcome in a riparian dispute.

*Trust*

Trust, whether it be among state leaders or technocrats, is a key prerequisite to cooperation.\(^84\) It is argued that mistrust and uncertainty are characteristic of negative, conflictual interactions.\(^85\) Thus, LeMarquand suggests that, “confidence must be felt between neighbors before they are willing to commit treasured natural resources to interdependent development and management”\(^86\) of shared resources.

*Power Asymmetries*

Applying hegemonic stability theory to river basins, Lowi suggests, “If the dominant power in the basin will benefit from regional cooperation in water utilization, it will take the lead in creating and maintaining a regime.”\(^87\) In theory, downstream states will be

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\(^82\) Wolf, “Conflict and Cooperation along International Waterways,” 259.
\(^83\) Conca, *Environmental Peacemaking*, 1.
\(^85\) Conca, *Environmental Peacemaking*, 9.
\(^86\) LeMarquand, “Politics of International River Basin Cooperation and Management,” 157.
predisposed to cooperate because of their being at mercy to the upstream state, and therefore a basin will be cooperative only if the upstream riparian elects to cooperate.\textsuperscript{88}

\textit{Issue Linkage}

In countries where a high level of conflict is common, riparians often link issues. States create an “agreement with a neighbor for an international river scheme that the neighbor wants [in order to] gain concessions for other bilateral issues.”\textsuperscript{89} While many authors suggest this as an important method of forwarding cooperation, Sosland argues, “when a state has a general preference toward violent conflict or even war…that preference may be strategically linked to the water scarcity issue in an ideological and nationalistic manner to create international discord.”\textsuperscript{90} Thus, while issue linkage is an important bargaining technique for states and can encourage cooperation, the political and religious context, and the exact issue water is linked to, matters and can make conflict more likely.

\textit{Existence of Common Patron or Influence of an External Actor}

The scholarly literature suggests that, when a third party or external actor becomes involved in a riparian dispute to mediate, whether it is an international organization, other state, or NGO, the chances for cooperative resolution are generally higher. According to Elhance, “sustained international initiatives and support are often needed to overcome the many barriers to interstate cooperation in hydropolitics and to persuade and enable the respective riparian states to see cooperation as a “win-win” situation for all concerned.”\textsuperscript{91} On a somewhat similar note, Sosland suggests that two states are more likely to cooperate if they have a common patron.\textsuperscript{92}

\textsuperscript{88} Ibid.
\textsuperscript{89} LeMarquand, “Politics of International River Basin Cooperation and Management,” 155.
\textsuperscript{91} Elhance, \textit{Hydorpolitics in the third World: Conflict and Cooperation in International River Basins}, 7.
National Image

The degree of concern a riparian has for its national image can influence the position it takes in negotiations and motivate a more cooperative or conflictual outcome. If a country is pursuing a “good neighbor policy” or looking to be “a model of cooperative international behavior” it will seek more positive resolution. Conversely, if states, especially those upstream, choose to be “candidly egocentric,” a more negative outcome is likely.\(^93\)

Sovereignty and Nationalism

When states are concerned about breaches of sovereignty, they are less willing to cooperate. This is especially true in situations where water has come to be intertwined with a state’s sovereign national identity. Klare writes that, for many countries, “disputes over water have taken on a deeply emotional or symbolic character, as matters of national (or regime) survival and identity.”\(^{94}\) When a regime draws some or much of its legitimacy from river control or development, it is less likely to pursue riparian cooperation for water management.

Commitment of High Level Officials

When high level officials (i.e. those in positions of power above technocrats and the bureaucracy) have a vested interest, or make a commitment to cooperative resolution, a positive outcome is more likely. According to LeMarquand, “if the chief executive of the basin countries can be motivated to make a commitment to resolve the issues, definitive and innovative solutions may be more easily accomplished than if negotiations are left to the representatives of the government departments.”\(^{95}\) That being said, the reverse is also posited

\(^{93}\) LeMarquand, “Politics of International River Basin Cooperation and Management,” 153.

\(^{94}\) Klare, Resource Wars: The New Landscape of Global Conflict, 163.

\(^{95}\) LeMarquand, “Politics of International River Basin Cooperation and Management,” 163.
to be true: leaders that define cooperative water management as in opposition to the national strategy reduce the impetus for positive resolution.\textsuperscript{96}

**Epistemic Communities**

Peter Haas articulates the concept of epistemic communities, which make cooperative resolution of a transboundary environmental dispute more likely. Epistemic communities are “transnational networks of knowledge based communities that are both politically empowered through their claims to exercise authoritative knowledge and motivated by shared causal and principled beliefs.”\textsuperscript{97} Such groups—consisting of water experts, technocrats, and bureaucrats—after working together to manage a resource, form relationships and shared connections that can help encourage cooperation regardless of the political climate. In Haas’ words, “if the group of specialists share a common world view or believe in the same set of cause-and-effect relations, then they are likely to be particularly influential, because they will resist the political temptations to subordinate their advice to existing political concerns,”\textsuperscript{98} and can thus maintain cooperative resource management when larger political relations among states deteriorate.

**Economic Modernization**

The processes by which states utilize shared water bodies for economic modernization has the potential to stimulate competition and conflict. Klare suggests that damming rivers and unilateral efforts to increase supply for a certain population’s use make conflict more likely\textsuperscript{99} by giving the upstream riparian control over the taps of downstream users. However, Wolf suggests that “a dam…can not only provide hydropower and other benefits for the upstream riparian, but it can be managed to even out flow for downstream

\textsuperscript{96} Ibid., 160.
\textsuperscript{97} Haas, “Obtaining International Environmental Protection through Epistemic Consensus,” 349.
\textsuperscript{98} Ibid., 350.
\textsuperscript{99} Klare, Resource Wars: The New Landscape of Global Conflict, 146–147.
agriculture, or even to enhance water transportation for the benefit of both riparians.”

Thus, when projects that manipulate river flow are conducted jointly among states or competing users, or when shown to equally benefit multiple actors, they may in fact foster cooperation.

**Analytical Framework**

While water conflict and cooperation have been examined extensively, most authors study them dichotomously, i.e. attempting to determine which factors will lead states to take up arms against each other versus which motivate them sign treaties over water. While some authors, like Gleick and Sosland, have acknowledged that water wears a variety of hats in conflict and can be cooperative at a level below fully codified, the existing literature does not portray water conflict and cooperation as a spectrum. The preceding section has illustrated how water conflict and cooperation have been discussed so far throughout scholarly literature. In the section that follows I use the above theories to outline my analytical framework, in which I treat water conflict and cooperation as two ends of a spectrum along which a diverse array of factors dictate where a particular transboundary water body at a particular time falls.

**The Spectrum of Conflict and Cooperation**

In my conflict—cooperation framework, state interaction ranges from armed conflict and less severe negative forms of engagement, to positive interactions such as joint projects and treaties/codified agreements. The cooperation—conflict spectrum is shown below.

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100 Wolf, “Conflict and Cooperation along International Waterways,” 259.
Figure 1: Spectrum of Conflict and Cooperation

**High and Low Politics**

Throughout my analysis of the Tigris-Euphrates basin, I will consider whether water plays into the relationships among Turkey, Syria, and Iraq as an issue of high or low politics. Conventional wisdom suggests that “‘high politics’ of security and survival ha[s] priority over the ‘low politics’ of economic and social affairs.”\(^{101}\) High politics has many characteristics in common with foreign policy, while low politics is often synonymous with issues of domestic policy. Jackson writes that foreign policy is a

Separate sphere from domestic politics and activities of sovereign states. It [is] the realm of ‘high politics’ defined and guided by reason of state, now more commonly labeled ‘national interests.’ It [is] directed and managed by the leading state officials (emperors, kings, presidents, prime ministers, chancellors, secretaries of state, foreign ministers, defense secretaries, etc., and their closest advisors.) It [is] not subject to popular scrutiny or democratic control. It [is] an exclusive and often secretive sphere of statecraft.\(^{102}\)

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\(^{102}\) Jackson, *Introduction to International Relations*, 254.
For the purposes of my analysis, I consider “high politics” to constitute foreign policy issues, dealt with by heads of state or high-level ministers and concerning the security, sovereignty, and territorial integrity of the state(s) in question. I consider “low politics” to include more functional, technical, administrative issues, often confined to domestic politics, considered less crucial to national security or territorial integrity, and primarily managed by lower level bureaucrats and technocrats.

*Theoretic Model for Hydro-Cooperation and Hydro-Conflict*

As the theoretical literature suggests, water can enhance cooperation or exacerbate conflict among states. The question remains, when do we expect to see more positive or more negative interstate interactions? The “under what conditions” section within the preceding literature review outlined the most commonly identified intervening variables in the literature. On the following page, I depict a schematic diagram illustrating how transboundary water bodies can provide sources of both positive, cooperative and negative, conflictual interaction.
Figure 2: Paths to Cooperative and Conflictual Interaction over Transboundary Waters
In this model, scarcity is the key factor that creates the potential for conflict over water. Without either a perception of limited supply or an actual shortage, water cannot provide a basis for competition or, at the extreme, conflict. Real and/or perceived scarcity—which stems from either climatic conditions/drought or unilateral development that creates either a perception or reality of deprivation—is the factor that drives water from low politics to high politics. As J.A. Allan suggests, “when news of a water deficit is widely known, the issue of water security can become an issue of high politics”\textsuperscript{103} With water in the realm of high politics, the environmental conditions are filtered through the social, political and economic context, which determines the outcome on the conflict-cooperation scale. The four most important intervening variables, as illustrated on the diagram above, are: 1) the character of diplomatic relations, which includes existing political relationships or disputes, and ties or alienation among heads of state or high level officials; 2) the influence of external actors or outside political allegiances, which encompasses both direct intervention by a third party in negotiations and more indirect influence of patron states or international organizations; 3) the existence or lack of trade or other economic linkages among states; and 4) ethnic/ideological similarities and differences, which include ties or alienation stemming from religion, ethnicity, or governing doctrine. When real or perceived water scarcity does not exist, there is little to no potential for competition or conflict, so the potential outcomes range only over the positive interaction side of the conflict-cooperation spectrum from no interaction to treaties/codified agreements.

\textit{Turkey, Iraq, and Syria’s Tigris-Euphrates Basin}

The Middle East is often flagged as the region where water conflict is most likely to occur due to both its extraordinary dryness and its politically tumultuous landscape. In

\textsuperscript{103} Allan, “Water Security in the Middle East: The Hydropolitics of Global Solutions,” 2.
suggesting that the Middle East will be the host of the 21st century’s “water wars,” scholars are making an assumption about how water politics relate to other political issues. They assume that water will be more conflictual when in a context otherwise characterized by negative relationships among states. While this is a reasonable assumption to make—it is well established that the implications of transboundary water in any given case will be filtered through the particular environmental, sociopolitical, and economic circumstances of that case—there is little scholarly work that considers precisely how water issues interact with other policy issues among states, and why they interact in the ways they do.

Widely cited as a “hot spot” for future water conflicts,104 the Tigris-Euphrates Basin, shared among Turkey, Syria, and Iraq, is an interesting case to consider in order to better understand how hydropolitics interact with other factors in states’ relationships. The Tigris-Euphrates inspires calamitous predictions because of 1) the many other potent points of contention among the three riparian states; 2) a predicted age of unprecedented scarcity; and 3) the lack of codified agreement or treaty that allocates Tigris and Euphrates waters among the three riparians. Are such predictions of impending tripartite conflict warranted? What do the lessons of the past have to tell us about how water politics intertwine with other politics among these three states?

My analysis considers the likelihood of positive and negative interaction in the Tigris-Euphrates case not based upon the magnitude of scarcity/environmental degradation or record of negotiations, as has been done,105 but through comparison of the change over time in the trajectory of water politics and that of other sociopolitical and economic relations. I show how the water politics of the Tigris-Euphrates basin were largely cooperative and low

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104 For example, see: Starr, “Water Wars”; Hillel, Rivers of Eden: The Struggle for Water and the Quest for Peace in the Middle East; Homer-Dixon, Environmental Scarcity and Global Security; Roberts, “Geopolitics and the Euphrates’ Water Resources”; Jehl, “In Race to Tap the Euphrates, The Upper Hand Is Upstream.”

105 See: Hillel, Rivers of Eden: The Struggle for Water and the Quest for Peace in the Middle East; Dolatyar and Gray, Water Politics in the Middle East.
politics between 1918 and the early 1960s and moved to the realm of high politics and became more conflictual in the years between 1960-2000. In the period between 2000 and 2011, water remained a high politics issue, but became dramatically more cooperative. My research question is thus: why has water oscillated among positive and negative forms of interaction and between high and low politics? In other words, what factors drive the roller coaster of hydropolitics in the Tigris-Euphrates basin? Is scarcity the critical driver of water relations? Or does the path of hydropolitics follow the trajectory of broader political, economic, and social relations? Can the influence of external actors dictate a basin’s hydropolitics? How are water politics shaped by ethnic and ideological factors? Having answered these questions, what are the implications of the hydropolitics of the Tigris-Euphrates today and in the future, and can these conclusions be applied to other river basins?

In answering these questions I apply the above-delineated frameworks to determine what roles water plays in the relationships between Turkey, Syria, and Iraq, and what factors influence whether riparian relations are positive or negative. I argue that the mechanism that dictates whether water is a high or low politics issue is scarcity, both real and/or perceived, stemming from climatic conditions/drought or unilateral, upstream water development. The driver of the Tigris-Euphrates water politics’ oscillation from cooperative to conflictual and to cooperative once again is not scarcity or equity of access, as is often suggested, but rather the security implications of other political, economic, and social issues that may have been linked to water or create conditions for cooperative or conflictual relationships overall. In opposition to those who suggest that water scarcity will lead to conflict or encourage

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106 The following authors also divide the history of the Tigris-Euphrates into similar time periods for the purpose of illustrating changes in cooperative and conflictual hydropolitics: Kibaroglu and Scheumann, “Evolution of Transboundary Politics in the Euphrates-Tigris River System: New Perspectives and Political Challenges”; Dolatyar and Gray, Water Politics in the Middle East; Shapland, Rivers of Discord: International Water Disputes in the Middle East.

cooperation, I suggest that water in the Tigris Euphrates basin has not thusfar been a “cause” for either negative, conflictual relations or positive, cooperative interaction. Rather, water politics have followed the tenor of other political, social, and economic issues that shape relations among Turkey, Iraq, and Syria, and have yet to provide an independent source of dispute. As would be predicted by the power asymmetry thesis, the upstream state, Turkey often sets the tone of both hydropolitics and wider political relationships in the Tigris-Euphrates. Turkey’s foreign policy choices have the largest implications for tripartite basin relations overall and Syria often holds the cards in its relationship with downstream Iraq. Although armed conflict over Tigris and Euphrates waters exclusively is unlikely, it is still important to understand why water is drawn into politics and under what conditions it follows, or diverges from, the path of political relationships in general, both positively and negatively.
Chapter 2: The Tigris Euphrates Basin Over Time

Figure 3: The Tigris and Euphrates Rivers

The Tigris-Euphrates basin’s history can be divided into three time periods, and within each, water has played a distinct but consistent role in the domestic and foreign policy of the three riparian states. From the fracturing of the Ottoman Empire in 1918 to the beginning of large-scale hydro-development in the late 1950s and early 1960s, water was low on the political agendas of the three riparian states and reflected the relatively cooperative climate of the times. From 1960 to 2000, as hydro-development took off, water’s power as an economic and political tool was recognized, it was elevated to a central position in high politics and fueled dispute among the three riparian states. Between 2000 and 2011, though remaining in high politics, water policy among Turkey, Iraq and Syria became more positive and collaborative. This chapter will illustrate these oscillations in hydropolitics from low cooperative to high conflictual and high conflictual to high cooperative, and the following chapter will explain this variation over time.

108 Elhance, Hydopolitics in the third World: Conflict and Cooperation in International River Basins, 127.
**Time Period 1: 1918-1960**

After the end of the First World War and up until the late 1950s/early 1960s, water was a low politics issue in Turkey, Iraq, and Syria, and the hydropolitics of the Tigris-Euphrates Basin were comprised of positive, cooperative interactions among the three riparian states. When addressed, the water issue was managed by lower level technical bureaucrats from the three states and was embedded in management of other economic and social policies. During this period, the three states (or their colonial puppeteers) entered into treaties and agreements that were primarily focused on defining their basic bilateral relationships but also included brief references to cooperative water management.

**New States and New Hydro-Relationships**

At the end of the First World War, the Ottoman “sick man of Europe” breathed its final breath, and Europe carved up the deceased empire into the Middle East’s modern nation-states, transforming the Tigris-Euphrates Basin into a transboundary river system. British-controlled Iraq was comprised of old Ottoman districts, Baghdad, Basra, and Mosul, and contained the lower 1060km of the Euphrates and 1418km of the Tigris. Syria, made up of the old Greater Syria minus Jordan, Palestine, and Lebanon, was given to France in 1920 and included 710km of the Euphrates and 32km of the Tigris forming its border with Turkey. Turkey arose at the heart of the old Ottoman Empire in Anatolia where originate the headwaters of both the Euphrates and Tigris, which then flow for 1230km and 1850km respectively before exiting Turkish territory. While Iraqi nationalists did not win independence from the British until 1932 (and even then much British

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113 Ibid.
institutional structure remained)\textsuperscript{114} and France did not give Syrians independence until 1941,\textsuperscript{115} the man who would become the father of modern Turkey, Mustafa Kemal Atatürk, expelled the British and established the Turkish Republic in 1923.\textsuperscript{116} It was under such conditions of semi-autonomy and rapid state consolidation that Turkey, Iraq, and Syria began to manage their rivers.

During this period, water was treated as a low politics, primarily domestic issue. Between the breakup of the Ottoman Empire and the 1960s, “transboundary waters were the subject of domestic planning and development exercises and had little to do with the foreign policy agenda. Those involved in transboundary water relations at that time were…medium-level technocrats, advisers, and professionals who prepared the technical ground for the drafting of the water-related clauses of the treaties.”\textsuperscript{117} Thus, water was largely an administrative, rather than foreign policy, concern in this first period, and the external water policy that did exist prior to the late 1950s was very much embedded within the creation of overall bilateral relations and the finalization of territorial claims among the three newly independent riparian states.

Several treaties, aimed at establishing peace among the three states, address water within other cooperative frameworks and form the basis for the positive hydropolitical interactions among Turkey, Iraq, and Syria during this period. The agreements, their dates, parties, and water provisions are as follows:

\begin{itemize}
\item \textsuperscript{114} Sorenson, \textit{An Introduction to the Modern Middle East}, 225.
\item \textsuperscript{115} Ibid., 290.
\item \textsuperscript{116} Schulz, “Turkey, Syria, and Iraq: A Hydropolitical Security Complex,” 106; Sorenson, \textit{An Introduction to the Modern Middle East}, 267; Rubin and Kirisci, \textit{Turkey in World Politics: An Emerging Multiregional Power}, 1.
\end{itemize}
<table>
<thead>
<tr>
<th>Year</th>
<th>Treaty Name</th>
<th>Parties</th>
<th>Provisions Regarding Tigris and Euphrates Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>Convention of 23 December 1920</td>
<td>Britain (Iraq), France (Syria)</td>
<td>&quot;Any plans for irrigation in Syria that might diminish ‘in any considerable degree’ the flow of the Tigris or Euphrates were to be examined by a commission nominated by the two governments.&quot;(^{118})</td>
</tr>
<tr>
<td>1921</td>
<td>Agreement of 20 October 1921</td>
<td>Turkey, France (Syria)</td>
<td>&quot;The city of Aleppo may organize, at its own expense, a water-supply from the Euphrates in Turkish territory in order to meet the requirements of the district.&quot;(^{119})</td>
</tr>
<tr>
<td>1923</td>
<td>Treaty of Lausanne</td>
<td>Turkey, Britain (Iraq)</td>
<td>&quot;Turkey should confer with Iraq before beginning any activities that may alter the flow of the Euphrates&quot;(^{120})</td>
</tr>
<tr>
<td>1926</td>
<td>Friendship and Neighborly Relations Convention</td>
<td>Turkey, France (Syria)</td>
<td>Required Turkey to increase the flow of the Koveik river or authorize off-take of Euphrates flow to satisfy the needs of irrigated areas around Aleppo within Syria.(^{121}) Also mandates that “water disputes would be resolved ‘on the basis of complete equality.’&quot;(^{122})</td>
</tr>
<tr>
<td>1930</td>
<td>French-Turkish Protocol</td>
<td>Turkey, France (Syria)</td>
<td>Established the Commission on the Demarcation of the Turco-Syrian Frontier.(^{123}) Affirmed previous agreements and committed the two states to coordinate any planned utilization of Euphrates water.(^{124})</td>
</tr>
<tr>
<td>1946</td>
<td>Treaty of Friendship and Good Neighborly Relations</td>
<td>Turkey, Iraq</td>
<td>Delineates rights and responsibilities of both states regarding Tigris and Euphrates water. Turkish would begin monitoring the rivers and share data. Turkish would report to Iraq on any plans to develop Euphrates and Tigris waters, allowed for separate negotiations. Iraq could construct dams within Turkish territory for flood prevention (construction cost born by Iraq, maintenance costs shared). Established that most suitable dam sites for flood prevention were in Turkey.(^{125})</td>
</tr>
</tbody>
</table>

Table 1: Water-related Treaties of 1918-1960

As the provisions of these treaties illustrate, the riparian relationships among the three states were positive and cooperative between 1918 and the 1950s. Though none of these treaties are tripartite or establish measurable river rights, they highlight the degree to which the three states interacted collaboratively with regard to water during this time period. As all of these treaties were primarily designed to deal with territorial and security issues unrelated to water,

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\(^{121}\) Dolatyar and Gray, *Water Politics in the Middle East*, 134; Barkey, *Reluctant Neighbor: Turkey’s Role in the Middle East*, 132.

\(^{122}\) Lupu, “International Law and the Waters of the Euphrates and Tigris,” 354.


\(^{124}\) Dolatyar and Gray, *Water Politics in the Middle East*, 134.

and addressed water as a subordinate, technical, and administrative concern, water inhabited the realm of low politics.

**Time Period 2: 1960-2000**

At the end of the 1950s, the hydropolitical dynamics among Turkey, Syria and Iraq began to change considerably. Between 1960 and 2000, the three states experienced recurring friction over the waters of the Tigris-Euphrates Basin. During this time period, water was catapulted from its minor, technical role within low politics to become intertwined with issues of high politics, at times taking center stage on the agendas of presidents and prime ministers. The newly recognized power and importance of water in interstate relations drove conflicting claims for the Tigris-Euphrates waters and repeatedly came close to providing the impetus for war.

**The Troubled Waters of Development**

By the early 1960s, Turkey, Iraq, and Syria had each designed ambitious development projects for their stretches of the Tigris and the Euphrates. Although the potential for the twin rivers to fuel development and economic improvement in the three riparian states was acknowledged before the 1960s,\(^{126}\) this decade marked the early implementation of large-scale water projects. As all three states faced growing populations and escalating energy demands, they looked to the Tigris and Euphrates. Turkey and Syria, both of which barely used the Tigris or Euphrates waters prior to the 1960s, began rapid, ambitious development projects to harness the waters' potential. Iraq, where water infrastructure dated back to the 1930s (and even pre-WWI),\(^{127}\) expanded the goals and altered

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the scope of its projects, like its neighbors, increasing the demands it placed on the two
rivers.

Turkey

In 1955, an ambitious young Turk, Süleyman Demeril, was named director of the
State Hydraulics Works (DSI). Demeril, who would go on to be elected Prime Minster ten
years later, came to be known as Turkey’s “King of Dams.” The name was not
unwarranted—during his stint at DSI, Demeril oversaw most of the planning for the
Southeastern Anatolia Project, which involved the construction of 22 dams and 19
hydroelectric power plants on the Tigris and Euphrates in Turkey’s nine poorest provinces.
As Prime Minister, he championed the project as key to Turkey’s development and defended
it against the sharp criticisms of Turkey’s southern neighbors.

The Southeastern Anatolia Project (Güneydoğu Anadolu Projesi--GAP) in its early
formulations was primarily targeted toward meeting Turkey’s growing energy and
agricultural needs. In 1970, close to 60 percent of Turkey lacked electricity and a growing
industrial sector in the western part of the country was driving a rapidly rising demand.
Energy needs were predicted to increase 9.5 percent from 1990-2000 and seven percent from
2000-2010. Similarly, increasing oil prices in the 1970s sparked a push for Turkish energy
independence. As one of the most oil-poor nations of the Middle East, Turkey looked to
use GAP to capitalize on its remarkable hydroelectric capacity. Early predictions showed
GAP increasing Turkey’s hydroelectric production to take advantage of 45 percent of the

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129 Kolars and Mitchell, *The Euphrates River and the Southeast Anatolia Development Project*, 25. GAP and its characteristics are mentioned over and over again in the literature. Is it important to cite all/multiple of the sources I have found it in? Most of those sources cite this one, which seems to contain most of the conventional wisdom about the project.
130 Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 577.
131 Ibid., 572.
country’s 100 billion KW hydroelectric potential, supplying 25 percent of Turkey’s overall electricity.\textsuperscript{133} Turkey’s population more than doubled between 1950 and 1980, and, with annual growth rates of 2.2 percent, was expected to exceed 70 million by 2000.\textsuperscript{134} Turkey hoped to maintain food security throughout its rapid growth and improve its balance of payments with exports of $20 million worth of profitable cash crops to the rest of the Middle East.\textsuperscript{135} With 40 percent of Turkey’s arable land located in the nation’s southeast, GAP’s multipurpose dams would irrigate 1.6 million ha area for agriculture while providing 24 billion KW of electricity.\textsuperscript{136}

GAP evolved to include broader development goals. With per capita income in the GAP region only 47 percent of the national average, DSI hoped the hydro-development project would spark general industrial and economic expansion to close the country’s socioeconomic gap.\textsuperscript{137} Through improved standards of living and growing employment opportunities, GAP also aimed to prevent emigration from the GAP region and better equip local cities to attract and manage growing populations.\textsuperscript{138} However, despite these largely benevolent goals, the Turks were not unaware of the implications GAP would have for their control of, and claim to, the Tigris and Euphrates waters. In a 1970 feasibility report, DSI reportedly wrote, “In the absence of a water treaty among riparian interests, precedence of beneficial use becomes an important criterion in the adjudication of water rights.”\textsuperscript{139} Thus, while the motivations for Turkey’s design and implementation of GAP were largely

\begin{itemize}
\item \textsuperscript{133} Ibid.; Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 572.
\item \textsuperscript{134} Schulz, “Turkey, Syria, and Iraq: A Hydropolitical Security Complex,” 95.
\item \textsuperscript{135} Rubin and Kirisci, \textit{Turkey in World Politics: An Emerging Multiregional Power}, 242; Starr, “Water Wars,” 29; Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 568.
\item \textsuperscript{137} Southeastern Anatolia Project Regional Development Administration, “Socioeconomic Characteristics of the GAP Region.”
\item \textsuperscript{138} Rubin and Kirisci, \textit{Turkey in World Politics: An Emerging Multiregional Power}, 242; Biswas, Ünver, and Tortajada, \textit{Water as a Focus for Regional Development}, 177.
\item \textsuperscript{139} Brismar, “The Atatürk Dam Project in South-East Turkey: Changes in Objectives and Planning over Time,” 103.
\end{itemize}
Turkey was not blind to the implications its control of the Tigris and Euphrates would have for its relationships with co-riparian states.

Figure 4: Hydro-development on the Tigris and Euphrates in Turkey

Turkey initiated its hydro-development with the construction of the Keban Dam on the Euphrates between 1966 and 1973. Keban was followed between 1976 and 1987 by the Karakya dam, also on the Euphrates. In securing funding for these dams, Turkey faced World Bank concerns about water flow to Iraq and Syria and assured the World Bank that Syria would receive at least 450-500m$^3$/s. Despite these promises to the World Bank, Turkey at the time did not provide the same guarantees to Syria and Iraq themselves. Because of the lack of basin-wide agreement on Turkey’s project, Turkey lost World Bank support for GAP in 1980 as it began the plans for the project’s crown jewel, the Atatürk Dam. Unlike its forerunners, Atatürk stored a large volume of water for irrigation and thus was perceived as

140 (United Nations Economic and Social Commission for Western Asia, Bundesanstalt für, and Geowissenschaften und Rohstoffe, “Euphrates River Basin,” 50–51.
141 Shapland, Rivers of Discord: International Water Disputes in the Middle East, 113.
more substantially impacting downstream flow to Iraq and Syria.\textsuperscript{143} Despite funding challenges, GAP continued, primarily financed from Turkish state coffers.\textsuperscript{144}

Ninety-eight percent of the Euphrates flow originates in Turkey, and upon completion, GAP would provide Turkey with control of 40 percent of that river’s waters flowing into Syria and 80 percent of Tigris and Euphrates waters to Iraq.\textsuperscript{145} Just over half of GAP projects are located on the Euphrates and those that focus on irrigation would drain the river of 30 percent of its average annual flow.\textsuperscript{146} From Syria and Iraq’s perspectives, these figures clearly raise a red flag. However, GAP has one underrated benefit for Turkey’s downstream neighbors: the dams’ regulation of the Euphrates and Tigris flow, which, prior to Turkish development, exhibited dramatic seasonal fluctuations and caused damaging floods in all three states.\textsuperscript{147} Despite the mix of beneficial and potentially harmful effects of Turkey’s GAP project, water scholar John Waterbury has pointed out that “Turkey could claim, although [there is] no evidence that it has, that it has undertaken at its own expense precisely the kinds of works provided for in the 1946 treaty,”\textsuperscript{148} in which Iraq gave Turkey the right to undertake flood control projects on the two rivers provided that Turkey communicate its plans to Iraq.

A summary of GAP’s key components is shown below:

\begin{itemize}
\item\textsuperscript{144} Waterbury, “Transboundary Water and the Challenge of International Cooperation in the Middle East,” 55; Kliot, Water Resources and Conflict in the Middle East, 125.
\item\textsuperscript{145} Kolars and Mitchell, The Euphrates River and the Southeast Anatolia Development Project, 107; Zentner, Design and Impact of Water Treaties: Managing Climate Change., 144.
\item\textsuperscript{146} Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 570.
\item\textsuperscript{147} Ibid., 571; Kiburoglu, Scheumann, and Kramer, Turkey’s Water Policy: National Frameworks and International Cooperation, 281; Dolatyar and Gray, Water Politics in the Middle East, 140.
\item\textsuperscript{148} Waterbury, “Transboundary Water and the Challenge of International Cooperation in the Middle East,” 56. As discussed in the section on time pd. 1, the 1946 Turkey-Iraq treaty gave Turkey the right to construct water infrastructure within its borders that would contribute to river flow regulation.
\end{itemize}
<table>
<thead>
<tr>
<th>Euphrates River</th>
<th>Tigris River</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Keban Dam (1974)</td>
<td>Name: Ilisu Dam (in progress)</td>
</tr>
<tr>
<td>Hydroelectric Capacity: 1240MW</td>
<td>Hydroelectric Capacity: 1200MW</td>
</tr>
<tr>
<td>Irrigation Potential: N/A</td>
<td>Irrigation Potential: N/A</td>
</tr>
<tr>
<td>Name: Karakaş Dam (1988)</td>
<td>Name: Cizre Dam (in progress)</td>
</tr>
<tr>
<td>Hydroelectric Capacity: 1800MW</td>
<td>Hydroelectric Capacity: 240MW</td>
</tr>
<tr>
<td>Irrigation Potential: N/A</td>
<td>Irrigation Potential: 120,000 ha</td>
</tr>
<tr>
<td>Name: Atatürk Dam (1990)</td>
<td>Name: Dicle (1997)</td>
</tr>
<tr>
<td>Hydroelectric Capacity: 2400MW</td>
<td>Hydroelectric Capacity: 110MW</td>
</tr>
<tr>
<td>Irrigation Potential: 852,781 ha</td>
<td>Irrigation Potential: 218,920 ha</td>
</tr>
<tr>
<td>Name: Birecik Dam (2000)</td>
<td>Name: Kralkizi Dam (1997)</td>
</tr>
<tr>
<td>Hydroelectric Capacity: 672MW</td>
<td>Hydroelectric Capacity: 94MW</td>
</tr>
<tr>
<td>Irrigation Potential: 60,000 ha</td>
<td>Irrigation Potential: 80,000 ha</td>
</tr>
<tr>
<td>Name: Karkamış Dam (2000)</td>
<td>Name: Batman Dam (1999)</td>
</tr>
<tr>
<td>Hydroelectric Capacity: 180MW</td>
<td>Hydroelectric Capacity: 185.6MW</td>
</tr>
<tr>
<td>Irrigation Potential: N/A</td>
<td>Irrigation Potential: 37,744 ha</td>
</tr>
<tr>
<td>Total: 5400MW</td>
<td>Total: 5960MW</td>
</tr>
<tr>
<td>Irrigation Potential: 1,083,000 ha</td>
<td>Irrigation Potential: 558,000 ha</td>
</tr>
</tbody>
</table>

Table 2: Major Dams of the Southeastern Anatolia Project (GAP)

Syria

In the mid-20th century, Syria faced increasing energy and agricultural demands similar to Turkey’s. With a population growing at an annual rate of 3.6 percent and electricity demand at rising at close to 20 percent per year in the latter half of the 20th century, Syria felt a pressing need to employ the waters of the Tigris-Euphrates Basin for agricultural production and energy provision. After Soviet-funded surveys of Euphrates dam potential in the late 1950s, Syria established the Syrian General Establishment of the Euphrates Project in 1961. The Syrian Euphrates Project, also known as the Euphrates Valley Project, was officially launched in 1966 when Syria began construction of the Soviet and German funded Tabqa Dam. The Syrians had ambitious plans for the dam: irrigating 850,000 ha and producing 800MW of electricity. The Tabqa was completed in 1973 and its reservoir was filled by 1975 to create the 11bilion m³ Lake Assad. Following the initiation of Tabqa, Syria set up the General Administration for the Development of the

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150 Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 139.

151 Ibid., 136.

152 Naff and Matson, Water in the Middle East, 96; Zentner, Design and Impact of Water Treaties: Managing Climate Change., 144.

153 Naff and Matson, Water in the Middle East, 90.

Euphrates Basin in 1968, which hatched plans for nine hydropower projects to be launched by 1988.\footnote{Schulz, “Turkey, Syria, and Iraq: A Hydropolitical Security Complex,” 100.}

Despite ambitious goals, many of Syria’s projects were seen as a disappointment, particularly the Tabqa dam. Although the dam provided 60 percent of Syria’s electricity by the turn of the century and accounted for close to 100 percent of the water supply to Aleppo,\footnote{Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 573; Shapland, Rivers of Discord: International Water Disputes in the Middle East, 110.} its irrigation and energy production has fallen well short of its goals. The Soviet design of the dam did not account for the land’s uneven topography, so the dam regularly fails to meet full electricity demands during seasonal river fluctuations.\footnote{Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 573.} Similarly, while exact figures vary, there is widespread consensus that Tabqa’s predicted agricultural expansions of an additional 650,000 ha of irrigated farmland were not realized due to Syria’s high gypsum content soils (gypsum is quite soluble, leading to the collapse of irrigation

\footnote{Schulz, “Turkey, Syria, and Iraq: A Hydropolitical Security Complex,” 100.}
channels built in gypsum-rich soils). In fact, Syria’s irrigated land area fell by close to 20 percent between the 1960s and 1990s, due to salinization, inundation, waterlogging and changing land laws. Syria’s salinization problems, along with lower-than-expected energy and irrigation output can be attributed to both its physical characteristics and changes in flow stemming from completion of Turkey’s upstream projects. Despite challenges, Syria went forward with a plan to install pump irrigation for 150,000 ha on the Tigris in 1989 and followed the Tabqa dam with construction of the Al-Baath and Tishrin dams in 1986 and 1999 respectively. Though environmental factors have limited the success of Syria’s hydro-development projects, as in Turkey, the Tigris and Euphrates have been viewed and utilized as tools to boost Syria’s economy and provide food and energy to her populations.

**Iraq**

Iraq’s hydro-development has followed a similar model. With an ample supply of oil and relatively flat topography (which limits the construction of large dams necessary for hydroelectric production), Iraq’s development ambitions on the Tigris and Euphrates originally emphasized flood control, irrigation, and desalinization. Iraq’s modern river development began earlier than her upstream neighbors—in 1939 with the construction of the Al-Kut Barrage (a barrage is a low dam) and followed in 1956 with the Habbaniya project and Samara and Euphrates Barrages for flood control. By the 1960s, Iraq was irrigating ten times as much land as Turkey and five times as much as Syria.

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162 Kliot, *Water Resources and Conflict in the Middle East*, 139.
Despite topographical challenges, Iraq was keen on opportunities to produce cheap hydropower at home and reserve petroleum for export. By the latter part of the 1970s, half of Iraqi electricity was provided by hydropower. In the mid-1970s, with Soviet aid, Iraq’s Higher Agricultural Council, Land Reclamation Organization, and Ministry of Irrigation created the General Scheme for Planning Water and Land Resources of Iraq (also known as the “Revolutionary Plan”), which involved investing $300 million in 20 irrigation, hydropower, flood control, and water storage projects to be completed by 2000. Though Saddam Hussein’s rise to power in 1979 altered the state’s land and water bureaucracy, it did
not slow water development. The Haditha Dam for irrigation and hydropower was completed in 1987, followed by the Baghdadi Dam, begun in 1990. A system of barrages and dams lower on the Euphrates, including the Hindaya, Fallouja, and Hammourabi, all constructed in the 1980s, provide irrigation, diversion, and regulation. While much of Turkey’s development of the Tigris is in progress, and Syria’s is close to non-existent, Iraq’s Mosul dam on the upper Tigris has been providing up to 750MW of power and irrigating nearly 250,000 ha of farmland since 1983.

The most unique and ambitious of Iraq’s development projects is the Third (or Saddam) River. Beginning as the Thartar Canal, the idea was to connect the Tigris and Euphrates through a reservoir and canal, allowing Iraq to supplement any decreases in Euphrates flow with water from the Tigris. However, the plan evolved to consist of a 350-mile-long navigable canal between the two rivers that facilitates Iraq’s transfer of water from the Tigris to Euphrates and back while simultaneously removing excess irrigation drainage water from fields around Baghdad and desalinizing polluted agricultural land in the south near Basra. The Third River, for which construction was completed in 1992, eventually empties into the Persian Gulf alongside Tigris and Euphrates waters. While the final configuration of the project has received ample international criticism on environmental and human rights grounds (the ecologically rich Mesopotamian Marshes, home to the Shi’ite Marsh Arabs who historically opposed the Iraqi regime, were drained in creation of the Third River), both Syria and Turkey were in support of Iraq facilitating the transfer of water

172 Biswas, International Waters of the Middle East: From Euphrates-Tigris to Nile, 84.
173 Kliot, Water Resources and Conflict in the Middle East, 121.
174 Ibid.; Food and Agriculture Organization, Euphrates-Tigris River Basin, 7.
175 Dolatyar and Gray, Water Politics in the Middle East, 158; Biswas, International Waters of the Middle East: From Euphrates-Tigris to Nile, 84; Rubin and Kirisci, Turkey in World Politics: An Emerging Multiregional Power, 240.
176 Dolatyar and Gray, Water Politics in the Middle East, 158.
177 Rubin and Kirisci, Turkey in World Politics: An Emerging Multiregional Power, 240; Biswas, International Waters of the Middle East: From Euphrates-Tigris to Nile, 84–85; Soffer, Rivers of Fire: Conflict Over Water in the Middle East, 103.
between the Tigris and Euphrates as it justified, to a certain degree, continued development on the Euphrates in the two upstream states.

**1960s: Unproductive Negotiations and Competing Claims**

Recognizing their potentially competing claims for Tigris and Euphrates waters, the three states convened during the early phases of designing and implementing their schemes. After Syria announced its plans to construct the Tabqa Dam in 1962, the riparians entered into a series of ultimately unproductive technical bipartite and tripartite talks attended by mid-level economic ministers from the three countries that lasted until the early 1970s. At a 1962 meeting between Syria and Iraq, the two states agreed to exchange technical information regarding river flow and in a meeting between Turkey’s Ministry of Energy and Natural Resources and equivalent Iraqi representatives signed agreements for similar exchanges of information. In a 1965 tripartite meeting (the first meeting of representatives from all three states), following the recommendations of a World Bank report, Turkey suggested the creation of a Joint Technical Committee to evaluate the two rivers’ flow and the needs of the three riparians to ensure an equitable division. The initially promising negotiations turned sour after the three states announced their respective development plans’ demands for the rivers: Turkey 14 billion cubic meters, Iraq 18 billion, and Syria 13 billion. The demands added up to a full one and a half times (15 billion cubic meters) more than actual river capacity. While Turkey agreed in 1966 to guarantee at least 350 m$^3$/s of flow.

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178 Dolatyar and Gray, *Water Politics in the Middle East*, 158.
179 Interesting and important things to discuss that pertain to this section: nationalism/black boxes of unilateral development projects, ideological and ethnic dimensions of the development projects.
182 Rubin and Kirisci, *Turkey in World Politics: An Emerging Multiregional Power*, 244.
183 Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 578.
184 Waterbury, “Transboundary Water and the Challenge of International Cooperation in the Middle East,” 57.
during the impounding of the Keban Dam on the Euphrates, the first dam of its development project for Southeastern Anatolia, no long-term agreement was reached during the series of negotiations.\textsuperscript{187}

During these meetings, Turkey staked a claim to the Tigris and Euphrates based on the principle of absolute territorial sovereignty whereby a state “has an unrestrained right to use the water resources within its own territory.”\textsuperscript{188} Brismar (2002) has argued that part of Turkey’s motivation for GAP was the need to exercise this claim to the river\textsuperscript{189} and undermine its neighbors’ claims of historical rights. Iraq expressed its claim of historical or acquired rights to use of the Tigris and Euphrates based on the fact that it was the first of the three riparian states to develop water projects along the rivers.\textsuperscript{190} Syria similarly claimed acquired rights and riparian rights, which dictate, “every state along the course of a river has an inherent right to the water of that river, which is not to be diminished or degraded without that state’s concurrence.”\textsuperscript{191} These competing claims led to full blown crisis in the mid-1970s.

**The Crisis of 1975**

By the end of 1973, both Turkey and Syria’s first large dams were relatively complete (Keban in Turkey and Tabqa in Syria), and full functionality waited only on the filling of their respective reservoirs. Unfortunately, the timing for filling the dam reservoirs coincided with two years of drought.\textsuperscript{192} During the first season that spring flood waters were impounded behind both reservoirs, Iraq, the farthest downstream state, experienced dramatic drops in water levels, and so requested that Damascus release an additional $200\text{m}^3/s$
downstream. The following year, as the two upstream dams once again decreased flows to fill their reservoirs, Iraq accused Syria of diminishing the flow from the usual 920 m$^3$/s to an “intolerable” 197 m$^3$/s,\textsuperscript{193} and keeping more water than necessary in Lake Assad behind Tabqa dam for political reasons.\textsuperscript{194} Iraq blamed Syria for loss of 70 percent of Iraq’s winter crops and the suffering of more than three million Iraqi farmers,\textsuperscript{195} and called upon the Arab League to intervene.

Amidst this crisis, Syria and Iraq came close to engaging in armed conflict. After Syria refused to cooperate with first an Arab League, then a Saudi Arabia-mediated, resolution and closed her airspace to Iraq, the two states sent troops to their mutual border and suspended flights. Despite Syria’s claims that she was passing on more than two thirds of the water coming to her from Turkey, Iraq threatened Syria that it was prepared to “take any action necessary to ensure the Euphrates flow”\textsuperscript{196} and there were reports of Iraqi plans to blow up the Tabqa dam. The tense situation was not helped when a Syrian soldier was discovered on the Iraqi side of the border placing explosives inside Kerbala, an Iraqi holy city.\textsuperscript{197}

Tensions finally died down after Soviet and Saudi mediated efforts convinced Syria to agree to release additional water downstream to Iraq. There are conflicting accounts as to the precise agreements: Rubin and Kirisci cite an additional 200 m$^3$/s per year as the agreed upon extra water flow from Syria, while Naff and Matson credit a Syrian decision that 60 percent of Euphrates water that got to Syria from Turkey would go on to Iraq and 40 percent
would be utilized in Syria.\textsuperscript{198} Despite the fact that the filling of the Keban dam contributed to the lack of water downstream in Syria and Iraq, Turkey was never brought into this crisis.

\textit{Missed Shots at Peace}

Following the drama of the mid-1970s, the 1980s heralded a multitude of failed attempts to find a peaceful resolution to the Tigris-Euphrates issue. In 1980, Turkey and Iraq agreed to establish a Joint Technical Committee (JTC) for Tigris and Euphrates cooperation.\textsuperscript{199} Syria began attending JTC meetings in 1983 and, although 16 trilateral JTC meetings were held over the following 10 years, they were primarily concerned with fact-finding and communications to determine how to begin to allocate the basin’s waters. Unfortunately, the JTC had no real power and did not succeed in catalyzing a trilateral agreement. JTC meetings deteriorated in the early 1990s and would not be reinstated until the mid-2000s.\textsuperscript{200}

To assuage the fears of its downstream neighbors and share its water abundance with the rest of the Middle East, Turkey’s then Prime Minister, Turgut Özal proposed two “Peace Pipelines” in the mid 1980s.\textsuperscript{201} The Peace Pipeline project would have sent water from the Seyhan and Ceyhan rivers in Turkey through the “Western Pipeline” to several large metropolitan areas in Syria and Jordan and through the “Gulf Pipeline” to urban centers in Iraq, Kuwait, Saudia Arabia, Oman, Bahrain, Qatar, and the United Arab Emirates.\textsuperscript{202} While the project appeared feasible environmentally and financially (the necessary $20 billion was fronted by the International Bank for Reconstruction and Development and Islamic

\textsuperscript{198} Naff and Matson, \textit{Water in the Middle East}, 94–95.
\textsuperscript{199} Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 578.
Development Bank),\textsuperscript{203} it was ultimately politically unpalatable to the other states of the Middle East. Key pipeline states Saudi Arabia and Kuwait cited concerns related to higher-than-local water prices and fear of Turkish water monopoly in the region.\textsuperscript{204}

The 1987 Protocols

Conflicntial water politics inhabited the top of riparian agendas amidst security crises of the late 1980s, and between Turkey and Syria became linked Kurdish militancy. In 1986, Syrian Prime Minister Abd Al-Rauf Al-Kasm “stressed that the Euphrates was of vital importance to Syria, and implied that if during the building of the major dams of GAP, Turkey retained an excessive amount of Euphrates’ waters, Syria could retaliate with other means.”\textsuperscript{205} By “other means,” the Syrian regime intimated that any action on Turkey’s part to decrease downstream flow would result in Syria upping its support for militants, like those of the Kurdistan Worker’s Party (PKK), inside Turkey.\textsuperscript{206} In 1986, 25 people were arrested throughout Anatolia after a plot was discovered to plant explosives in Atatürk Dam and blow up connected parts of GAP.\textsuperscript{207} Though the men were caught before they were able to carry out their plan, Turkish authorities discovered that Syria had funded the attack out of concerns that the entirety of Euphrates flow would be cut off upon completion of GAP.\textsuperscript{208}

On the heels of this diplomatic fiasco, Turkey and Syria came to a temporary agreement in 1987. At back-to-back economic and security meetings with participation of both Turkish and Syrian Prime Ministers, Turkey and Syria signed protocols designed to delink water politics from security politics. In the economic protocol, Turkey promised to maintain a yearly average Euphrates flow of 500 cubic m/s while filling Atatürk Dam

\begin{itemize}
\item \textsuperscript{203} Starr, “Water Wars,” 28; Schulz, “Turkey, Syria, and Iraq: A Hydropolitical Security Complex,” 118.
\item \textsuperscript{204} Starr, “Water Wars,” 28.
\item \textsuperscript{205} Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 19.
\item \textsuperscript{206} Ibid.
\item \textsuperscript{207} Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 577; Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 20; Wolf and Medzini, “The Euphrates River Watershed: Integration, Coordination, or Separation?,” 112.
\item \textsuperscript{208} Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 20.
\end{itemize}
reservoir and until an official, tripartite allocation was reached.\textsuperscript{209} In the following protocol, “Cooperation on Security Problems,” Syria promised to extradite insurgents (it was implied that Syrian and Turkish leadership referred to the PKK in the use of the term “insurgents”) and both sides would “prevent activities against the other from originating in their countries.”\textsuperscript{210}

Although it initially seemed that both sides would hold to the agreements, in 1989, after PKK militants captured in Turkey continued to admit to being trained and backed by the Syrians, Turkey’s Özal stated that “he had doubts that Syria was adhering to the Mutual Security accord signed in 1987…[and] added that if Syria did not stick to the requirements of the 1987 accord Turkey would also see itself not bound by the requirements of its 1987 promise to deliver 500 cubic meters of water per second downstream.”\textsuperscript{211} The failure of the 1987 agreement to elicit cooperation on Turkey and Syria’s mutual water and security concerns laid the unsteady foundations for water politics to once again tip the scale towards armed conflict among the three riparians, in 1990.

\textit{The Crisis of 1990}

In 1989, Turkey began to herald the coming completion of the Atatürk dam, crown jewel of its Southeastern Anatolia Project. Turkey announced to downstream riparians, Syria and Iraq, that, in January of 1990, Turkey would begin a month-long diversion of Euphrates flow in order to fill the Atatürk reservoir.\textsuperscript{212} With river levels predicted to drop to 120\(m^3/s\), Turkey planned to release extra water (750-1000\(m^3/s\)) in the months before it began impoundment in order to guarantee that flow levels did not fall below the 500\(m^3/s\) agreed

\textsuperscript{209} Scheumann, “The Euphrates Issue in Turkish–Syrian Relations”; Syrian Arab Republic and Turkey, Protocol on Matters Pertaining to Economic Cooperation.
\textsuperscript{210} Wolf and Medzini, “The Euphrates River Watershed: Integration, Coordination, or Separation?,” 112; Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 22; Zentner, Design and Impact of Water Treaties: Managing Climate Change., 151.
\textsuperscript{211} Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 22–23.
upon in 1987.\textsuperscript{213} Prior to impoundment, the Turkish Foreign Ministry even sent representatives to both Damascus and Baghdad to make guarantees to the downstream states’ governments that filling of the Atatürk dam was “not a political maneuver to apply pressure on our neighbors,” and noting that Turkish farmers between the Atatürk dam and the Syrian border would also be affected during the month of impoundment.\textsuperscript{214}

Despite these seemingly friendly reassurances, Turkey’s choice to continue with dam impoundment despite an ongoing drought was perceived as purposeful water hostility from Ankara and not taken well south of Turkey’s border. Both Syria and Iraq demanded that the impoundment period be shortened and Saddam Hussein’s regime in Iraq, which claimed that the country stood to lose 1.3 million hectares of agricultural farmland in the month of diminished Euphrates flow, “considered the Euphrates problem as the most important issue between the two neighbors.”\textsuperscript{215} Syria opposed Turkey on the grounds that the diminished flow would largely snuff out the water supply to Aleppo.\textsuperscript{216} Iraq, feeling excluded from Syria and Turkey’s 1987 agreement on 500m\textsuperscript{3}/s Euphrates flow, called for a trilateral treaty that guaranteed a Euphrates flow of 700m\textsuperscript{3}/s out of Turkey. When Turkey was unwilling to meet such demands, Iraq threatened to deny renewal of the 1984 Turkey-Iraq Security Protocol (which gave Turkey permission to pursue militants up to 5km into Iraqi territory) and there were reports of Iraqi threats to bomb Euphrates dams in Turkey\textsuperscript{217} if Ankara did not compromise on the water issue.\textsuperscript{218} Just days before dam impoundment began, a group of PKK fighters with Syrian ID cards was caught crossing Syria’s border into Turkey. Though

\textsuperscript{213} Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 23.
\textsuperscript{214} Bagis, “Turkey’s Hydropolitics of the Tigris-Euphrates Basin,” 575.
\textsuperscript{215} Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 25.
\textsuperscript{216} Shapland, Rivers of Discord: International Water Disputes in the Middle East, 123.
\textsuperscript{217} Zehtiner, Design and Impact of Water Treaties: Managing Climate Change., 148.
\textsuperscript{218} Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 25.
the incident was never expressly linked to the impending Euphrates diversion, it has been suggested that the actions were characteristic of a covert Assad response to the water issue.\textsuperscript{219}

To Ankara’s dismay, the filling of the Atatürk dam reservoir finally united Syria and Iraq on water concerns. Both feeling the victim of Turkey’s unilateral development, Syria and Iraq in late 1990 reaffirmed their prior agreement that Syria would utilize 42 percent of the flow out of Turkey and allow 58 percent to continue on to Iraq.\textsuperscript{220} After the Atatürk reservoir impoundment was completed and flow returned to normal, tempers cooled between Turkey and the two downstream riparians.\textsuperscript{221} Despite Iraq and Syria’s brief cooperation, the Gulf War, which started mere months after the impoundment, widened the gap between Baghdad and Damascus, diminishing their combined leverage against Turkey.\textsuperscript{222} Although the Atatürk dam incident was largely forgotten about after flows returned to normal, it had made its mark on the physical landscape—a 70-mile dry brown area stretched from the Turkish border to Lake Assad where Syrian farmers had been unable to irrigate their crops during the month-long diversion.\textsuperscript{223}

\textit{The End of an Age}

After the Atatürk Dam crisis, the water issue remained largely at an impasse for the last 10 years of the century. The dam crisis effectively ended the little tripartite cooperation that existed throughout the 1980s with the end of Joint Technical Committee meetings in the early 1990s.\textsuperscript{224} Turkey was scheduled to host the Middle East Water Summit in November 1991, but it was cancelled in light of the outbreak of the Gulf War, collapse of the Soviet

\begin{footnotes}
\item[219] Ibid.
\item[220] Ibid.; Rubin and Kirisci, \textit{Turkey in World Politics: An Emerging Multiregional Power}, 245.
\item[221] Zentner, \textit{Design and Impact of Water Treaties: Managing Climate Change}, 148.
\item[222] Bolukbasi, “Turkey Challenges Iraq and Syria: The Euphrates Dispute,” 31.
\item[223] Barkey, \textit{Reluctant Neighbor: Turkey’s Role in the Middle East}, 138.
\item[224] Zentner, \textit{Design and Impact of Water Treaties: Managing Climate Change}, 148.
\end{footnotes}
Union, and death of then Turkish President Özal.\textsuperscript{225} Meanwhile, Turkey and Syria continued to exchange threatening words related to water and separatist militants, and animosities among all three regimes remained. In 1999, soon after the leader of the PKK, Abdullah Öcalan was expelled from Syria and captured by Turkish officials, Turkey increased water flow to Syria.\textsuperscript{226}

Though the 20\textsuperscript{th} century ended on a relatively conciliatory note, the tenor of water politics since 1960 was more-often-than-not negative and conflictual. As has been illustrated, water during this time period remained primarily in the arena of high politics. Dealt with by prime ministers and presidents, it raised dispute among the three riparian states alongside central security issues. During the following time period, between 2000 and 2010, water would remain in high politics but prove a far less divisive issue among the Tigris-Euphrates’ three riparian states.

**Time Period 3: 2000-2010**

"If we ask a Turk living on the banks of the Euphrates whether he wants his Syrian brother to go without water he will reply, ‘Absolutely not.’"—Syrian President Bashar al-Assad, 2004\textsuperscript{227}

The coming of the new millennium marked a dramatic change in Turkey, Syria, and Iraq’s water power politics. While the latter half of the 20\textsuperscript{th} century often brought bilateral and trilateral tension and conflict, the 21\textsuperscript{st} opened to a decade of unprecedented cooperation among all three riparian states. Despite violence and political upheaval in Iraq, and the worst drought in centuries afflicting the Tigris-Euphrates Basin, water no longer served as a source of dispute among the three states during this time period. Though it remained largely in high politics, dealt with by presidents, prime ministers, and other top-level officials alongside

\textsuperscript{226} Scheumann, “The Euphrates Issue in Turkish—Syrian Relations,” 760.
\textsuperscript{227} “Syria’s Al-Asad Upbeat on Relations With Turkey, Border Disputes, EU Prospects.”
security concerns, it was an arena of cooperation rather than contention. During this time period, while dramatic progress was made in bilateral and trilateral discourse about water, no treaties were implemented, nor permanent water allocations agreed upon.

**Hydro-Cooperation: New Views for a New Millennium**

The Tigris-Euphrates co-riparian states rang in the new millennium with renewed bilateral water cooperation on all fronts. In January 2001, Iraq and Syria held talks to reach a new water sharing agreement. Although the agreement’s specifics, which included a “formula for sharing the waters of the Euphrates between Iraq and Syria,” were never made public, the agreement was largely intended to represent a call upon Turkey to initiate trilateral discussion on the water issue. Syria and Iraq reiterated the desire for tripartite cooperation in 2005. According to *The Syrian Arab News Agency (SANA)*, Syrian Premier Mohammed Naji Ottri received Iraqi Minister of Electricity Abdullateif Rasheid, and Minister of Water Resources, Mohsen Shalash, in June to sign an agreement indicating Syrian and Iraqi intentions to sustain their exchange of Euphrates river operational, climatic, and hydrological data and to contact Turkey to revive the tripartite Joint Technical Committee. Syria also articulated a plan to release extra water from its dams to help spur much-needed Iraqi electricity production.

Although Turkey did not attend either of Iraq and Syria’s early meetings, the two Arab states were not alone in their bilateral progress in the first years of the 21st century. In August 2001, Syrian Minister of irrigation Taha al-Atrash visited sites on Turkey’s

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228 Wolf and Newton, “Case Study of Transboundary Dispute Resolution: The Tigris-Euphrates Basin.”
231 “Syrian, Iraqi Ministers Discuss Water, Electricity Cooperation, Comment.”
232 “Syrian Premier Receives Iraqi Ministers; Water Agreement Signed.”
Southeastern Anatolia Project (GAP)\textsuperscript{234} as part of a larger Turkish-Syrian cooperation on river development. The administration for Turkey’s GAP project and its counterpart in Syria, the General Organization for Land Development (GOLD), signed a joint communiqué for cooperation on the two projects.\textsuperscript{235} Turkey and Syria planned to exchange information regarding water quality and irrigation management and to collaborate on research, training, agricultural education programs, and even some environmental protection and rural development projects.\textsuperscript{236} On the one-year anniversary of Syria and Turkey’s Joint Communiqué, Syrian Minister of Irrigation Ridwan Martini appreciated Turkey’s awareness of the Syrian peoples’ need for water and stated that “waters flowing from Turkey to Syria should bring happiness to the peoples of both countries.”\textsuperscript{237} This sentiment was echoed after Syria’s new president, Bashar al-Assad, met with Turkish Prime Minister Recep Tayyip Erdoğan during his first-ever visit to Turkey in 2004. According to Assad, the Turks brought up the water issue during the meeting and presented a new proposal for cooperation.\textsuperscript{238} While the details were not publicized, the proposal led Assad to state in an interview with \textit{Milliyet}, “In my opinion neither the Syrian State nor its people have any problem with Turkey over water.”\textsuperscript{239} Though not conclusive in terms of a more permanent bilateral water agreement, this statement represents a remarkable about-face from Syria’s view of Turkey’s use of the Tigris-Euphrates waters just five years earlier.

While bilateral cooperation on the water issue in the early 2000s was more limited on the Iraq-Turkey front, it was not altogether non-existent. In 2003, on a visit of Turkey’s
Energy and Natural Resources Ministry to Iraq, Turkey announced plans to sell Iraq water. In addition to electricity transmissions and diesel oil sales, it was agreed that Turkey’s State Hydraulic Works (DSI) would both transport water from a purification facility in the southeastern Sanliurfa province to Iraq and support Iraq’s agricultural irrigation efforts.\(^{240}\) To this end, Turkey in 2004 provided Iraq’s newly reformed Ministry of Water Resources with water flow data.\(^{241}\) According to Lorenz (2008), “This was significant because the parties ha[d] long treated flow data as a national security secret.”\(^{242}\)

As is evident, the early part of the new millennium’s first decade was characterized by promising bilateral cooperation on all sides. Though Syria and Iraq’s calls for a tripartite meeting were not yet answered, the dialogue occurring on all sides represented remarkable progress since the previous period. Many of the above discussions and agreements were conducted in tandem with security and military negotiations, and, as discussed, it was often high level technocrats or even heads of state involved in these bilateral water negotiations.

**Three is a Magic Number: The Revival of Tripartite Negotiation**

Although representatives of Turkey, Syria, and Iraq’s governments would not come together again to discuss water until 2007,\(^{243}\) civil society within the three states took advantage of the opportunity for water cooperation starting in 2005. That year, scholars, scientists, and professionals from Turkey, Syria, Iraq, and the United States established the Euphrates-Tigris Initiative for Cooperation (ETIC).\(^{244}\) Recognizing the limits of formal government negotiation, ETIC’s aim was to “provide opportunities to enhance the dialogue

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\(^{240}\) “Turkey Begins To Sell Electricity to Iraq.”


\(^{242}\) Ibid.


and mutual understanding among the riparians of the Euphrates-Tigris System\textsuperscript{245} through “voluntary, nonofficial, nonbinding, not for profit, and non-governmental” track two diplomacy.\textsuperscript{246} More recently, ETIC has put an emphasis on climate change, endeavoring to develop a database of agricultural, historical, hydrologic, and development information for use of the three riparian governments in their official negotiations.\textsuperscript{247} Though it is unclear what, if any, impact ETIC had upon official negotiations, the mere existence of such an institution is indicative of the warming climate for cooperation among the three riparian states. It also represented the first forum of water experts from all three countries to convene since the Joint Technical Committee meetings of the 1990s.

During Syrian irrigation minister al-Atrash’s visit to Turkey’s GAP in 2001, he called for a revival of the tripartite Joint Technical Committee (JTC).\textsuperscript{248} Though it took six years, his wish came true in 2007. The JTC was reinstated after the Turkish Minister of the Environment and Forestry, Syrian Minister of Irrigation, and Iraqi Minister of Water Resources identified it as the most effective “cooperative framework to deal with regional water issues.”\textsuperscript{249} Between late 2007 and 2010, the JTC met several times to discuss river monitoring, joint training programs in irrigation management, information exchange for climate and drought data.\textsuperscript{250} The three states also agreed to build or repair river flow measuring gauges and Turkey acquiesced to increase downstream flow from $500\text{m}^3/\text{s}$ to $550\text{m}^3/\text{s}$ during the dry season of 2009 in the face of worsening drought.\textsuperscript{251} At a 2008 JTC meeting, ministers from the three states decided to “establish a trilateral water institute

\textsuperscript{244}“Euphrates-Tigris Initiative for Cooperation (ETIC).”
\textsuperscript{246}Rifai, “Impact of Collaboration in the Euphrates Tigris Region.”
\textsuperscript{247}Oktav, “Water Dispute and Kurdish Separatism in Turkish-Syrian Relations,” 111.
\textsuperscript{249}Ibid., 295; Strategic Foresight Group, \textit{Water Cooperation for a Secure World: Focus on the Middle East}, 34.
comprised of 15 water engineers from each country in order to conduct studies aimed at achieving efficiency in water use and management in the region.” Located at Atatürk Dam in Turkey and paid for by the Turkish government, the institute mapped the basin’s water resources and drafted recommendations for each state’s management of the Tigris and Euphrates waters in its borders. In 2009, the three states signed a memorandum of understanding, which “focused on the establishment of joint measurement stations on the Euphrates and Tigris rivers, exchange of meteorological information, observation of water amount that goes into Syria and Iraq every season, and evaluation of the impact of climate change on the two rivers.” This memorandum capped the late 2000s period of promising tripartite cooperation.

**High Level Strategic Cooperation Councils**

While the revitalization of the JTC and the establishment of the trilateral water institute were by far the most substantial illustrations of tripartite water cooperation in the 2000s, 2008 and 2009 witnessed immense progress on bilateral fronts as well. Top diplomats in Turkey and Iraq established a High Level Strategic Cooperation Council (HSCC) in 2008 to cover a broad range of issues between the two states, including, “encouraging cooperation in the field of water resources and agriculture to assist Iraq in meeting its agricultural needs and water requirements including irrigation by taking into account Turkey’s agricultural needs and water requirements to provide such assistance.” This goal of improved water cooperation was largely realized in mid-2009 when Turkey’s Ministry of Environment and Forestry and Iraq’s Ministry of Water Resources signed a memorandum of understanding

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252 Strategic Foresight Group, *Water Cooperation for a Secure World: Focus on the Middle East*, 34.
253 Nowhere in my research have I been able to find a name for this institute—it seems it may have been built into the already-functioning Atatürk Dam administration.
255 “Turkey Signs MOU With Iraq, Syria on Use of Water From Euphrates, Tigris Rivers.”
regarding national water use, development, and management, which also addressed potential
effects of climate change.\textsuperscript{257}

Similarly, after Turkey’s establishment of an HSCC with Syria in early 2009, the two
states also signed four water-related memorandums of understanding.\textsuperscript{258} The first permits
Syria to construct a water pumping station on the Tigris, which Syria had previously
underutilized, to withdraw 1.25km\textsuperscript{3} of water.\textsuperscript{259} One remarkable aspect of this memorandum
is its clear indication of the continuing intention to reach a final agreement on allocation of
the rivers. Though this particular memo does not achieve this allocation (or even that
between Turkey and Syria alone on the Tigris), Article 6 begins, “Upon reaching a final
allocation agreement of the waters of Tigris-Euphrates Rivers among Turkey, Syria, and
Iraq…”\textsuperscript{260} thus illustrating the eventual intent to reach a more permanent agreement. The
second and third memorandums outlined Turkey and Syria’s planned coordination in face of
the worsening regional drought.\textsuperscript{261} Drought cooperation entailed extensive data, information,
and experience exchange, hydrologic studies, joint training programs, implementation of
monitoring and climate change mitigation measures, and rehabilitation of drought-resistant
plant species.\textsuperscript{262} The potential to include Iraq in establishment of a joint hydrological and
meteorological database is mentioned, but only “if deemed necessary by both parties.”\textsuperscript{263} The
final, and perhaps most notable Syrian-Turkish memorandum is the memo “for the


\textsuperscript{258} Strategic Foresight Group, Water Cooperation for a Secure World: Focus on the Middle East, 34.


\textsuperscript{260} Syria-Turkey High Level Strategic Cooperation Council, “The Memorandum of Understanding Between the Government of the Republic of Turkey and the Government of the Syrian Arab Republic on Establishment of a Pumping Station in the Territories of Syrian Arab Republic for Water Withdrawal From the Tigris River.”


\textsuperscript{262} Syria-Turkey High Level Strategic Cooperation Council, “The Memorandum of Understanding between the Government of the Republic of Turkey and the Government of the Syrian Arab Republic in the Field of Efficient Utilization of Water Resources and Combating of Drought.”

\textsuperscript{263} Ibid., 3.
construction of a joint dam on the Orontes River under the name ‘Friendship Dam,’

a name that is indicative of warming relations in and of itself. Syria and Turkey would collaborate on the construction, operation, and maintenance of the dam and its reservoir on the long-contested Orontes River. The dam marks the first large-scale joint river development project in the basin and provides a remarkable example of collaboration on water issues.

Beyond the more tangible examples of agreements and memorandums of understanding, the evolving rhetoric of leaders and high-profile ministers in the three riparian states best illustrates the new millennium’s changing tides. At a Middle East Water Forum in Jordan in 2008, Turkish Minister of Environment and Forestry, Veysel Eroglu, said of Turkey’s use of the Tigris and Euphrates, “War will not erupt in the Middle East due to water…we do not perceive them as our rivers, and we wish to launch studies in line with interests of countries from which these rivers also flow.” This comes in contrast to the Turkish attitude during the second period, when a Turkish foreign minister suggested that downstream demands to halt dam construction were an “interference in Turkey’s national sovereignty” and then President Suleyman Demirel stated, “Turkey has the right to exploit Euphrates water, because 90 percent of the water comes from Turkey.” The new view clearly indicates a greater propensity on Turkey’s part to recognize alternate claims to the Tigris and Euphrates water sources and reflects the high politics, cooperative nature of their actions during this time period in contrast to the previous.

265 Ibid.; Arsu, “Turkey and Syria Signal Improved Relations.”
266 “Turkish Minister Views Water Use in Middle East in Water Forum in Jordan.”
267 Arslan, “Turkey: Turkey Refuses To Revive Water Meetings With Syria, Iraq.”
268 Ahmad, “Turkey: Demirel on Terrorism, Ties With Syria.”
Hydro-Contention: Simmering Just Beneath the Surface

Despite kinder words along with actual progress in communication, discourse, and technical collaboration on the water issue, no formal treaty was signed among Turkey, Syria, and Iraq during this time period and the three states did not reach a trilateral agreement on water allocation. Turkey and Syria’s August 2001 Joint Communiqué on GAP and GOLD did not contain any provisions regarding changes in the amount of water Turkey would release as part of the agreement.\textsuperscript{269} The same can be said of all other agreements and memorandums of understanding (whether bilateral or trilateral) that took place during this time period. According to Kütük (2010), “Turkey continues to regard the Euphrates and Tigris as transboundary rivers while Syria and Iraq see them as international watercourses and demand an equal division of water.”\textsuperscript{270} As long as such rigid views of the river system remain, it will be very difficult for cooperation to get beyond the kind of technical progress made during this time period.

This chapter has illustrated the oscillation of the Tigris-Euphrates basin’s hydropolitics over time. During the first period between the end of the First World War and the late 1950s/early 1960s, water was a low politics issue, managed as a technical, domestic policy concern, and subordinate to the three infant states’ newly forming political relationships. When discussed or addressed in treaties delineating overall relations, water was a cooperative issue among the three states, reaching the level of positive interaction on the conflict-cooperation spectrum characterized by information exchange and meetings of technical experts and bureaucrats. During the second time period, between 1960 and the turn of the century in 2000, water rose to high politics, taking center stage on agendas of prime

\textsuperscript{269} Lupu, “International Law and the Waters of the Euphrates and Tigris,” 358.
\textsuperscript{270} Kütük, “The Marginalization of Water in Turkish-Syrian Relations,” 40.
ministers, presidents, and foreign ministers and dealt with in state negotiations amidst critical concerns of security and territorial integrity. In these years, water politics became conflictual, with the liquid resource the subject of negative interaction ranging from verbal threats and coercive politics to military mobilization and covert activities. In the third time period, beginning at the start of the 21st century and extending until 2011, water remained a high politics issue, regularly discussed among high-level officials from all three states and certainly a foreign policy priority. However, unlike the previous period, water politics were collaborative during these years and, although no final allocation treaty was signed, there were instances of all types of positive engagement on the conflict-cooperation spectrum including joint projects and codified agreements.
Chapter 3: Turkey, Syria, and Iraq’s Politicized Hydropolitics

As the previous chapter evidenced, while Tigris-Euphrates hydropolitics have fluctuated between positive and negative interaction among the three riparian states over time, the basin has not experienced either extreme on the conflict—cooperation spectrum. This chapter examines the factors that have driven the oscillation in hydropolitics over time. I show how scarcity, both real and perceived, drove water from low to high politics, and illustrate how overarching diplomatic relations, the influence of external actors, economic ties, and ethnic and ideological similarities and differences have shaped hydropolitics.

Low Politics and Cooperation in the Early Years

Water was the subject of largely low politics, positive interaction during the first time period for two reasons: 1) the abundance of water (i.e. absence of both real and perceived scarcity) allowed water to remain primarily a technical issue; and 2) an internal focus in all three states kept their leaders focused on domestic issues, namely independence from colonial powers, organization of new governments, forging of national identities, and internal reform. The three states’ water cooperation was thus embedded within the establishment of basic bilateral relationships among the three new states and reflected the relatively peaceful tenor of the states’ political relationships during this time period.

Overflowing Rivers and Low Politics

Plentiful water to fulfill the needs of all three states and minimal upstream river development kept water off the agendas of high level politicians and separate from traditional security concerns. Without the threat of impending shortages or deprivation, water was an issue of little concern for state leaders and negotiators preoccupied with other pressing post-war political concerns. Under the climatic conditions of this period, the Tigris and Euphrates
contained more than adequate flow to meet the consumptive needs of all three states.\textsuperscript{271}

Between the breakup of the Ottoman Empire and the late 1950s, Turkey, the most water rich of the three states, was using less than three percent of the Tigris and Euphrates water it possessed, Syria just under ten percent, and Iraq around fifty percent.\textsuperscript{272} Dolatyar and Gray (2000) characterize the rivers as having a “marked surplus of water…until the 1970s.”\textsuperscript{273} It is thus clear that there was no “real” scarcity during this period that might concern leaders and high-level officials within the three states.

Development of the upstream stretches of the Tigris and Euphrates in Turkey and Syria was also extremely minimal, thus also preventing any \textit{perception} of water scarcity within the riparian states. Placing water management in the hands of medium level technocrats, advisors, and professionals, “the riparian countries were mainly concerned with water supply for urban and rural populations”\textsuperscript{274} during this period. Populations and economies were still relatively small, keeping demands for agriculture and electricity low\textsuperscript{275} and therefore requiring only the creation of small water management and irrigation projects that had little impact on water quality or quantity and were often inefficient.\textsuperscript{276} According to Shapland (1997), the views from Ankara, Damascus, and Baghdad during this period maintained that “it was clear that there was more than enough [water] for all,”\textsuperscript{277} keeping water low on the political agendas of the three riparians.

Iraq was the only state during the 1918-1960 time period that saw any substantial use of water for more than basic consumptive purposes. As much of the nation is comprised of

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\item \textsuperscript{272} Kliot, \textit{Water Resources and Conflict in the Middle East}, 136; Dolatyar and Gray, \textit{Water Politics in the Middle East}, 135.
\item \textsuperscript{273} Dolatyar and Gray, \textit{Water Politics in the Middle East}, 131.
\item \textsuperscript{275} I will find population and GDP statistics to back this up. Also Kibaroglu and Unver, “An Institutional Framework for Facilitating Cooperation in the Euphrates-Tigris River Basin,” 2.
\item \textsuperscript{276} Ibid.
\item \textsuperscript{277} Shapland, \textit{Rivers of Discord: International Water Disputes in the Middle East}, 115.
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low-lying plains, Iraq faced a severe flooding problem. While Iraq was still under Ottoman rule in the early 1900s, British hydrological engineer William Wilcox (hired by the Ottomans to evaluate solutions to the flooding issue) recommended the construction of the al-Hindiya Barrage on the Euphrates, the Kut Barrage on the Tigris, the Habbaniya, Tharthar, and Naharavan irrigation projects, and what would become the Bekhme and Mosul Dams to address the flooding problems and reinvigorate the small-scale irrigation of ancient Mesopotamia. The development of these projects proceeded slowly while Iraq was occupied by the British and after Iraqi independence in 1932. As the farthest downstream state on both rivers, these actions only affected domestic Iraq. Although they have provided the grounds upon which Iraq has claimed “historical rights” to the use of the basin since then, Iraq’s hydro development projects for flood control and small-scale irrigation during this time period were of very little concern to the two upstream powers, as they had no impact on the water supply faced in Turkey and Syria. Thus, despite the presence of some hydro-development, the fact that this development took place in the state farthest downstream on both rivers—and that no state faced the constraints of either real or perceived scarcity—water was not a primary issue in the states’ relations. With water a low politics concern, there was “no exigency during that period in devising a regime framework for better management and utilization of the waters in the basin” or in disputing river usage.

**Looking Inwards**

The cooperative water politics of this time period can largely be attributed to the inward focus of the three countries during their early years. Throughout this era, the three regimes were preoccupied with developing domestic economies and forming bureaucracies

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and basic governance institutions. Upon independence in 1932, Iraq faced numerous problems left over from Ottoman and British rule. The state spent the first several years of independence stabilizing its political system, quelling tribal fighting, and attempting to meet the demands of local citizens for order, infrastructure, and food.  

Similarly, after it became an independent nation at the end of WWI, Turkey turned inward to heal the land of its wounds, and Atatürk focused on goals of rapidly consolidating, developing, and reforming the Turkish state. After independence in 1941, Syria was left with little to no political structure. The nation thus focused domestically to construct its state institutions and build a cohesive nation free from French influence.

While this time period did see the beginnings of plans for the larger scale hydro-development that would come to characterize the years between 1960 and 2000, these plans reflected the three states’ internal focus. The states kept their plans for water management and development to themselves, and, preoccupied as they were facing the internal challenges of nationalist movements, bureaucracy formation, and power transitions from colonials to national governments, they were not overly concerned about water plans being made elsewhere. According to Kilbaroglu (2013), the three states’ burgeoning “national management and allocation policies were like ‘black boxes,’” reflecting both the domestic focus of state governments, and also indicating that the riparians’ future water demands were not discussed during treaty negotiations. While the treaty clauses pertaining to water clearly acknowledge the potential for future challenges of water allocation, the fact that development schemes were not yet finished or shared during negotiations both made water

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280 Sorenson, An Introduction to the Modern Middle East, 224.
281 Rubin and Kirisci, Turkey in World Politics: An Emerging Multiregional Power, 1.
282 Sorenson, An Introduction to the Modern Middle East, 290.
284 Ibid., 287.
285 The full extent of each riparian’s demands for the rivers would not be unveiled until the mid 1960s.
agreements basic and positive and allowed water to be treated as just another technical issue to be dealt with amidst state formation.

This is reflected in Turkey and Syria’s early hydro-development planning, which was at this time managed by the relevant bureaucratic organs in each state (the Ministry of Energy and Natural Resources in Turkey\(^{286}\) and the Ministry of Public Works and the Ministry of the Euphrates Dam in Syria\(^{287}\)). In 1936, Turkey established the “Administration for Electricity Studies” to investigate the potential of the Tigris and Euphrates rivers for hydroelectric production.\(^{288}\) Extensive surveys and studies of the geologic and hydrologic features of the basins were completed, resulting in plans for development projects along the Twin Rivers and the creation of the State Hydraulic Works (DSI) in 1953 to manage water development.\(^{289}\) However, despite “the Euphrates and Tigris rivers attract[ing] the attention of planners in the early years of the Turkish Republic...the remoteness of the region and the more pressing matters facing the young nation prevented action at that time.”\(^{290}\)

Hydro-planning began as early as the 1920s in Syria, when the French recommended the construction of a barrage on the Euphrates near Syria’s border with Turkey.\(^{291}\) However the plan was not carried out then, nor upon reinvestigation after Syria gained independence in 1946.\(^{292}\) In the early 1950s, Syria saw some small-scale installation of pumps for irrigation, but it was not until the 1960s that more widespread water development began in both Syria and Turkey.\(^{293}\) The fact that the domestic projects during this first period both remained in the planning phase and that the full extent of their future water demand was not yet known


\(^{287}\) Daoudy, “Water, Institutions and Development in Syria: A Downstream Perspective from the Euphrates and Tigris.”


\(^{290}\) Ibid.

\(^{291}\) This would become the Tabqa dam after Soviets provided funding in 1957, dam construction began in 1960s


among the three riparians contributed to the perception of water abundance and facilitated this period’s cooperative hydro-politics. Water negotiations’ place embedded within the larger peace process and the establishment of basic diplomatic and economic relations also illustrates how water politics followed the tenor of the three states’ broader political relationships during this period.

**The Conflictual High Politics of Century’s End**

Water’s movement from the low politics of the first period to high politics in the second was driven by the riparian states’ mutual realizations that the aggregate water demand of their unilateral development projects, all of which were deeply tied to national pride and regime legitimacy in their respective states, exceeded the Twin Rivers’ supply. This perceived scarcity, which threatened the potential for each state to develop and maintain control of their diverse populations, made water a high politics issue. The conflictual water politics of the time followed overarching trends of hostility among the three riparian states. The specific factors that drove negative hydro-interactions in the second time period were: the Hatay territorial dispute between Syria and Turkey, Cold War proxy politics, Alawi and Sunni Ba’ath ideological differences and rivalries in Syria and Iraq, and Kurdish questions in Turkey. With water in the arena of high politics, the existing political divides based on the above factors made cooperative, positive hydro-interaction impossible. In this respect, water once again followed politics in Tigris-Euphrates riparian relations.

**Developing Dispute: Scarcity and the Politics of Development**

While hydro-development projects were in their planning phases up until the 1950s, the 1960s marked the beginning of their implementation and the first communication of the plans’ water demands among riparians. It was during the 1960s JTC negotiations that the full
extent of the three riparians’ competing claims to the rivers emerged.294 When the three riparians brought forward their development projects’ water demands and found them to outstrip river supply by more than 50 percent,295 water became, for the first time in the Tigris-Euphrates basin, a scarce resource. With aggregate demand set to exceed supply, the states were transformed from neighbors into competitors. The arrival of this perceived scarcity—and attendant to it, the possibility of real scarcity down the line—created the potential for conflict and dispute based on competing river claims, thus making water a possible security concern and catapulting it into high politics.

The implication of this newly created scarcity was that one or more state(s) were going to have to scale back their projects or alter their designs to make them less water intensive. Because of intimate linkages between the riparian states’ massive hydro-development projects and national pride, regime legitimacy, and economic success, the threat that each state’s project posed to those of the other states went beyond the risk of incomplete dams. In Turkey, “GAP [w]as a matter of national pride,” inspiring a kind of “obsessive interest in it by some politicians, such as Turgut Özal and Suleyman Demirel.”296 With the original plans laid out by the revered father of modern Turkey himself297 and designed to unite the state’s ethnic groups by “turn[ing] Kurds into Turks,”298 GAP was inextricably linked to Turkish national identity. In fact, each dam was inscribed with the motto of Turkish nationalism (originally spoken by Atatürk himself), “Ne mutlu Türküm diyene,” meaning “Happy is whoever says ‘I am a Turk.’”299 Similarly, in both Syria and Iraq, the “concept of

296 Dolatyar and Gray, Water Politics in the Middle East, 153,154.
297 Moran, Roskilde University, 76.
298 Jongerden, “Dams and Politics in Turkey: Utilizing Water, Developing Conflict.”
Arab food security...dominated...strategic thinking during the 1980s.” The economic promise of hydro-development projects was an important source of legitimacy for the regimes in both downstream states. In Syria, top officials asserted that “the Syrian Euphrates Project is Syria’s future,” and both states’ ruling Ba’ath parties “placed...emphasis on the development of rural areas and the organization of peasants as a political power base.” As the three riparians’ Tigris and Euphrates development projects were tied to state unity and regime survival, the moment that the extent of the three projects’ water demands were known by all parties, each state’s project thus became a threat to not only the others’ development plans but the very foundations of their states. In the words of Turkey’s President Suleyman Demirel: “Neither Syria nor Iraq can lay claim to Turkey's rivers any more than Ankara could claim their oil. This is a matter of sovereignty. We have a right to do anything we like. The water resources are Turkey's, the oil resources are theirs. We don't say we share their oil resources, and they can't say they share our water resources.” Such sentiments were echoed and compounded in downstream states Syria and Iraq, where Turkey’s development projects not only made their own development more challenging, but also gave Turkey a “water weapon.” As such, water politics became high politics.

**Water and Political Conflict in JTC Negotiations**

**Hatay Territorial Dispute**

Despite the importance of water to all three regimes, otherwise politically strained relationships drove negative hydropolitical interactions. Between Turkey and Syria, the Hatay territorial dispute colored relations enough to prevent productive water cooperation. In 1939, France ceded the Syrian territory of Hatay (also known as Alexandretta or Iskendernur)
to Turkey in exchange for Turkey’s entrance of the Second World War on the side of the Allies. However, since independence, Syria refused to acknowledge the transfer of this piece of territory and continued to show Hatay as a part of its own territory on Syrian maps. At the same time, Turkey also claimed the region, and its people, as her own. The Hatay territorial dispute became linked to Tigris-Euphrates water politics amidst disputes over the Orontes River. The Orontes River runs from Syria into the Hatay province. During the 1940s and 1950s, Syria, treating Hatay as her own, built small dams on the upper reaches of the Orontes without consulting Turkey. When Turkish farmers claimed to be facing water shortages in the early 1960s, Turkey attempted to link negotiations over the Orontes with those for the Euphrates. Syria refused, continuing to ignore Turkey’s codified claim to the province. Syria’s unwillingness to budge on the Hatay issue shaped Turkey’s alacrity to negotiate and make concessions during the tripartite 1960s negotiations about the Tigris-Euphrates. According to Barkey (1996), “Turkey’s insensitivity to downstream needs and concerns is a by-product of traditionally bitter relations between the two states.” Thus, the lack of cooperation on the issue of Tigris-Euphrates water during this period can be partially attributed to the bilateral animosities stemming from Turkey and Syria’s decades-festering Hatay territorial dispute.

Cold War Proxy Politics

The negative hydro-interaction among the three riparian states during this second time period was also a result of conflictual predispositions based on historical ethnic

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304 Kliot, Water Resources and Conflict in the Middle East, 165; Soffer, Rivers of Fire: Conflict Over Water in the Middle East, 112; Sorenson, An Introduction to the Modern Middle East, 300; Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 134.
305 Kliot, Water Resources and Conflict in the Middle East, 165; Sorenson, An Introduction to the Modern Middle East, 301; Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 134.
309 Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 133.
animosities and Cold War political alignments. Even prior to the Second World War, Turkey began to face west. Atatürk’s secular, modernizing reforms endeavored to “bring Turkey closer culturally and politically to Europe.” Atatürk’s reforms, which emphasized “Turkification” reflected the anti-Arab sentiments of the early 20th century Young Turk movement in Turkey. According to Barkey (1996), “the extremist Turkification policies of the Young Turks, in the form of harsh suppression of Arab language and culture, resulted in an angry backlash that resonates even today in Turkey’s relations with the Arab world.”

The Cold War only served to deepen these existing divides between Turkey and her Arab neighbors downstream. In response to Soviet attempts to claim eastern Turkish territory and waters following the Second World War, Turkey joined the North Atlantic Treaty Organization (NATO) in 1952, finalizing “a strategic portion of the long-term plan to join Europe and the West.”

While Turkey was turned toward the West, Syria and Iraq were both facing East. In 1955, Syria opted to join a Soviet pact in return for $200 million in aid, and both Syria and Iraq received Soviet assistance in hydro-development planning and construction. These alliances not only served to deepen the East-West divide that existed along Syria and Iraq’s northern borders with Turkey, but linked the larger geopolitical conflict to Tigris-Euphrates hydropolitics. According to Dolatyar and Gray (2000), in the more conflictual water relations of this time period, “what was critical was the East-West competition which came to graft itself on the internal rivalries between the countries in the region. It was specifically in the ‘East-West context’ that the development of the Euphrates by the three riparian countries

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310 Sorenson, An Introduction to the Modern Middle East, 267.
311 Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 9.
312 Ibid., 7.
313 Sorenson, An Introduction to the Modern Middle East, 282.
314 Rubin and Kirisci, Turkey in World Politics: An Emerging Multiregional Power, 2.
315 Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 134; Sharnoff, “The Syria-Soviet Alliance.”
gained considerable strategic significance.”  

It was thus the conflictual political climate of the Cold War that colored Turkey, Syria, and Iraq’s water engagement during the second period and hamstrung each state’s willingness to negotiate and compromise on water during the negotiations that did take place. In this way, water relations followed political relations. In the words of Allan (2002), the more conflictual Tigris-Euphrates politics in the latter half of the 20th century were “examples of the international allocation and management of water in the region being subordinate to the other priorities of international relations.”

**Political Rivalry and the 1975 Euphrates Crisis**

Water’s mercy to the ebb and flow of the riparian states wider diplomatic relations was again illustrated in the 1975 crisis between Iraq and Syria. While upon first look, Syria and Iraq’s mutual threat of armed action appears to stem from Iraq’s animosity resulting from water shortages after the filling of Syria’s Tabqa Dam reservoir, two factors indicate otherwise. First, it is highly unlikely that the two states would have been so quick to mobilize troops to their shared border if it was not for their regimes’ fierce, pre-existing rivalry and ideological differences; and second, had the dispute truly centered on water, Iraq would likely have placed equal blame on Turkey (whose filling of the Keban Dam reservoir at the same time as Syria’s Tabqa contributed to the shortages Iraq experienced).

At the end of the First World War, the initial, relatively arbitrary, state divisions paid little attention to ethnic or religious lines, creating the potential for internal ethnic or sectoral conflict in the newly formed states. The institutionalization of these differences in Syrian and Iraqi politics after independence pitted these two states against each other. In 1947, the Syrian Ba’ath party was elected, and in 1954, a parallel Ba’athist movement arose in Iraq.

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marking the beginning of an era in which, “the two Ba’ath regimes [were] in competition for hegemony in the Arab world.”\textsuperscript{320} The Syrian Ba’ath party was Alawi (a Shia sect with ties to the Shia minority in Iraq) and the Iraqi Ba’ath was Sunni.\textsuperscript{321} This religious divide, competition to be the principal ideological voice in the Arab nationalist movements of the region, and personal hatreds between the two Ba’athist regime leaders\textsuperscript{322} colored the water tensions between these two states. According to Scheumann (2003), “The threat of war in the mid-1970s was much more the result of political rivalries between the Syrian and Iraqi branches of the Ba’ath Party and their competition over regional strength and authority than struggles over water.”\textsuperscript{323}

This was reflected in Syrian and Iraqi propaganda during the 1975 Euphrates crisis. The two regime’s public acknowledgements of the water issue almost exclusively appeared alongside rhetoric attacking the other’s “Arab legitimacy.”\textsuperscript{324} According to Kienle (1990), Iraq “made it clear on several occasions that…it did not regard the [Euphrates] problem as ‘technical’ but as ‘political’, stemming from the two sides’ controversy over the defense of Arab rights and interests.”\textsuperscript{325} A high ranking political figure of the Iraqi Ba’ath Regional Command, Na’im Haddad, stated during the 1975 crisis,

\begin{quote}
Today…certain regimes, particularly the Syrian regime…cut off water from our masses…But we will be victorious as we have been before. The masses of our Arab people in Syria will discover this criminal design, which is neither new to us nor unexpected. The same Syrian regime adopted a negative policy when the revolution in Iraq nationalized the monopolist oil companies and even requested an increase in revenue from the oil flow.\textsuperscript{326}
\end{quote}

This statement illustrates the inseparability of Iraq and Syria’s water dispute from the two states’ political rivalry. Tigris-Euphrates politics’ tendency to follow Iraq and Syria’s larger

\textsuperscript{320} Kliot, \textit{Water Resources and Conflict in the Middle East}, 166.
\textsuperscript{322} Soffer, \textit{Rivers of Fire: Conflict Over Water in the Middle East}, 113.
\textsuperscript{323} Scheumann, “The Euphrates Issue in Turkish—Syrian Relations,” 756.
\textsuperscript{326} Ibid., 104.
Ba’athist ideological and political antagonism is further evidenced by 1) the failure of this official, and the Iraqi regime overall, to place any blame on Turkey for Iraq’s water challenges;\textsuperscript{327} and 2) the fact that the Syrian and Iraqi regimes briefly united against Turkey to oppose GAP in 1989, only after tempers between the two Ba’athist regimes had finally cooled.\textsuperscript{328} Thus, while water certainly exacerbated existing tensions between Iraq and Syria during the second time period, it was the overarching political climate of the times that dictated the negative tenor of hydropolitics rather than vice versa.

**Issue Linkage: Kurdish Militants and Euphrates Waters**

During the last 20 years of the second time period (1980-2000), the linkage of the water issue to that of PKK militancy in Turkey largely accounts for the contentious water politics between Syria and Turkey. When the Turkish state was first formed at the heart of the deceased Ottoman Empire, it came to contain coastal areas along the Mediterranean and Black Sea (populated largely by ethnic Turks) and Anatolia: the mountainous, water-rich region to the East where most considered themselves ethnically Kurdish. While these ethnic differences had been nearly invisible under Ottoman rule—when demographic differentiations were made on the basis of religion, rather than ethnicity—Mustafa Kemal Atatürk’s secularizing reforms after the First World War complimented a new attitude toward ethnic identity. The 1924 constitution clearly articulated that the concepts of “citizen” and “Turk” were one and the same, meaning for Kurds that the modern republic’s new citizenship rights came “at the expense of denying their own ethnic identity.”\textsuperscript{330} Unable to speak their own language and severely culturally repressed over the first three quarters of the 20\textsuperscript{th} century, a budding Kurdish nationalism, with ties to Kurdish populations across the

\textsuperscript{327} Shapland, *Rivers of Discord: International Water Disputes in the Middle East*, 117.
\textsuperscript{328} Ibid., 122.
\textsuperscript{329} Barkey and Fuller, *Turkey’s Kurdish Question*, 6.
\textsuperscript{330} Ibid., 10.
border in Syria and in northern Iraq, grew in Turkey’s southeast. In 1984, a branch of the Kurdish nationalist movement, the Kurdistan Worker’s Party (PKK) began fighting a guerilla campaign against the Turkish government in an attempt to carve a Kurdish state out of Southeastern Anatolia. The resulting pseudo-civil war between PKK militants and government forces would come to claim more than 40,000 lives over the next 20 years.

Given the extraordinary violence that resulted from Kurdish separatism in Turkey and the threat it posed to the very foundations of Turkish national identity and territorial integrity, this issue came to inhabit center stage in both Turkey’s domestic policy and regional relations. Water policy is no exception. The linkage between the PKK issue and water was originally a domestic phenomenon—a Turkish attempt to use hydro-development to enfranchise its discontented Kurdish population. Given that “the Kurdish question is arguably the most serious internal problem in the Turkish republic’s…history,” and identifying economic underdevelopment as a principal factor in the political and social unrest that had characterized Turkey’s Kurdish region throughout the late 20th century, Turkey’s Southeastern Anatolia Project (GAP), was conceived as a tool to improve regional stability, discourage separatism, and counter the draw of the PKK. However, both GAP and the PKK issue had implications beyond Turkey’s borders. According to Barkey (1996) and James and Özdamar (2009), “Turkey’s relations with its neighbors [were] driven by the exigencies of the [PKK] rebellion” and “internal relations between Turkish-Kurds and the national government in Ankara…had direct influence on the relationship between Turkey

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331 Ibid.
335 Barkey, *Reluctant Neighbor: Turkey’s Role in the Middle East*, 34.
and Syria.”

Thus, given the gravity of the PKK predicament at home and the use of hydro-development with downstream implications to combat it, Turkey’s decisions in Tigris-Euphrates negotiations were influenced by concerns for the Kurdish issue within its borders. The importance of GAP to containing the PKK made Turkey less willing to compromise or scale back its project in negotiations with Syria and Iraq.

The PKK issue was also linked to Tigris-Euphrates riparian political dynamics as part of Turkish efforts to externalize the PKK threat and thereby mobilize Turkish nationalism against it. According to Brahma (2013), “The GAP case illustrates how water disputes may come in ‘handy to politicians in personifying real or perceived outside threats in the domestic context and in this way serve to unite the society against ‘foreign enemies’ and mobilize support for the government.’”

However, this linkage between the dispute over the Euphrates and Turkey’s domestic Kurdish question provided Syria and Iraq with an opportunity in their attempts to gain leverage against Turkey’s growing military, economic, and hydro-hegemony that further entwined the two issues. Syria, which had been intermittently supporting militants inside Turkey since the 1970s, recognized the additional control GAP would give Turkey over her water resources, and by extension her people, and thus had “an interest in aiding [the PKK] movement because one of the targets of the guerilla group [was] the GAP.”

Thus, “Damascus continued to pursue a policy which had been enforced since the early 1970s and which had acquired greater importance because of the Euphrates dispute. It consisted of supporting left-wing Turkish extremists, Kurdish secessionists, and Armenian militants, but refusing to admit it.” Though Iraq had less of a history of doing so, Saddam Hussein’s regime is rumored to have also supported the PKK’s

339 Soffer, Rivers of Fire: Conflict Over Water in the Middle East, 112.
activities in Turkey for a time during the Atatürk Dam crisis. Thus, Syrian and Iraqi efforts to hamper full Turkish control of their water resources by supporting PKK militants within Turkey compounded the linkage of the PKK issue to the water issue, and, by bringing water politics intimately near Turkey’s primary security threat, contributed to the more conflictual nature of water politics during the time that the two issues were linked.

While downstream riparian’s use of the PKK card as leverage to guarantee Tigris and Euphrates flow may initially appear to be an example of water leading politics (i.e. downstream states choosing to take political steps because of water concerns), there are two factors that indicate otherwise. First, the water problem was only one among many festering political disputes between Turkey and her downstream neighbors. Iraq and Syria’s support for the PKK was related to an overarching political goal of offsetting Turkey’s growing regional hegemony overall, and not only (or even primarily) hydro-hegemony. According to Barkey (1996), “The use of the PKK card against Turkey by its neighbors with varying degrees of intensity is a direct result of their need to balance Turkey’s potential threat to them.” While water problems were a piece of this, Syria and Iraq were “also motivated, respectively, by irredentist claims over Alexandretta or by desire for revenge for Turkey’s role during the Gulf Conflict.” In this case, water was inseparable from other political grievances that collectively provided adequate motivation for Syria and, to a lesser extent, Iraq, to support the PKK. Secondly, as will be discussed in the following section, the rapid warming of water relations directly following the resolution of the PKK issue between Syria and Turkey indicates that water relations were once again at the mercy of other political disputes. Given Syria’s additional motivations for supporting the PKK beyond simply water

341 Barkey, Reluctant Neighbor: Turkey’s Role in the Middle East, 33.
342 Ibid.
343 Ibid.
concerns, it is unlikely that the resolution of the water issue would have had similar ameliorating impacts on the PKK issue. Thus, while water was a high politics, priority issue for the riparian states during this time period, state actions were not motivated exclusively or even primarily by water concerns. Rather, water once again played into the intricacies of the states’ relationships overall and water politics were guided by the tenor of a broad variety of often unrelated political and social concerns.

**High Fives and High Hydropolitics**

During the third time period, water remained in the realm of high politics due to both continued unilateral water project development on the Twin Rivers (and thus a persistence of perceived scarcity among riparians) and the onset of real scarcity with an extended drought in Mesopotamia. Despite the first widespread shortages the basin has experienced since ancient times, Turkey, Syria, and Iraq’s water politics took on a remarkably cooperative character during this time period, following several overarching political trends: 1) resolution of historic disputes between Turkey and Syria, including the Hatay territorial disagreement and the PKK issue; 2) growing EU-influence in Turkey, which triggered reorientations in both Turkey’s overall foreign policy towards its neighbors and its water policy; and 3) changes in leadership, trade dynamics, and views of the Kurds in all three states near the turn of the century.

**The High Politics of Drought**

Perceived scarcity persisted into this period because, even during a time of overall water collaboration, none of the three states was willing to scale back its development projects. In spite of several financial stumbling blocks, Turkey has continued its

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344 Chulov, “Water Shortage Threatens Two Million People in Southern Iraq.”
345 Jehl, “In Race to Tap the Euphrates, The Upper Hand Is Upstream.”
construction of Ilisu Dam on the Tigris, much to Iraq’s displeasure. According to Iraq, the dam would give Turkey the ability to decrease flow of the Tigris by 47 percent, damaging Iraqi agriculture and the economy. Baghdad long protested the construction of Ilisu and Iraqi author, Sami Hasan, was widely quoted for his inflammatory statements towards Turkey and Syria’s continued dam construction. And yet, Iraq’s projects went on as well. Under a newly appointed minister of water resources in 2004, Iraq had its own laundry list of proposed hydro-development projects, including the massive Bakhmeh, or “Dream” Dam capable of restraining 11 billion square meters of water and producing 1500MW of electricity. Like Turkey’s, Iraq’s projects were not void of critics. Gun Kut, water expert at Istanbul’s Bogazici University, stated in response to Syria and Iraq’s continued allegation that Turkish dam projects leave too little water for downstream, “Quit wasting the water and there will be enough for everybody.” The ongoing hydro-development and continuing condemnation in each state of others’ projects illustrates the persistence of perceived scarcity in the basin. As projects continue, each state perceives the basin as becoming scarcer and unable to meet the demand of all riparians. The fact that dam construction and water project efficiency remained a key hydropolitical concern among riparians further exemplifies how the perception of potential scarcity has helped to keep water a high politics issue.

The arrival of real scarcity during the latter half of the third time period also contributed to water’s sustained place in high politics. In the six years between 2003 and 2009, the Tigris-Euphrates basin lost 117 million acre-feet of stored freshwater, representing

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348 Gurcanli, “Turkey-Iraq-Syria to Form a Water Institution.”
349 “Iraqi Writer Criticizes Syria, Iran for Building Dams, Urges Anti-Drought Plans.”
350 “Iraqi Water Minister on Iraq’s Share of Tigris, Euphrates, Future Plans, Marshes.”
351 “Iraqi Official On Talks On Joint Waters With Neighboring Countries Continuing”; “Iraqi Water Minister: Italy To Help Build ‘Dream Dam.’”
352 Amos, “Tide Of Arab-Turk Tension Rises Amid Water Shortage.”
the second fastest loss of water in a six year period of anywhere on the planet.\textsuperscript{353} Beginning in 2006, summer rains failed to arrive four years in a row in the basin,\textsuperscript{354} leading NOAA to release a study suggesting that, “the magnitude and frequency of the drying that has occurred is too great to be explained by natural variability alone” and linking Fertile Crescent drought to human-induced climate change.\textsuperscript{355} All three Tigris-Euphrates riparians were impacted by regional scarcity. In Turkey, farmland dried up in the country’s Southeast\textsuperscript{356} and Istanbul and Ankara instituted rationing programs in 2007 when drought brought reservoirs to five percent capacity.\textsuperscript{357} Syria’s harvest in 2008 was 38 percent lower than prior to the drought,\textsuperscript{358} and by 2010, 160 villages had been abandoned and 800,000 citizens lost their livelihoods due to drought.\textsuperscript{359} In Iraq, harvests fell by 51 percent,\textsuperscript{360} dust storms engulfed the country’s north,\textsuperscript{361} and two million people in the south faced drinking water and electricity shortages.\textsuperscript{362} Under such conditions, with water refugees multiplying rapidly and urban dwellers demanding improved supply, water remained high on both the domestic and foreign policy agendas of all three states’ top officials.

Despite that physical conditions were ripe for water competition and conflict, high water politics took on a cooperative nature during this period. In the words of Turkish Foreign Minister Ahment Davutoğlu in a 2009 meeting with Iraqi Foreign Minister Hosyhar Zebari, “We know the situation is worsening in Iraq [and Syria] due to drought…we understand the difficulties of the farmers in Basra. Their difficulties are our difficulties. Their

\textsuperscript{353} Hammer, “Is a Lack of Water to Blame for the Conflict in Syria?”
\textsuperscript{354} Amos, “Mideast Water Crisis Brings Misery, Uncertainty”; Hammer, “Is a Lack of Water to Blame for the Conflict in Syria?”
\textsuperscript{355} National Oceanic and Atmospheric Administration, \textit{NOAA Study: Human-Caused Climate Change a Major Factor in More Frequent Mediterranean Droughts.}
\textsuperscript{356} Amos, “Mideast Water Crisis Brings Misery, Uncertainty.”
\textsuperscript{357} Associated Press in Ankara, “Turkey Rations Water as Cities Hit by Drought.”
\textsuperscript{358} National Aeronautics and Space Administration, “Earth Observatory: Drought in the Fertile Crescent.”
\textsuperscript{359} Amos, “Mideast Water Crisis Brings Misery, Uncertainty.”
\textsuperscript{360} National Aeronautics and Space Administration, “Earth Observatory: Drought in the Fertile Crescent.”
\textsuperscript{361} Landis, “Turkey Says More Water For Iraq, Syria Is Unlikely”; National Aeronautics and Space Administration, “Earth Observatory: Drought in the Fertile Crescent.”
\textsuperscript{362} Chulov, “Water Shortage Threatens Two Million People in Southern Iraq.”
future is our future. The expectations of the farmers in Iraq and Syria are equally important for us.\textsuperscript{363} Though Turkey and Syria repeatedly came close to war during the final 40 years of the 20\textsuperscript{th} century, the resolution of several issues that provided the sources of these disputes during the second time period helps to explain the rapid improvement in riparian relations and the tenor of the two states’ water politics during the third time period.

**Healing Old Wounds in Turkey and Syria**

**Delinking Water from Syrian Support for PKK Militancy**

After Turkey massed 10,000 troops along its mutual border with Syria in 1998, leaders of the two states met in Adana, Turkey and signed the Adana Agreement.\textsuperscript{364} With the Adana Agreement, “Syria for the first time acknowledged that the PKK was a terrorist organization” and agreed to “(1) expel PKK leader Abdullah Öcalan from Syria…(2) arrest PKK militants active in Syria and uproot the PKK camps there; (3) cease providing weapons and logistical and financial support to the PKK and forbid it to use Syrian soil…(4) extend cooperation with Turkey against the PKK well into the future.”\textsuperscript{365} It was less than a year after the Syrians made good on these promises in 1999 that Turkey increased Euphrates flow into Syria. Though Turkish officials cited technical reasons behind their choice—the need to reduce pressure on dams in case of earthquakes—it is far more likely that the Syrian expulsion of Öcalan, and the de-linking of the PKK and water issues between Turkey and Syria that occurred as a result of the Adana Agreement, was the real reasoning behind Turkey’s good water will.\textsuperscript{366} The warming water relations that resulted from the resolution of the PKK issue at the end of the 20\textsuperscript{th} century led Dohrmann and Hatem (2014) to assert, as I do, that “the water issue cannot be identified as the leading source of tension and conflict between Turkey

\begin{itemize}
\item\textsuperscript{363} DEMIRTAŞ, “Turkey Confirms Opening of Dams on Euphrates To Allow More Water To Iraq, Syria.”
\item\textsuperscript{364} Aykan, “The Turkish-Syrian Crisis of October 1998: A Turkish View,” 174; Dohrmann and Hatem, “The Impact of Hydro-Politics on the Relations of Turkey, Iraq, and Syria,” 580.
\item\textsuperscript{365} Aykan, “The Turkish-Syrian Crisis of October 1998: A Turkish View,” 174.
\item\textsuperscript{366} Scheumann, “The Euphrates Issue in Turkish—Syrian Relations,” 760.
\end{itemize}
and Syria.” Given the critical importance of the PKK issue to Turkish domestic and foreign policy, it comes as little surprise that resolution of this long-standing tension between Turkey and Syria improved not only their overall political relations going into the 21st century, but also prompted a softening of Turkey’s stance on the water issue and the beginning of more positive hydro-interactions.

Settlement of the Hatay Dispute

Following trade negotiations between Turkish and Syrian leadership in late 2008, “the Syrian government revised its official maps so as to remove the district around Iskandarun from Syrian territory,” effectively acknowledging Hatay as a part of Turkey. Resolution of this long-standing dispute between the two states directly influenced collaboration on the water issue with their agreement to construct the Friendship Dam, the two states’ inaugural shared water project. According to Kütük (2010), Syria’s “agreement to build a dam jointly on the Orontes River on the border between Hatay and Syria in 2010 [was] an official seal on Syria’s acceptance of Hatay as a part of Turkey.” If Syria still considered Hatay as her own, there would be no “joint” water project, as the Friendship Dam would be in Syrian territory alone. The fact that the project was funded and managed by both states in tandem with one another not only illustrates Syrian acknowledgement of Hatay as Turkish territory in practice, but also was made possible only through the resolution of this territorial dispute. Here, warming water relations and high levels of cooperation arrived alongside solutions to other, age-old political problems between the two states that had contributed to conflictual hydropolitics in the past. When the political problems that had made both overall relations and hydropolitics divisive were resolved, water politics improved along with the states’

367 Dohrmann and Hatem, “The Impact of Hydro-Politics on the Relations of Turkey, Iraq, and Syria,” 582.
368 Lawson, Global Security Watch: Syria, 137.
thawing attitudes. This again provides an example of water politics following larger political relations in the Tigris-Euphrates Basin.

The EU in Turkey

Although evolving dynamics in all three states contributed to the more positive riparian interactions of the third time period, as the farthest upstream state, Turkey’s changing attitudes toward its downstream neighbors (largely as a result of EU influence) played an important role in the betterment of diplomatic relations and hydro-engagement during the third time period. While Turkey has been tying itself closer to Europe since 1959,370 it was officially granted candidate status for membership to the European Union (EU) at the Helsinki Summit in 1999.371 Turkey thus entered the 21st century with a new focus on meeting requirements for EU membership. This has taken two forms: 1) taking on a role in the Middle East that, to a certain extent, serves European foreign policy needs; and 2) implementing domestic reforms in issue areas extending from economic policy to human rights in an effort to align Turkish policy with that of Europe.372 With regard to the former, Turkey has, since the turn of the century, recognized that its greatest source of value to Europe and much of the West comes from its ability to connect to and represent its (often more troublesome) Middle Eastern neighbors. In other words, in the early 2000s, the Turkish government could see that “the acceptance of Turkey’s placement in the West will be more likely through the strengthening of Turkey’s links to the east.”373 Turkey thus enacted its “zero problems with neighbors” policy374 in the early 2000s, which endeavored to improve Turkish relations with Syria, Iraq, and Iran with goals of both increasing Turkey’s regional

370 “EU and Turkey History.”
371 Ibid.; “EU-Turkey Relations.”
372 Oğuzlu, “Middle Easternization of Turkey’s Foreign Policy: Does Turkey Dissociate from the West?”
373 Ibid., 7. Robins (2013) expresses similar sentiments on pg. 383 in his assertion, “The Turkish government could see that one very good chance of making progress in its relations to the north lay in developing growing ties to the south.”
influence and making it an even more appealing ally to Europe. Under the auspices of the “zero problems” policy, which represented an “appropriation of EU norms and principles in regional politics,” Turkey took on a “pre-emptive approach” to “eliminate all the problems from her relations with her neighbors or at least minimize them as much as possible.”

Water, as a “problem” among Turkey and her downstream neighbors, was not excluded from this reorientation in Turkish foreign policy and hydropolitics thus became more cooperative amidst improving relations overall. The “zero problems with neighbors” policy helps to explain Turkey’s more active efforts to communicate and collaborate bilaterally with both downstream neighbors on water issues during this time period, and, because of Turkey’s preeminent place as hydro-hegemon of the basin as a whole, contributed to the more positive, collaborative trilateral hydro-interactions in this period.

Turkey’s aspirations to join the EU also had a more direct, explicit impact on her domestic and foreign water policy. As a potential EU member state, Turkey is responsible for implementing the European Union Water Framework Directive (WFD). While the WFD presents member states with a wide variety of responsibilities and initiatives ranging from reducing pollution in urban wastewater to implementing accurate water pricing, at the heart of the WFD is the requirement of water management on the scale of entire river basins, rather than individual states. In other words, full implementation of the EU WFD mandates, “the integration of industrial, agricultural, rural development, nature conservation and forestry programmes at the river basin scale and, in many cases, transboundary collaboration.” In the case of water bodies “that extend beyond the territory of the EU, the WFD obliges Member states to endeavor to establish appropriate coordination with non-member states

375 Aras and Polat, “From Conflict to Cooperation: Desecuritization of Turkey’s Relations with Syria and Iran,” 495.
376 “Policy of Zero Problems with Our Neighbors.”
with a view to achieving the objectives of the Directive.” As an EU candidate state, Turkey began implementation of WFD when it entered into force in October of 2000, and thus, starting in that year, was “under an obligation to seek cooperative arrangements with Iraq and Syria with the aim of achieving good...status as defined in the EU WFD.” Thus, though the Turkish government has not released statements explicitly linking its increasingly collaborative attitude toward its downstream neighbors to its requirements to fulfill the WFD, it is nearly indisputable that Turkey’s need to work towards basin wide river management of the Tigris and Euphrates (per EU directive) contributed to the more cooperative hydropolitics that began at the turn of the century. With EU membership one of the Turkish administration’s top priorities in the 21st century, Turkey’s softened stance with regard to the Tigris and Euphrates and the state’s greater willingness to make concessions to, and collaborate with, Syria and Iraq on the water issue was influenced by the mandates of the EU WFD.

**Secondary Factors in a Warming Political Climate: New Leaders, Kurds, and Trade**

Beyond the resolution of long-standing disputes and EU influence in Turkey, new leadership in Turkey and Syria also played an important role in improving relations. Economic downturn and the US-led war in Iraq changed the regional dynamic considerably, also creating opportunities for newly-forged alliances and new economic ties in the power vacuum arising in Iraq after Saddam Hussein’s fall. Under these overarching political and economic conditions, the three states forged newly cooperative relationships based upon personal affinities among leaders, opportunities for trade and economic growth, and changes in each regimes’ relationship with its respective Kurdish population. Although rarely

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explicitly related to water, bilateral cooperation on all sides of the Tigris-Euphrates triangle built up trust and a positive climate among the three states’ leadership, thus contributing to the improving hydro-political relationships during the third time period.

**Turkey and Syria**

Between Turkey and Syria, the progress made on the Hatay, PKK, and water issues was broadly motivated by changes in leadership in both states. Hafiz al-Assad, who took power in Syria in 1970 and whose “crude interest in national and regime security”\(^{383}\) contributed to strained relations with the Turkish regime throughout the latter half of the 20\(^{th}\) century, passed away in 2000. According to Lawson (2013), “Improvements in relations between Syria and Turkey accelerated during the months surrounding the death of President Hafiz al-Assad.”\(^{384}\) Directly following Assad’s death, the two states revived a Joint Economic Commission and began working to fully normalize relations,\(^{385}\) a process in which the water project visits and river negotiations in the first years of the 21\(^{st}\) century were part and parcel. In 2002, the election of the Justice and Development Party (AKP) in Turkey completed the transformation of bilateral relations.\(^{386}\) Not only would the newly elected Prime Minister Recep Tayyip Erdoğao, come to call Syria’s new leader, President Bashar al-Assad his “brother,”\(^{387}\) but the two states would harmonize their economic policies. Under the economic component of Turkey’s “zero problems with neighbors” policy, Turkey and Syria signed a bilateral free trade agreement in 2007, and in 2009 removed visa requirements for travel between the two states.\(^{388}\) The fact that Syria also saw Turkey as an increasingly

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\(^{383}\) Perthes, “Syrian Regional Policy under Bashar Al-Asad: Realignment or Economic Rationalization?,” 36.


\(^{385}\) Ibid.

\(^{386}\) Phillips, “Turkey and Syria,” 35; Robins, “Turkey’s ‘Double Gravity’ Predicament: The Foreign Policy of a Newly Activist Power,” 381.

\(^{387}\) Altug, “The Syrian Uprising and Turkey’s Ordeal with the Kurds,” 127; Tarasov, “Assad-Erdogan Fight: Can They Become ‘brothers’ Again?.”

powerful and important ally to have in the region\textsuperscript{389} undoubtedly contributed to her willingness to negotiate and collaborate on the water issue. In addition to such personal and economic ties between the two states—which certainly help to explain the increases in interaction and more positive water rhetoric between Turkey and Syria during the third time period—the two state’s newly harmonious Kurdish policies also played a role.

It has been suggested that Turkey found itself less head to head with Iraq than with Syria over the water and PKK issues during the late 20\textsuperscript{th} century because “Iraq and Turkey have a…common interest: the suppression of Kurdish dissidents in their frontier areas.”\textsuperscript{390} This same common interest brought Turkey and Syria together during the third time period. After Kurdish areas of northern Iraq were granted some autonomy during the US occupation of Iraq,\textsuperscript{391} Syrian Kurds, “emboldened by the freedom they saw in Iraq,”\textsuperscript{392} erupted into revolt in Syria’s north.\textsuperscript{393} Syria, which rapidly quashed these Kurdish uprisings,\textsuperscript{394} got a taste of the challenge Turkey faced domestically in the PKK and found itself on common ground with Turkey in managing ever-bolder Kurdish populations at home. It is highly likely that, as the common Kurdish challenge mediated hostilities between Iraq and Turkey in previous years, it helped to foster cooperation—or at the very least common understanding—between Turkey and Syria during the 21\textsuperscript{st} century. While it may not have directly impacted water relations between the two states, the intimate connections between water and the Kurdish issue suggests that a shared understanding of the Kurdish challenge, in addition to a strong personal relationship between heads of state and growing trade linkages, helped to create the environment for the 21\textsuperscript{st} century’s more positive, cooperative water politics.

\textsuperscript{388} Phillips, “Turkey and Syria,” 36.
\textsuperscript{389} Wolf and Medzini, “The Euphrates River Watershed: Integration, Coordination, or Separation?,” 115.
\textsuperscript{391} Phillips, “Turkey and Syria,” 36.
\textsuperscript{392} Phillips, “Turkey and Syria,” 36.
\textsuperscript{393} Lawson, Global Security Watch: Syria, 135.
\textsuperscript{394} Phillips, “Turkey and Syria,” 36.
Iraq and Turkey

While the creation of an autonomous region for Iraqi Kurds in the country’s north initially concerned Turkey, which feared the impact this Kurdish success would have on separatist Kurds within Turkey and their ability to operate out of a more independent northern Iraq, ultimately “Post-Saddam Iraq offered new opportunities for the AKP to seize...[which] would thrust Turkey into the wider region’s turbulent politics and make it a player in Iraq’s future.” Soon after the US-led invasion of Iraq, Turkey, which maintained goals of improving relations with its neighbors and “contribut[ing] to the emergence of a stable environment in the region” came to the understanding that its “relations with Baghdad now went through Erbil,” the capital of the autonomous Kurdish region in northern Iraq, controlled by the Kurdish Regional Government (KRG). With its sights set on becoming an “energy corridor” for Europe Turkey dared not risk its chances to secure Iraqi oil pipelines. Thus, despite its displeasure at Kurdish autonomy in northern Iraq, Turkey and Iraq under post-Saddam leadership reestablished the “free flow of traffic and revenues” between the two states (which had been limited since the early 1990s) and implemented lucrative business and oil deals with the KRG. These critically important economic ties, which were intricately woven into Turkey’s goals of appealing to the European Union and extending its regional influence and provided Iraq with much needed revenues during unstable war years, helped keep water politics positive and cooperative. While water

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396 Ibid., 663–664.
397 Oğuzlu, “Middle Easternization of Turkey’s Foreign Policy: Does Turkey Dissociate from the West?,” 4.
399 Oğuzlu, “Middle Easternization of Turkey’s Foreign Policy: Does Turkey Dissociate from the West?,” 11; Barkey, “Turkey and Iraq: The Making of a Partnership,” 664.
400 Dohrmann and Hatem, “The Impact of Hydro-Politics on the Relations of Turkey, Iraq, and Syria,” 577.
401 Ibid., 577–578.
402 Oğuzlu, “Middle Easternization of Turkey’s Foreign Policy: Does Turkey Dissociate from the West?,” 4.
remained high on both states’ agendas, neither side dared take a potentially disputable stance on the water issue at the expense of such important, profitable economic linkages.

_Syria and Iraq_

Similar changes in leadership and economic ties facilitated the more cooperative hydropolitics between Syria and Iraq during the third time period. After Bashar al-Assad took over his father’s place at Syria’s helm, “there were perceptible efforts to turn over a new leaf in his relations with Iraq under Saddam Hussein.” These efforts were manifested in the two states’ agreements to phase out duties and establish oil flow in 2001, and in their negotiations about the Euphrates during 2000. While the US invasion of Iraq changed the dynamic—bringing Syria’s remaining anti-Western sentiments into sharp relief close to home—Syria kept up its efforts to maintain relations with Iraq, “welcome[ing] successive delegations of Iraqi notables as 2003 passed and [doing] their best to reestablish commercial and transportation links to post-war Iraq.” The economic ties between Syria and Iraq continued to grow throughout the first decade of the 21st century. While these ties alone are not enough to fully explain the improved water relations between these two states, they created critical interdependencies that helped facilitate the positive hydropolitical interactions of the time.

_Following Hydropolitics_

While it is clear from the above descriptions of 21st century changes that water relations followed the tenor of wider politics, this fact is perhaps best illustrated by the “19 August Crisis” between Iraq and Syria. On August 19, 2009, a Shiite attack in Baghdad

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403 Zisser, “Syria and the War in Iraq,” 48. For a more in-depth discussion of Syria’s opening to Iraq, see Perthes (2001).
404 Lawson, _Global Security Watch: Syria_, 130.
405 See description of time period 3.
406 Zisser, “Syria and the War in Iraq,” 44, 47.
408 Ibid., 140.
killed 101 civilians and wounded 600 more.\textsuperscript{409} Iraq blamed Syria for the bombing and the issue shot to the “top of the political agenda.”\textsuperscript{410} Though Turkey, Iran, and the Arab League rushed to mediate so as to prevent the crisis from eroding the progress made in Syria and Iraq’s political, economic, and water relations during the new millennium, the two downstream Tigris-Euphrates states’ water relationship suffered.\textsuperscript{411} Syria and Iraq’s “crisis of confidence” blighted the water meeting that was to take place two weeks after the attack and hamstrung Turkey’s hopes for an integrated regional market to help ease energy and water tension.\textsuperscript{412} Though this brief crisis did not entirely, or even substantially, undermine water cooperation during the third period, it highlights both the peace’s fragility and the enduring link between the political atmosphere and the hydropolitical climate of the times. Despite the ample progress made during the first decade of the 21\textsuperscript{st} century, water politics ultimately proved to still be susceptible to conflictual flares in other issue realms or relations overall.

\textbf{Patterns of Water Conflict and Cooperation}

This study of the oscillation of Tigris-Euphrates hydropolitics synthesizes scholarship from the environmental security field focused on the question of resource cooperation and conflict. This research substantiates and further clarifies the conditions under which we can expect to see more cooperative or conflictual relationships among actors sharing a water resource. The preceding analysis of the ups and downs of water engagement in the Tigris-Euphrates Basin demonstrates which aspects of the prevalent political, economic, and social circumstances in interstate relations tend to engender the more positive, cooperative hydropolitical outcomes seen in the first and third time periods, or encourage negative, conflictual hydropolitics, as in the second. Based on this analysis, it seems unlikely that any

\textsuperscript{409} “Turkey’s Plans for ‘Triple Alliance’ Said Spoiled by Iraq-Syria Tension.”

\textsuperscript{410} Ibid.

\textsuperscript{411} “The Daily Star: Turkish, Syrian And Iraqi Relations: Look for the Water.”

\textsuperscript{412} “Turkey’s Plans for ‘Triple Alliance’ Said Spoiled by Iraq-Syria Tension.”
transboundary water resource can be the subject of perfectly cooperative or entirely conflictual hydropolitics at all times. Rather, we can expect interaction to oscillate along the conflict-cooperation spectrum over time, only periodically reaching or remaining at either extreme.

As water politics fluctuate between positive and negative engagement over time, it seems that the best determinant of the tenor of hydropolitical relations at any one moment is the current diplomatic climate. Throughout all three time periods, we see water “following” ties or divisions among the three riparian states. Whether the outcome was more collaborative or conflictual in each time period, hydropolitics improved when relations improved in general and worsened when they deteriorated. The most clear-cut example of this is issue linkage. In the Tigris-Euphrates case, hydropolitics tended to become conflictual when linked to other key issues of national security and sovereignty, such as the Kurdish issue and Hatay dispute between Turkey and Syria, but improved dramatically and quickly after such linked disputes were resolved. As such, it is clear that one of the most reliable means to achieve more cooperative hydropolitics is the resolution of issues to which they have been linked.

The influence of an external actor can also be a very powerful force for engendering more cooperative hydropolitics, to the extent to which a third party prioritizes improved relations among riparian states. The opportunity for Turkey to gain membership to the EU had a remarkably positive impact on Tigris-Euphrates hydropolitics, as Turkey’s efforts to comply with the EU’s vision and requirements resulted in both a new concern for Turkey’s national image in its neighborhood and measures towards implementing EU-mandated basin-wide river management. This EU influence ultimately drove a reorientation of Turkey’s
domestic and foreign water policy in the long-term that positively impacted basin-wide hydropolitics. We also see external actors having a positive impact on short-term dispute resolution, as the 1975 crisis between Iraq and Syria would likely have resulted in war if it were not for Soviet Union and Saudi Arabia mediation.\textsuperscript{413} However, when more cooperative politics are not a focus of an external actor influencing one or more states sharing a transboundary water body, third parties can have a negative impact. Such was seen when the Tigris-Euphrates riparians associated themselves with opposing superpowers during the Cold War and experienced conflictual hydropolitics while the international politics of these external actors influenced regional relations.

Commitment from high-level officials and economic interdependencies also emerge as factors helpful for achieving cooperative hydropolitics. During the third period, water relations became markedly more positive in light of the fast friendship between Turkish Prime Minister Recep Tayyip Erdoğan and Syrian President Bashar al-Assad and their prioritization of the water issue. The existence of political will for cooperation in the upstream state especially encourages positive hydropolitics, as illustrated by the extraordinary impact of Turkey’s “zero problems with neighbors” policy in improving both political and water relations with its downstream neighbors. Growing trade linkages on all three sides of the Tigris-Euphrates triangle during the third, and to some extent also the first, period were similarly important in creating the climate for more cooperative hydropolitics at these times.

The factor that emerges as most often espousing negative hydropolitical interactions is ethnic/ideological politics. When states or groups see themselves as divided along irreconcilable ethnic or ideological differences, or when such dynamics come into play in

\textsuperscript{413} I discuss this in Chapter 2 on page 46.
water disputes, conflictual hydropolitics emerge or become more difficult to resolve. In the Tigris-Euphrates case, the Alawi and Sunni Ba’ath differences in Syria and Iraq provide evidence for such a conclusion, as does the Kurdish issue between Syria and Turkey and the echoes of Arab vs. Turk politics that remained in Turkey’s relationships with her downstream neighbors during the Cold War. That being said, when states find themselves on the same side of an ethnic dispute, positive hydropolitics can result, as seen in improvements of Turkey-Syria water relations in the third period as Syria came to share Turkey’s challenges in facing an uppity domestic Kurdish population.

When connected to the water issue, nationalistic tendencies, concerns about sovereignty, and economic modernization can cause water relations take on a conflictual tone. As seen during the second period, when hydro-development projects become intertwined with national identity and regime legitimacy, states’ expressed displeasure at another’s water management can become a much broader affront and cause water politics to take on a competitive, nationalistic, and ultimately conflictual, tone. In the Tigris-Euphrates case, all three states saw their development projects for the Twin Rivers as key to maintaining control over their territory and uniting their populations, making them dramatically less willing to compromise in negotiations when it became clear that scale-backs were necessary.

Perhaps the most surprising finding of this case study is that regarding the role of scarcity. While scarcity is generally thought of as a factor that encourages conflictual water relations, the third period shows how a cooperative existing political context can override the potential competition of real and perceived scarcity to augment negative hydropolitics. In fact, this study illustrates that although scarcity creates the potential for conflict over water
resources by engendering competition (or at least the perception thereof) among riparians, rather than necessarily translating into conflictual hydropolitics, scarcity simply puts water on the agendas of presidents and prime ministers and makes it a high politics, foreign policy concern rather than solely the subject of domestic, technical management. While in some cases, scarcity can prompt negative water relations, as is seen during the second period when perceived scarcity and competing river claims contribute to conflictual hydropolitics, it can also engender interactions on the cooperative side of the spectrum when other political, economic, and social relations among states are positive. This analysis thus contributes to more nuanced understandings how environmental conditions and existing relationships among states interact to influence hydropolitics and vice versa.
Conclusion

While the history of the Tigris-Euphrates improves our understanding of the specific factors that drive interstate water politics, a look at the basin since 2011 complicates and adds dimension and nuance to this picture, illustrating both the relevance of the preceding analysis and the limits of such a framework.

Hydropolitics and Syria in Crisis

2011 started off a promising year for Tigris-Euphrates hydropolitics. January heralded both an announcement that Turkish planners intended to build 18 cross-border dams in concert with neighbors Iraq, Syria, Iran, Georgia, Bulgaria, and Greece, with the specific intent of “disprov[ing] the water wars thesis.”414 And in February, construction began for Turkey and Syria’s much-anticipated Friendship Dam on the Orontes.415 However, these encouraging, positive dynamics were not to last. The Syrian government’s brutal crackdowns against graffiti artists in the country’s south that sparked widespread domestic uprising in March 2011416 brought the Syrian regime’s legitimacy into question and proved catastrophic for the Tigris-Euphrates riparians’ cooperative hydropolitics of the previous ten years.

At the outbreak of the Syrian uprising, Turkey initially encouraged Assad to pursue reform.417 When it became clear that this path was a dead end,418 Erdoğan proclaimed that it was time for Assad “to go.”419 Turkey quickly reversed its friendly policies toward Syria, suspending dialogue and trade,420 imposing steep sanctions on the Syrian regime, and welcoming both Free Syrian Army (FSA) fighters and the Syrian National Council (Syrian

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414 “‘Water Wars’ Threat Gone with 18 Transborder River Dams.”
415 “Turkey’s Erdogan Meets With Syria’s Al-Assad in Aleppo.”
416 Blight, Pulham, and Torpey, “Arab Spring.”
418 “Syria at ‘Point of No Return,’ Turkey Says.”
419 Ibid.
420 “Turkey Halts Dialogue with Syria, Says Source.”
governing coalition, supported by the West) inside Turkish borders. In response, the Syrian regime renewed support for PKK activities inside Turkey.

Water relations initially seemed more resistant to alienation than these other political links between the Turkish and Syrian states. As of 2012, the construction of the Friendship Dam was still a go despite the more general ‘end of Friendship’ between the two regimes in the final months of 2011. Similarly, Turkey initially decided against the possibility of cutting off water flow to Syria as part of the international sanctions regime against the increasingly unpopular Assad. However, a worsening drought at home and mounting chaos and violence in Syria prompted Turkey to begin to strangle Euphrates flow in May 2014. By the end of June 2014, Turkey had closed its dam gates altogether for the first time reducing Euphrates flow to a trickle.

Water relations between Syria and Iraq have remained largely unchanged and somewhat neutral amidst the crisis in Syria. Primarily due to sectarian similarities between Syria’s ruling party and new leadership in Iraq, Iraq is standing by Syria, opposing sanctions, and providing an “economic lifeline” for the country. Under these conditions, water relations have neither dramatically improved nor deteriorated in the last five years. In contrast, Turkey and Iraq’s hydropolitical relationship has suffered amidst poor relations between Turkish leadership and Iraq’s new Shia regime. Following the theme of ethnic and ideological differences contributing to more conflictual water relations, Foreign Minister

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422 Dohrmann and Hatem, “The Impact of Hydro-Politics on the Relations of Turkey, Iraq, and Syria,” 582.
423 “Turkish-Syrian Friendship Ends but ‘Friendship Dam Project’ Still under Way.”
424 “Turkey Rules out Cutting Water Flow to Syria.”
425 “Water Levels in Turkey’s Dams Raise Alarm.”
426 al-Masri, “Turkey’s Control of the Euphrates Might Lead to Disaster.”
427 Dohrmann and Hatem, “The Impact of Hydro-Politics on the Relations of Turkey, Iraq, and Syria,” 581; “Water in Reservoir of Atatürk Dam down by 15 Percent.”
428 While Iraqi government has historically been Sunni, the rise of Prime Minister Nouri al-Maliki upon US departure for the first time unites Syrian and Iraqi leadership under the Shia banner.
429 “Analysts Argue Iraq’s Syria Stance Is Sectarian Related”; “Syria Eyes Iraq, Lebanon Economic Lifelines.”
430 “Iraq’s Nechirvan Barzani Said Visiting Turkey For Talks on KGK, Syria, Trade”; “Turkish Daily Views ‘Rising Shiite Influence’ in Iraq Posing Threat for Turkey.”
Ahmet Davutoğlu, representing majority-Sunni Turkey, and Iraqi Shia spiritual leader, Ayatollah Ali al-Sistani, reportedly squabbled over the water issue at a meeting in November 2013, prompting al-Sistani to suggest that U.N arbitration was necessary for any peaceful resolution of the Tigris-Euphrates dispute.  

**ISIS: The New Kid on the River Bank**

In addition to new developments in interstate hydropolitics, Tigris-Euphrates dynamics since 2011 have been influenced by the rise and growing power of non-state actors. While there are a wide variety of groups at play in Iraq, Syria, and Turkey—including the PKK, FSA, al-Nusra Front, KRG, Kurdish Peshmerga fighters, and more—by far the most critical to this discussion is the Islamic State in Iraq and Syria (ISIS). ISIS’ debut in Tigris-Euphrates hydropolitics has been equally as negative for the potential of cooperative basin management as it has been conceptually interesting for scholarly understanding of the role of water in conflict. In its brutal bid to construct an Islamic caliphate over the area of modern Iraq and Syria, water has functioned as one of the principle weapons in ISIS’s arsenal and control over the twin Mesopotamian rivers and associated infrastructure has been critical for the group’s territorial gains and state-building efforts.

ISIS’s movement through Iraq and Syria has followed the paths of the Tigris and Euphrates rivers, the group prioritizing control of riverside cities and dams. Not only does following the water give ISIS access to a large number of settlements in Syria and Iraq (and the life resource itself in an increasingly dry region), but it also provides the group with two measures of control over Iraqi and Syrian citizenry: 1) with command of water resources, the threat of turning off the taps and restricting access makes water a potent weapon of coercion;  

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431 “Shiite Leader Asks Turkey to Give Iraq More Water.”
432 Watkins and Yourish, “A Rogue State Along Two Rivers.”
and 2) taking control of water infrastructure and the responsibility of supplying water for local populations provides a measure of legitimacy to a non-state group attempting to gain state-like authority. In a particularly potent example of ISIS’ use of water for political ends, the group rapidly closed the massive gates of the Iraqi Fallujah Dam on the Euphrates in April of 2014, causing water to overflow above and flooding 200 square miles of farmland and villages, destroying homes, and ruining crops. This aggressive manipulation of water both forced the retreat of Iraqi forces gaining ground on ISIS in Fallujah and left thousands of Shiites downstream without water. Having previously voiced intentions to deprive Shiite regions of water, this appears to be a targeted use of water in a coercive, conflictual manner, motivated by sectarian differences.

Clearly, through its own actions, ISIS is a potent threat to cooperative resolution of the Tigris and Euphrates water disputes. As a non-state actor, ISIS is not bound or obligated by any of the existing treaties and agreements in the basin, nor does the group seem concerned about accountability to states or organizations of the international system. ISIS also provides a danger to the potential for more permanent hydro-peace through the reactions the group elicits from states. It has been suggested that Turkey’s choice to close the gates of the Atatürk Dam and stop the flow the Euphrates in June 2014 was in part a politically motivated effort to deprive ISIS of a key resource in the Caliphate’s capital, Raqqa, and thereby debilitate the group’s functional capacity. Though Turkey’s actions successfully put pressure on ISIS, prompting threats from the group that “God willing if they [the Turkish

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433 Martino, “Water Scarcity Is Helping Radicalize the Middle East.”
434 “1,700 Families Flee Flood-Hit Area of Iraq’s Fallujah”; Pearce, “Mideast Water Wars: In Iraq, A Battle for Control of Water”; Massih, “ISIS Gains Highlight ‘aggressive’ Use of Water as Weapon of War.”
435 Ali, “ISIS’ Path of Destruction Drains Iraq and Syria’s Water Supplies.”
436 ISIS is a Sunni group
437 al-Masri, “Turkey’s Control of the Euphrates Might Lead to Disaster.”
government] don’t open it [the dam], we’ll open it from Istanbul,” it has also had extremely damaging effects on water and electricity supply for civilians in Syria and Iraq. Thus, both in its own actions impacting water management and those it elicits from riparian states, ISIS has had a negative impact on Tigris-Euphrates hydropolitics.

**A Peaceful Future?**

This brief analysis of more recent events in the Tigris-Euphrates basin illustrates that many conclusions drawn from my inquiry into basin politics from 1918-2010 hold true, despite dramatic changes in political circumstances in Syria and the addition of new, non-state actors to the mix. In both interstate interaction and ISIS’ hydropolitics, sectarian and ideological differences once again emerge as important driving factors for water politics. New sectarian divisions between political leadership in Turkey and Syria precipitate these states’ deteriorating water relations, and ISIS’ hydro-aggression is somewhat motivated by its declared battle against Shiites. Similarly, we again see water following patterns of trade and relations among heads of state as worsening water relations complement the decline of economic ties and friendships among leaders in Turkey and Syria. Water undoubtedly remains a high politics issue, as evidenced by its discussion in key meetings between Turkish and Iraqi leadership such as Ahmet Davutoğlu and Ayatollah Ali al-Sistani. And once again, real scarcity (in the form of drought in Turkey and the actual shutting off of Euphrates flow from Turkey into Syria) maintains water’s place in high politics.

In the last five years, water has also largely conformed to the trend established in my previous analysis: hydropolitics reflect the character of overarching political trends. This is exemplified by the deterioration of water relations between Turkey and both Syria and Iraq.

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438 VICE News, *The Islamic State (Full Length)*, min. 10.
439 al-Masri, “Turkey’s Control of the Euphrates Might Lead to Disaster.”
amidst declining diplomatic and economic relationships related to the Arab Spring in Syria
and the rise of Shia leadership in Iraq. The continuation of construction of the Friendship
Dam into 2012 despite Turkey and Syria’s divergence, however, illustrates a stickiness to
hydropolitics that was not apparent in previous time periods. Though it is unclear from media
reports whether dam construction continued past 2012 as bilateral relations further
deteriorated, the simple fact that it extended beyond the official “end of friendship” between
Turkey and Syria is significant. This, combined with the Turkish regime’s somewhat
surprising willingness to draw attention to the dam as a mark of continued positive
hydropolitics amidst its simultaneous criticisms of the Assad regime, may illustrate
something of a “partial institutionalization of water cooperation” not previously seen in the
basin. Perhaps, if given the chance to further develop, such institutionalization could enable
cooperative hydropolitics to resist oscillations in wider political relations. Unfortunately, it
seems that Turkey’s 2014 choice to cut off water to Syria, combined with the rise of ISIS,
make such promising cooperation unlikely at present.

For its part, ISIS introduces a new and volatile dynamic into the Tigris-Euphrates
mix. Non-state actors like ISIS (i.e. powerful extremist groups) often do not see themselves
as bound by international norms or traditional mechanisms of dispute resolution in the
current international system (such as treaties, informal agreements, or obligations to
neighboring states). They thus may be less susceptible or subject to influence by external
actors that might otherwise be able to positively influence hydropolitics (such as the UN, EU,
etc.). The very fact that ISIS is attempting to conquer the territory of Iraq and Syria means
that the group also threatens the systems of bureaucratic organization and water management
that are important in encouraging and implementing cooperative agreements over water.

Combined with these discouraging facts, the extensive uncertainty surrounding the current and future control of the Tigris and Euphrates that ISIS brings to the table makes effective water management under such circumstances immensely difficult and positive water politics elusive.

The picture painted here of the present conditions in the Tigris-Euphrates basin is not very pretty or promising for the prospects of positive, cooperative hydropolitics in coming years. The fact that we have seen water politics follow broader trends of relations in a region where, historically, politics have been both remarkably violent and exceptionally volatile does not bode well for the future of water politics in the basin. In addition to this worrisome dynamic, climate change is only making water scarcer in this region. While this may not directly translate into conflictual hydropolitics, the combination of such environmental circumstances with the present political climate supplies the tinder and sparks for more widespread dispute and tension relating to water resources in the future.

Despite this somewhat pessimistic final note, this paper contributes to our understandings of the complex interconnectivities between a basin’s diplomatic, economic, and social circumstances and its water politics. I have illustrated how Tigris-Euphrates hydropolitics have fluctuated from low politics and cooperative interactions to high politics conflictual engagement and then remained in high politics but become more collaborative over the course of the 20th century and beginning of the 21st. I argue that the driving force for such oscillations stems from broad fluctuations in diplomatic relations, influence of external actors, economic ties, and the saliency of ethnic and ideological similarities and differences, thus reflecting a tendency of water politics to follow overarching political trends. My analysis of the role of scarcity in hydropolitical relationships as the driver for water’s

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movement from low to high politics, but not necessarily towards conflict, adds to scholarly understandings of how tensions over water develop and the necessary conditions for more cooperative resolution of such disputes. While recent developments in the region and the growing impacts of climate change have altered the dynamics of the Tigris-Euphrates basin in the last five years, if the lessons of the past are any guide, the exigencies created by such changes will likely contribute to some more positive, cooperative hydropolitical trends and some more negative and conflictual. Although the future of the Tigris-Euphrates basin is uncertain, there is no doubt that just as the Twin Rivers first raised the question of the potential for water to spark wars 4,500 years ago, these rivers will once again be center stage in the 21st century’s answers to that question.
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