

1

Introduction

In 1979, a group of Israeli water experts secretly crossed the Yarmouk River to enemy territory in Jordan. Their Jordanian counterparts greeted them, and discussions ensued concerning the difficult issue of sharing scarce water resources. These talks and subsequent cooperation continued for a surprisingly long time—the next fifteen years before Jordan and Israel signed a formal peace treaty in 1994. Publicly, during the same period, Jordan rejected all ties with Israel since, according to Amman, that country had failed to address the Palestinian and other issues of its peacemaking concerns. How did these extraordinary arrangements take place and succeed, while other cooperative efforts failed? The water-sharing arrangement that resulted was successful, I would argue, because both riparians were willing to link the mixed preferences of water cooperation with improving secret diplomatic relations. This cooperation came about because the two had water-scarcity related institutions and experts, defined rules for sharing, faced common threats, and finally were both allies of the same superpower, the United States, that promoted this cooperative regime. The difficulties of such cooperation between parties in a protracted conflict and the complexities of sharing scarce water resources are the focus of this book. Overall, the central question is: during a protracted conflict, what is the value of rivals cooperating on functional issues such as water scarcity and what role, if any, should third parties play in facilitating such cooperation?

The United States strongly embraces a policy of facilitating water cooperation among rivals. In 2001, Secretary of State Colin Powell announced an action plan on transboundary water. In part following the lessons learned from the past fifty years, this policy seeks to improve water management, decrease political and economic tension associated with shared water resources, and, as

a high-ranking State Department official characterized it, “use water where appropriate as a diplomatic tool to build trust and promote cooperation.”¹ While not always pleased with this policy, in the end, Jordanians, such as Water Minister Hazem al-Nasser, concluded in 2004 that “from our experience, water is an element of peace-building and cooperation.”² This book focuses on the Jordan-Israel case of the past half-century and attempts to analyze how the lessons learned from that experience apply to the other riparians of the Arab-Israeli conflict: the Palestinians, Syria, and Lebanon.

In most cases, states follow international law, such as established norms and water-sharing treaties. However, this book is interested in international cases in which prolonged conflicts have made scarce water resources a key issue and a source of political tension that established norms cannot solve. There are many such examples—the Arab-Israeli conflict, the Indian-Pakistani dispute, and the Syrian-Turkish conflict, to name only a few—that have all, at some point, involved serious disagreements over sharing common water resources.³ Allocating scarce water may be particularly problematic in arid or semiarid regions. Additionally, when riparians are engaged in an extended cold war, strained political and military relations make cooperation more difficult and outright conflict more probable. Under such conditions, my study suggests, creative statecraft still can be used to facilitate coordination.⁴

Can cooperation on an important functional issue such as water really benefit peacemaking of states in a protracted conflict? This basic question lies at the heart of a host of policy issues. Some argue that third parties such as the United States should concentrate on resolving the protracted conflict while leaving the functional issues for a later resolution. In this view, foreign aid and diplomatic efforts to promote water sharing would be a waste of time until the larger political conflict is resolved. Such an all-or-nothing approach, however, ignores several realities. Political leaders may be under pressure not to be seen as collaborating with the enemy, but they also want to avoid being dragged into an unintended war, making them more open to lower-profile opportunities for cooperation. Moreover, even in times of political conflict, leaders are under pressure to provide daily necessities, such as water, for their citizens. Thus, even when the political environment is not ripe for peace between countries in a protracted conflict, there may still be room for valuable functional cooperation. In a “no peace, no war” situation, interdependent and geographically adjacent states often have common functional interests that exert pressure toward cooperation. The challenge for third party policymakers has been to use this pressure as a tool to encourage cooperation on functional issues such as water resources, while guiding the feuding states toward a larger political settlement.

What place do domestic institutions, economic systems, and political parties have in determining whether a state will move toward cooperation or opt to fight over such scarce resources? In formulating a policy to address water

scarcity in the Arab-Israeli arena, some negotiators ignore such local institutions in favor of the international dynamics at play. They first focus on the configuration of military capabilities. So, for example, they might posit that Jordan would not start a violent conflict over water because it would not perceive such a conflict as winnable. On the other hand, diplomats might focus on the configuration of information and institutions and aggressively seek an international agreement, reasoning that similar expectations on water scarcity should help to stabilize political, economic, and military relations. If negotiators feel, though, that the underlying problem is not structural in nature, they first need to understand domestic state preferences or goals, independent of any particular international negotiation. Following this viewpoint, policymakers would, before all else, promote domestic institutions, such as a pool of trained water experts, an independent media, and a free-market economic sector, which could lead states to prefer cooperation and provide states with the capacity to properly address problems of scarcity. Such institutions would help create a stable, ongoing network of practices and professionals that would make cooperation on water resource issues more likely, no matter what the political environment.

In the past decade, scholars and politicians have shown growing interest in the relationship between scarce renewable natural resources and the outbreak of acute conflict and have tried to understand what leadership role the United States or other third parties can play. As part of this new direction in research, this book lies at the confluence of three significant research areas: international security, environmental studies, and American foreign policy. My work uses the tools of international relations—in particular liberalism—to examine an environmental issue, water scarcity. This work will explain why cooperation results in some cases and conflict in others. My detailed examination of the Jordan River basin from 1920 to 2006 uses a case study method. By testing generalizable arguments against particular case studies, I offer a critical framework for understanding how conflict may be mitigated in regions of tension and in developing states around the globe.

This book's thesis is that in protracted conflict in arid or semiarid regions, there is great value to third party efforts that facilitate water cooperation and mitigate violent conflict related to water scarcity. In addition to improved water management and a resulting increased supply for participants, fostering water cooperation produces a limited political benefit by creating rules, building confidence, and reducing tensions among adversaries. While these benefits alone may not resolve the entire conflict, this process does have a positive long-term peacemaking value. In other words, this sort of water cooperation paves the bumpy road to peace.

In exploring how to facilitate cooperation, this work builds on the liberal international relations claim that the configuration of states' preferences

matters most in understanding the international politics of resource scarcity. Political scientist Andrew Moravcsik contends that liberal theory explains “what states want and what they do,” in contrast to realists such as Hans Morgenthau who argue that “power” shapes a state’s “interests.”⁵ Unlike realists who argue that the relative power of states is paramount or international (regime) institutionalists who maintain that the configuration of information and institutions impacts world politics the most, I, along with other liberals, argue that national preference comes first, followed by interstate bargaining.⁶ During the bargaining phase, however, realism and institutionalism, in addition to liberalism, provide understanding for the strategy states use to realize their preferences. This liberal approach has been used to understand cooperation in economically and politically stable regions such as Western Europe and North America, but liberalism has not been used for explaining conflictual cases such as water scarcity in the Arab-Israel conflict. In contrast to the realist and institutionalist approaches, a liberalist approach respects the internal preferences of these supposedly “conflict-ridden” and intractable states. It seeks to understand them from the inside and recognize the variability and specificity of their motivations for acting. The implication, then, is that “low politics”—building expertise and domestic institutions—may influence security concerns or “high politics.”

This work looks closely at the precipitating factors in a violent conflict, especially the question of whether increasing the water supply is a likely motivation for a political leader to use force. The lack of sufficient quantities of water has led to the perception among some scholars that water is a potential source of conflict in the Middle East. It has been argued, though most serious analysts are dubious, that the next regional war will be over water rather than oil.⁷ In fact, the notion of Middle East water wars, past or future, is faulty. In the last 4,500 years, water scarcity has never precipitated a war.⁸ And it is doubtful that this single issue alone will cause war. However, this work makes the case that water scarcity can be a precipitating or intermediate source of political tension and even violent conflict. When a state has a general preference toward violent conflict or even war, as Syria did in the mid-1960s, that preference may be strategically linked to the water scarcity issue in an ideological and nationalistic manner to create international discord. Ultimately, a lack of rules for sharing water leads to misperception, misinformation, and sometimes even violent conflict.

Finally, this work argues, as liberals do, that water cooperation between adversaries in a protracted conflict increases when facilitators pursue an international strategy that clearly defines rules and links mixed issues such as foreign aid and water cooperation. However, for issue linkage to be successful, adversaries need to be on the same side of what may be termed the balancing equation. In other words, this work also argues, as realists do, that 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, or have a common security patron. However, unlike realists and liberals, this work argues that a tactical functional arrangement that facilitates reciprocity and communication will help to maintain coordination.

In the following discussion of water scarcity and international relations literature on cooperation, this work develops a general explanation for state behavior relating to water scarcity. My approach is tested in the case study and the argument's strengths and limitations are discussed in the conclusion. This chapter first discusses the arguments on water scarcity stimulating political and military conflict. The second and third sections explain why and how water scarcity cooperation occurs and defines key concepts, such as preferences, tactical functional cooperation, and hegemonic stability theory. Readers with only minimal interest in international relations theory as it contributes to understanding water scarcity and the Jordan River basin case should proceed to the final section. Methodology, the structure of the book, and my selection of the Jordan River case are discussed in the last section.

WHAT IS A WATER WAR?

This study differentiates between water wars, water-related acute conflict, and tactical attacks on water facilities.⁹ Unlike the other two categories of water conflict, tactical attacks on water facilities occur during wars and are a result of military, not political objectives. For example, during World War II, all sides targeted dams, water purification plants, and water-conveyance systems because they had a tactical military value in the war, not because the warring states had a water dispute.¹⁰ In a water war, by definition, mass organized violence is the method for resolving water conflicts among states, and it results in over one thousand civilian and combatant deaths.¹¹ To date, water wars are a myth. It is true, as geographer Aaron Wolf notes, that in the last 4,500 years, "there has never been a single war fought over water."¹² However, water scarcity certainly has been one of many issues that led to violence, not as a deep, but as an intermediate or precipitating factor. It is important to differentiate precipitating, intermediate, and deep, the three types of stimuli in terms of their proximity in time to the onset of war or acute violence. Those stimuli that occur immediately before the violence are precipitating causes. And the precipitating causes are not always the most important. In many cases, it is the deep or intermediate stimuli that play the most critical role in explaining the onset of violence. Political scientist Joseph Nye gives a couple of useful analogies: "Ask how lights come to be on in your room. The precipitating cause is that you flicked the switch, the intermediate cause is that someone wired the building and the deep cause is that Thomas Edison discovered how to deliver

electricity. Another analogy is building a fire: The logs are the deep cause, the kindling and paper the intermediate cause, and the actual striking of the match is the precipitating cause.¹³ As discussed in chapters 2 and 3, an acute conflict, unlike war, has limited scope and size but still involves violence.¹⁴ Although water was a primary reason for the conflict, it was not the only cause of the fighting, and, unlike a war, the violence was limited.¹⁵ These conflicts may be a contributing factor to a larger conflict, as illustrated by the events leading to the 1967 Arab-Israeli War.¹⁶ This book deals primarily with the political tension that conceivably leads to acute conflict between Israel and Syria. The challenge is to understand how and why water scarcity leads to political tension and then how those pressures result in acute conflict.

PREFERENCES

This book utilizes liberal international relations theory, which focuses on the impact of preferences to better understand water scarcity and violent conflict. This work challenges the neorealist and neoliberal institutionalist assumption that the international level of analysis is more important to understanding world politics than the domestic or second level of analysis. Andrew Moravcsik argues that this liberal “theory elaborates the basic insights that state–society relations—the relationship between governments and the domestic and transnational social context in which they are embedded—are the most fundamental determinant of state behavior in world politics.”¹⁷ In this view, states first formulate a “national preference” that is influenced by the state–society relations and is defined as “a set of underlying national objectives independent of any particular international negotiation.”¹⁸ Next, states pursue strategies to realize their national preference. To determine state preferences, we must first examine the sum of individuals in a civil society. There we find different opinions, social commitments, and capabilities. Individuals define their interests first and then advance those interests through politics and collective action, such as political parties.¹⁹ Once shaped, state preferences become the basis for rational, value-maximizing calculations of government leadership in domestic and international affairs.

These preferences are complex and should not be seen, as neorealist and institutionalist tend to do, as a fixed, homogeneous conception of security, autonomy, or welfare. States pursue particular interpretations and combinations of these interests that are preferred by powerful domestic groups or individuals.²⁰ As a number of liberal thinkers have pointed out, the nature and intensity of national support for any policy vary decisively with social context. According to Moravcsik, “it is not uncommon for states knowingly to surrender sovereignty, compromise security, or reduce aggregate economic welfare. In

the liberal view, trade-offs among such goals as well as cross-national differences in their definition, are inevitable, highly varied, and causally consequential.”²¹ Unlike what neorealists argue, a state’s relative power to other states does not always determine outcomes where powerful preferences enter into the equation. Vietnam-US and Afghanistan-USSR quagmires are examples of when a strong preference for the issue at stake made up for a country’s being less powerful. In fact, between 1950 and 1998 the weak actor or state defeated the strong actor or state more than half the time.²² In many of these cases, the intensity of state preferences of the weaker side had the greatest impact on the outcome.²³ Alexander George calls this an “asymmetry of motivations” where strong states may be punished if they ignore the “balance of interests” that weaker states sometimes enjoy in disputes with more powerful states. Also, George points out that neorealism fails to differentiate a state’s gross capabilities and its usable options.²⁴ For example, the United States had nuclear weapons during its Vietnam conflict, but use of such a weapon was unacceptable, domestically and internationally.

TACTICAL FUNCTIONAL COOPERATION

Once a state establishes a national preference, a strategy for realizing that preference must follow. Scholars have offered different explanations for how preferences lead states to pursue international cooperation or conflict. Some analysts within the school of functionalism argue that the water issue offers a means for ending the Arab-Israeli protracted conflict. According to Aaron Wolf’s functionalist argument, cooperation on purely water issues can spill over into the political realm and lead to increased cooperation in other issue areas. Going a step further, Wolf calls for the interested parties to focus on promoting water cooperation, which may eventually bring a broader settlement of political problems.²⁵

How can functionalism help us understand the Arab-Israeli conflict? Wolf argues that Israel, by cooperating on the water issue, would gain politically and hydrologically, albeit slowly and in stages. The benefits derived from negotiating the water issue and from the developing interdependence would encourage the Jordan River basin riparians to continue cooperative efforts and move further from protracted conflict. Wolf supports the view that functional water-related cooperation will not only reduce Israel’s water problems, but also move the Middle East peace process forward.²⁶

Critics of this view, however, claim that functionalism assumes that ideology and the external world would have little impact on cooperation, when in fact both do.²⁷ Water relations in the Jordan River basin, as Miriam Lowi argues, have certainly been tied historically to the larger political conflict. As a

classical realist, Lowi asserts the primacy of politics over economics, maintaining that “the *sine qua non* of resolving a transboundary water dispute in a protracted conflict setting is the prior resolution of the political conflict.” Lowi argues that “states involved in ‘high politics’ conflicts that provoke wars and engage the visceral issues of territorial sovereignty and the recognition of identities, are not inclined to collaborate in seemingly technical matters that concern economic development and human welfare.”²⁸ Even limited cooperation between Jordan and Israel over a period of many years, Lowi asserts,²⁹ has had “no implications for the end of the political conflict. . . . These highly delimited, highly specific arrangements have no conflict resolution potential.”³⁰

Lowi’s argument is correct, yet it lacks critical nuance.³¹ In fact, states in a protracted conflict that are interdependent on an important functional issue, such as shared water resources, may cooperate tactically. If we revise expectations, we can see that, in cooperating, the immediate objective need not be conflict resolution, as argued by the functionalist approach, but conflict management. The principal motive is to prevent the water issue from provoking an unintended war, and to address the mutual preferences of better water management. In addition to the conflict management benefits of tactical functional cooperation (TFC) over time, such a coordination process builds confidence and trust between adversaries—a critical ingredient for moving toward a resolution of the conflict, at least over a specific pivotal and controversial issue.³² In other words, if TFC can effectively address the dispute over the water issue, peace will be that much less difficult to realize. Constructivists such as Dalia Dassa Kaye point out, the process matters. A nonmaterial benefit of TFC is that it creates “a process of working together in an effort to achieve common understanding.”³³ This notion of cooperation highlights an important value of TFC. 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.

Tactical functional cooperation, like informal or formal international institutions, is a set of rules between states that “prescribes roles, constrains activities, and shapes expectations.”³⁴ It also provides critical information, reduces transaction costs, establishes focal points for coordination, and facilitates reciprocity.³⁵ Tactical functional cooperation is of critical importance to states trying to overcome the difficulties of cooperating in an international environment but lacking the means to enforce agreements. According to the neoliberal institutionalist literature, cheating or noncompliance is the greatest obstacle to cooperation.³⁶ Tactical functional cooperation, like international institutions, helps to provide states with the necessary information to generate confidence that they are not being cheated. This type of arrangement may

reduce transaction costs by providing rules, a sense of continuity, a standard operating procedure, and means to resolve conflicts peacefully. Thus, the time and resources that otherwise would be expended to realize state objectives decreases and expectations become better defined. These by-products are important when political leaders assess whether cooperation is worthwhile. By decreasing the expense of cooperation, TFC increases the probability of its success. In addition, such efforts permit experts in the given area to interact, exchange ideas, and solve difficult issue-specific problems.³⁷ By the time the overall political problems are resolved, many water-related issues have already been discussed and investigated, allowing difficult negotiations to become faster moving and less competitive because of familiarity with the personalities involved and mutual problems.

Tactical functional cooperation also facilitates the operation of reciprocity by activating a participant's self-interest in not wanting to be exploited and providing the incentive or interest to cooperate. In general, for cooperation to occur, state power does not have to be equal between participants, nor must reciprocal obligations be identical, as in the case of the cold war patron-client relationships. Political leaders determine which values are equivalent. Yet exchange cannot be one-sided; there must be an approximate balance. The exchange should be characterized by the standard "good is returned for good, and bad for bad."³⁸ The result over the long term is increased trust and fairness between participating states as reciprocity becomes more diffuse.³⁹

The means of successful tactical functional cooperation during a protracted conflict depends on diplomacy or statecraft that takes into consideration the involved parties' preferences. Because a formal state of hostilities exists, some political leaders would be unable to rationalize to the public and to allies why they are cooperating with the enemy. However, if only state elites are aware of the cooperation and important policy objectives are achieved, tactical functional cooperation becomes more inviting and more likely to succeed. Secrecy or a low-profile process insulates involved technocrats and elites from public pressure and scrutiny, which makes TFC during protracted conflict possible. However, a major drawback is that secrecy removes the public from experiencing the benefits of TFC, so while Jordanian and Israeli elites and technocrats had fifteen years of a process that built trust and confidence, the public gained no new understanding and, especially for the Jordanians, found the post-1994 peace treaty environment difficult to accept, even with elites defending the new reality. If a secret TFC is exposed, the arrangement could suggest deception to the public and to allies. It could also weaken a government that is more apt to prefer avoiding conflict or a challenge to the overall status quo. By its nature, secret TFC is based on an informal agreement, as opposed to a ratified treaty. A result is that informal TFC rules are, at least at the start of the process, ill defined and apt to lead to disagreement, cheating,

and the possibility of violent conflict, as occurred between Israel and Jordan in the 1980s. Once the rules are established and accepted by both sides, conflict over that issue is less likely.

In sum, tactical functional cooperation is an effective means of maintaining cooperation between states in a protracted conflict; it also has long-term conflict resolution value. Given that tactical functional cooperation is an important means for facilitating cooperation, we need to understand how states with a cooperation preference begin TFC and what else is needed to maintain it. International cooperation literature may help to better understand the answers to these questions.

STRATEGY AND INTERNATIONAL BARGAINING

This section investigates what factors shape a state's bargaining strategy to initiate cooperation and what conditions states use to maintain cooperation.⁴⁰ In an effort to better explain what strategies states use to initiate cooperation, this work draws on neorealist and neoliberal institutionalist theories. It uses both the neorealist approach that weaker states will form a coalition against a common threat with the neoliberal insight that issue linkage is a powerful motivator for maintaining cooperation. A more complex view that draws from both theoretical points of view may explain how states bargain to initiate cooperation in a protracted conflict.

Hegemonic stability theory, a well-known power-based approach to international cooperation, asserts that cooperation may be facilitated when a single dominant state is willing and able to provide and maintain it.⁴¹ In the water-scarcity literature, Lowi posits a "malign" variant of hegemonic stability theory that relations among international river riparians depend on which state is strong and located upstream and which riparian is weak and situated downstream. Cooperation is thus best understood and explained primarily by examining the relative power, geographic location, and the "dependency on the basin water" of the participants.⁴² The strongest can impose and force the others to alter their policies. The river hegemon may serve as the functional equivalent of a common power or central authority in international politics. However, in some cases a hegemon may not choose to cooperate or perhaps even to participate. Neoliberal institutionalists argue that even here cooperation is still possible—establishing international institutions or regimes, which set the rules, and establishing common expectations by providing information are the best means to cooperation. However, even with the benefits that come with cooperation, some states favor not to cooperate due to national preferences.⁴³

Power alone is not the only force at work in the relations between states, as we can see when states form alliances to coordinate security. Stephen Walt

argues that states form alliances because they seek to balance against potential threats rather than against power alone. "Although the distribution of power is an extremely important factor, the level of threat is also affected by geographic proximity, offensive capabilities, and perceived intentions."⁴⁴ States that balance threats together often have a common patron. The superpower or third party is an important factor in bringing together states that are in the midst of a protracted conflict. The patron serves as a mediator and has credibility because it has or will give assistance to both and is directly concerned with the security of both cooperating states. For instance, in 1970, Israel mobilized its military to deter the Syrian army from invading Jordan during the civil war between King Hussein and the Palestine Liberation Organization (PLO). By doing so, Israel demonstrated its willingness to risk war with Syria to protect its vital interests—preservation of the Hashemite monarchy and opposition to the establishment of a Palestinian state on either bank of the Jordan River. Since 1970, Israel and Jordan have continued to ally, albeit secretly or tacitly, against common threats and for mutual interests. This alliance has been facilitated by both states' close relationship with the United States. As a result of the security relationship, Jordan and Israel were more confident with nonmilitary cooperation.⁴⁵ Thus, states may utilize the improved relations from security coordination in order to cooperate more easily on nonsecurity issues. But on which issues will states cooperate?

Neoliberal theory argues that self-interest often motivates cooperation. One such interest-based strategy is issue linkage, a state's policy of making its course of action concerning a given issue contingent on another state's behavior in a different issue area.⁴⁶ This translates as giving something on one issue in return for help on another. Under conditions of interdependence, linking or adding issues may increase the likelihood of cooperation. Examples include positive linkage such as side payments in exchange for cooperation or negative linkage such as threats and sanctions for noncompliance. On any single issue, two states may be directly opposed; but on more than one they are most likely to rank preferences differently, which may make possible exchanges across issues. By linking issues, states may accommodate their most basic interests through "conceding on issues of low priority in exchange for reciprocal concessions on more important issues."⁴⁷ A state may want to "build up a 'reservoir of good will'" so as to be in a better position in the future when it may seek support or concessions on another issue of greater national interest.⁴⁸ Issue linkage does not necessarily require a situation in which states have coincidental or harmonious interests. It may occur, by definition, when states have a conflict of interests but are able to compromise and cooperate nonetheless. A possible constraint on linking issues is the domestic implications for special interest groups. Moravcsik argues that linked concessions often create domestic losers, even though the state perceives a net benefit for itself. If losers have

intense preferences and strong political connections, they may be obstacles to cooperation. Losers may be a small fraction of the population, and winners may be a large part of the citizens, but when the benefits are diffuse and those who benefit are unorganized or underrepresented groups—such as taxpayers or utility consumers—then the losers might be able to block the international cooperation.⁴⁹ For example, Israel at times limited its cooperation on the water issue because of the criticism of some powerful farmers. The loss of a small quantity of agriculture-sector water was being valued more highly than improved political relations with Jordan, from which all of Israel would benefit.

Tactical functional cooperation initiation is more likely to occur when states in a protracted conflict have already developed a relationship because they are working together to balance a potential threat or when they have a common patron. As a result of improved relations, they are more likely to cooperate on mixed interests that both are willing to link. This work argues that once cooperation is initiated, tactical functional cooperation will be more effective and longer lasting if specific conditions are present. These conditions, drawn from the international relations literature, are: altering the payoff structure, lengthening the shadow of the future, and having a low number of participants. Each has a different impact, but all may help maintain cooperation and all give insight into why TFC may become effective.

Political scientists from various theoretical approaches have utilized game theory to provide insights into why states cooperate in an uncertain international environment.⁵⁰ The “cooperation under anarchy” literature argues, first, that mutuality of interests maintains cooperation in an international setting. Mutuality of interests or altering the payoff structure occurs when the gains from cooperation are greater than the benefits for not following the rules—in other words, cheating. An example of this occurs when international financial assistance or political support is only available when the parties follow the rules of the game. Without such incentives, participating states may conclude that cooperation is not in their best interest. In addition, changing the perception of a state’s interests with new norms, information, and ideas may also alter a state’s understanding of its interests.⁵¹

Second, lengthening the shadow of the future takes place when the prospect of cooperation improves because states repeat actions designed to spur coordination indefinitely rather than merely a few finite times. Under a competitive and one-time situation, a participant has an overwhelming temptation to cheat. However, if a state knows that the interaction will continue and that others will respond to its cheating with sanctions, it will be less inclined to cheat.⁵² This behavior becomes more likely when the states in question are in close geographical proximity and are continually interdependent. For example, Jordan might have been tempted to take more water than it was allotted in a dry year, but it realized that Israel would probably do the same. Jordan recog-

nized that over time it would gain more by cooperating than by cheating for a one-time gain. With both sides understanding the long-term gains, cooperation became more probable. The establishment of a direct connection between a state's present behavior and its anticipated future benefits increases the likelihood of cooperation and decreases the chances that interdependence will lead to conflict.⁵³

Third, decreasing the number of participants is a further set of circumstances that favors the continuation of cooperation. The larger the number of states, the harder it becomes for participants to identify and to realize common interests or negotiate agreements.⁵⁴ For example, bringing Jordan and Syria or Jordan and Israel together on a water scheme may be possible, but bringing all three states together becomes much more difficult.⁵⁵ In fact, Middle East peace negotiations have been much more successful with a bilateral track, such as the Israeli-Egyptian, Israeli-Palestinian, and Israeli-Jordanian agreements, rather than multilateral negotiations, as discussed in chapter 6. Together, these conditions improve the likelihood that states will continue tactical functional cooperation. It must be acknowledged that if a state's preference is conflict, then, as neorealists argue, it will attempt a strategy of building its capabilities through procuring weapons, establishing alliances, and instituting water policies that challenge an opponent, such as building an upstream dam that decreases water to the downstream opponent.⁵⁶

WHY THE JORDAN RIVER BASIN?

As previously noted, this book analyzes the conditions under which states in a protracted conflict cooperate and compete with regards to shared, scarce water resources. Through careful historical analysis, this study focuses on how states behave in such an environment. The variables of state preferences and capabilities are examined to better understand how they lead to cooperation or conflict over water resources. This work takes as its case study the Jordan River basin from 1920 to 2006. Unlike other significant case studies, such as Allison's *Essence of Decision* and Homer-Dixon's *Ecoviolence*, this work does not focus on a single pivotal historical moment, but on a long time horizon. By examining the Jordan River basin over an eighty-five-year period, we also benefit from examining multiple subcases of conflict and cooperation.

This book investigates water scarcity-related conflict and cooperation in the Jordan River basin for several reasons.⁵⁷ First, it is a region with an arid to semi-arid climate. In addition, the riparians have been involved in a protracted conflict for over half a century. As a result, the politics of water, which has created a number of subcases for consideration, should reveal more about the factors that determine water-related cooperation and conflict than would an examination of

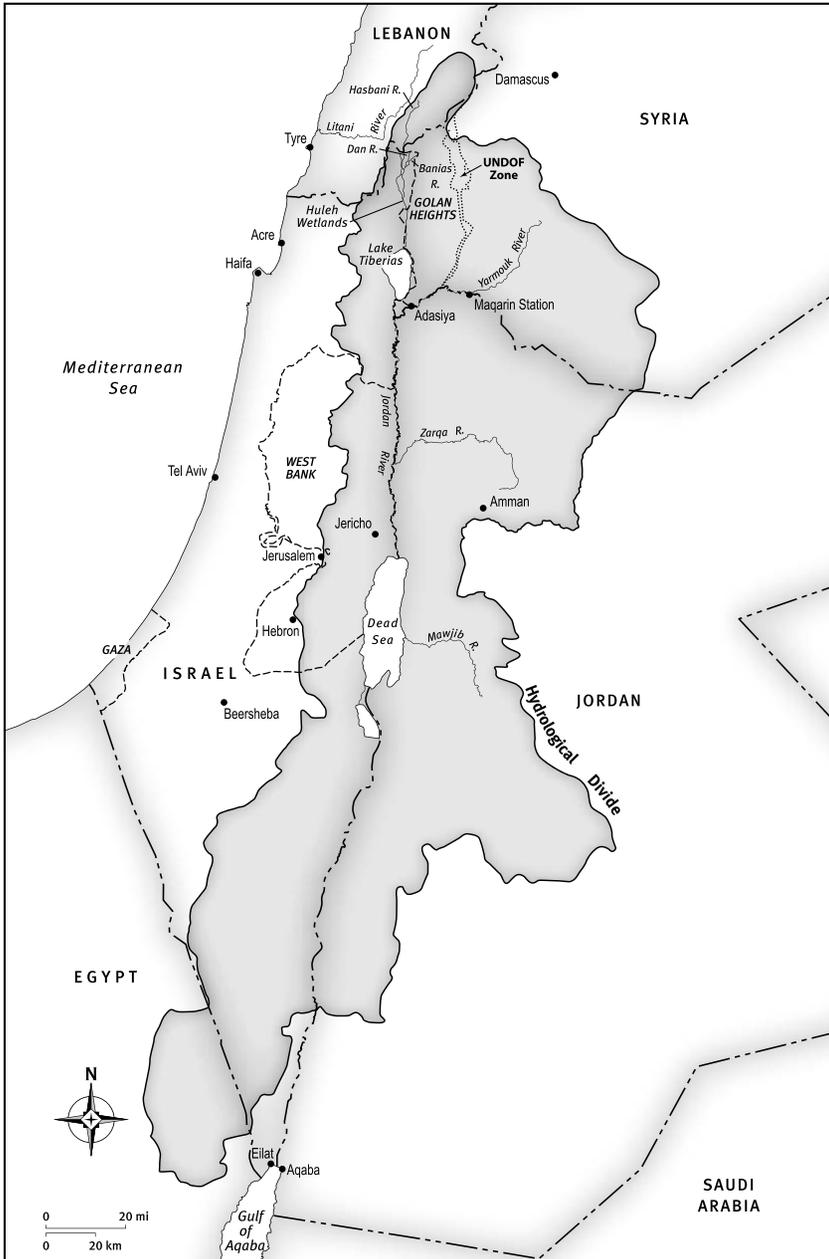
a peaceful region with abundant water. The Jordan River basin is an especially appropriate region within which to assess the issues in question. Second, the Jordan River basin and the Arab-Israeli conflict overall have been and remain an area of considerable political and strategic importance. During the cold war, both superpowers spent much time and resources in the region. And in the post-cold war era, the Arab-Israeli arena is still a central focus of world politics.

Prior to the case study, a brief overview of the riparians' capabilities and preferences will assist in understanding how states behave in relation to the water issue (see Map 1-1). The main hydrological problem in the Jordan River basin is one of rainfall distribution. Precipitation in the region is concentrated in the North—Syria and Lebanon—with the remainder of the region—Israel, Jordan, and the Palestinian Authority controlled areas—dependent on minimal rainfall, the river systems, and underground aquifers for their water supplies. Water is truly scarce in the sense that there is far less available than people would like to consume. For example, water piped to most Gaza Strip homes is not safe to drink and in recent summers in Amman water has been rationed to all consumers.

Prior to June 1967, Syria and Lebanon were upstream Jordan River riparians that had other primary sources of water (i.e., the Litani, Euphrates, and Orontes), while Jordan and Israel were downstream riparians that were dependent on the Jordan. After the 1967 War and its loss of territory, Syria was upstream for only one tributary of the Jordan, the Yarmouk. Throughout this period, Israel has had superior military, political, and economic capabilities. Syria has sought unsuccessfully to gain parity with Israel, while Lebanon and Jordan remain much less powerful states.

Israel is a parliamentary democracy with a Jewish majority. Zionism, a political philosophy promoting the existence of a "Jewish state," has had a significant influence on Israel. Since the early 1950s, that country has been closely aligned with the West. Israel has a relatively small population and geographical size, but has maintained its regional military superiority throughout much of its history. It has continuously sought international recognition and, when it saw this as practical, a peace settlement with its Arab neighbors. Beginning in the early 1950s, Syria experienced successive military coups. By 1963, the Baath party took control of the state and, since 1970, a single ruling family, Hafez al-Asad's, has maintained authoritarian rule. Syria was closely aligned with the Soviet Union. It has been a staunch public supporter of the Palestinian cause, Arab nationalism, and Arab unity. Even so, it has had serious political disagreements at one time or another with all its neighbors (Iraq, Turkey, Israel, Lebanon, and Jordan). Throughout most of its modern history, Syria has rejected cooperation with Israel.

Lebanon has always been militarily weak and ethnically divided. Political stability in the past has depended on dividing the domestic power between



MAP 1-1 Jordan River Watershed, 2004

Muslims and Christians. Throughout the cold war, Lebanon did not ally with the East or the West, and, by the 1970s, civil wars and foreign interventions became an acute problem. It was an active Jordan River riparian prior to June 1967, but not after that date. Jordan's international relations have been influenced by internal challenges—a large Palestinian population—and external threats. Between 1953 and 1999, one man, King Hussein, led the country in a monarchical, sometimes semiconstitutional system. Because of its weakness and vulnerability, Jordan's foreign policy has generally been very cautious. Hussein and his successor, Abdullah II, have had to rely most often on Western support and a policy of appeasing or allying with their neighbors to decrease the threats to their rule. Water scarcity has always been a central problem for Jordan. At present, the Palestinian Authority (PA) is not a recognized Jordan River riparian, but it is an important factor in relation to shared West Bank aquifers with Israel. Politically, the Palestinian Authority's power is still unclear since it has no military, but does have, at times, a large police force. In the past, it has received support from Europe and the United States. Water scarcity is an acute problem especially for the Gaza Strip, which since 2005 is controlled by the Palestinian Authority.

By 1967, Syria was informally allied with the USSR while Israel and Jordan were allied with the United States. The superpowers and their regional clients were united by different but usually compatible goals. The United States and the USSR attempted to balance each other, and their clients sought outside help to counter threats from other regional states.⁵⁸ Such alliances are a common occurrence in the Middle East, where unlikely partners join when their interests are threatened.⁵⁹

STRUCTURE OF THE BOOK

This large case study proceeds in five chapters and consists of seventeen smaller subcase analyses with the arguments tested in each (see Table 1-1). Chapters 2 through 4 offer a historical survey of the Jordan and Yarmouk basins' politics relating to the water issue. Chapter 2 discusses the public, multilateral US mediation in the 1950s, which initially succeeded in bringing the Arab (Jordan, Syria, Lebanon, and Egypt) and Israeli sides to agreement on a water-sharing program. However, in the eleventh hour, the parties failed to reach a formal understanding. Even so, the discussed Johnston Plan continued to have an important impact on Jordanian-Israeli tactical functional water cooperation facilitated by the United States over the next forty years, including the 1994 Israel-Jordan treaty negotiations. The plan's strengths and weaknesses along with the limitations of public, multilateral water-related diplomacy in a conflictual environment are assessed here. The

TABLE 1-1
Jordan River Basin Subcases

<i>Cooperation Subcases (Dates)</i>	
Johnston Mission (1953–1955)	Ch. 2
Criddle Mission (1963–1970s)	Ch. 3
Maqarin Dam (1970s)	Ch. 4
Yarmouk Forum Initiation (1979)	Ch. 4
Sandbar Cleaning (1985)	Ch. 4
Bani Hani-Vardi-Rosenthal Regime (1988–1994)	Ch. 4
Unity Dam (Late 1980s)	Ch. 4
West Bank and Gaza (1967–1993)	Ch. 5
West Bank and Gaza (1993–present)	Ch. 6
Jordan-Israel Treaty (1994–present)	Ch. 6
Multilateral Water Working Group (1992–present)	Ch. 6
Unity Dam (Mid 2000s)	Ch. 6
<i>Acute Conflict Subcases (Dates)</i>	
Demilitarized Zone/Hula wetlands (1951)	Ch. 2
Demilitarized Zone/B'not Yacov (1953)	Ch. 2
Upper Jordan Arab Diversion (1965–1966)	Ch. 3
Israeli Bombing of East Ghor Canal (1968–1970)	Ch. 4
Jordan and/or Israel Water-Scarcity-Related Mobilization of Troops on the Yarmouk's Banks (1979, 1986, and 1987)	Ch. 4

plan provides important rules, but the experience highlights to the riparians the limits of public, formal, multilateral water cooperation. It also emphasizes the limits of the United States as a third party facilitator. Chapter 3 traces the readjustment of US policy on water in the region led by the National Security Council and Washington's secret efforts to promote tactical functional cooperation between Israel and Jordan. In other words, the United States was now promoting bilateral, secret cooperation that would follow an informal arrangement. This chapter also examines the events preceding the 1967 Arab-Israeli War and analyzes how water played an intermediate, but not precipitating or long-term role in the advent of war. In other words, the 1967 War was not a water war. By the 1970s, as discussed in chapter 4, the United States, Israel, and Jordan again were attempting to develop a tactical functional cooperative arrangement by linking the water issue to other matters while improving on the already established secret political relationship between the two states. This work examines the failure of the negotiations regarding the Maqarin and Unity dams and the success of the fifteen-year secret Israel-Jordan arrangement on sharing the Yarmouk River water. Also assessed are Israel's bombing of Jordan's canal system in the late 1960s and the water-scarcity-related mobilization of Israeli and Jordanian forces on the banks of Yarmouk, no less than five times between 1979 and

1986. In the end, this chapter explains how the secret water regime developed and why secret, bilateral diplomacy, with the United States as a third party facilitator, was successful.

Chapter 5 looks at the politics of shared West Bank and Gaza water resources between Israel and the Palestinians. In contrast to the other sub-cases, this example shows no effective potential for reciprocity between Israel and the Palestinians not only because of power asymmetry, but because Israel had physical control over Palestinian areas. This chapter analyzes how the preferences of Israel's two dominant political parties, Labor and Likud, impacted Israel's West Bank and Gaza water policy. It illustrates the important point that, without reciprocity, cooperative efforts are limited. It also debunks the myth that Israel cannot redeploy from the West Bank because of its concern for its water security. Chapter 6 examines the 1990s Madrid Peace Process and the events that followed. By studying the Jordan-Israel treaty, Palestinian-Israeli interim agreement, and the multilateral talks, this work analyzes the past and present value of US-facilitated tactical functional cooperation. It also examines why cooperation has not occurred between Israel and Syria. Chapter 7 summarizes the causes of cooperation and conflict in protracted conflict. The case study provides strong evidence that supports the arguments. Finally, this work proposes policy recommendations that may be culled from this research and used for future international relations regarding water problems.

This study's major finding is that while tactical functional cooperation alone will not end a protracted conflict, it may play an important role in conflict mitigation and confidence-building, both of which have conflict resolution value. As a result, it is worthwhile for policymakers to promote water cooperation initiatives and domestic institution building, even if the states are in a protracted conflict.