Iraq’s Constitutional Mandate to Justly Distribute Water: The Implications of Federalism, Islam, International Law and Human Rights

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Abstract

With the impending water crisis in Iraq as a backdrop, this article examines the implications of Iraq’s constitutional mandate to ensure the “just distribution” of water. In 2005, Iraq adopted a new Constitution with a federal structure that was intended to balance power between its Shia, Sunni and Kurdish communities. Water is a unique case study for understanding Iraq’s federal structure because under the Constitution, power over water is shared between Iraq’s federal and regional governments, but not with governorates not incorporated into regions. Because water is not equally distributed across Iraq, jurisdictional disputes over this increasingly scarce resource could exacerbate the fragile ethnic-sectarian tensions that had led Iraq to adopt a federal system of government in the first place. This article suggests that such conflicts could be mitigated by Iraq’s constitutional mandate to ensure the “just distribution” of water. Islamic law and international law, both of which are referenced in Iraq’s constitution, offer guidance on how the “just distribution” obligation should be interpreted. This article concludes that Iraq should develop a domestic policy that embraces the principles of “equitable and reasonable utilization” in international transboundary water law. Drawing on Islamic and human rights law, Iraq should also interpret its “just distribution” requirement as incorporating a human right to water.
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I. Introduction

On June 18, 2010, a man in the city of Abu Ghraib, Iraq, notorious for its prison, was killed. According to the U.N. humanitarian news service, “[t]he motive was not sectarian, political or even economic - but water-related.”¹ The man worked for the government irrigation department and supervised the allocation of government water to farmlands in and around Abu Ghraib. He was the third irrigation worker in three months to be killed in that city.²

This event highlights the growing conflict over water in Iraq. The world has focused on oil and gas as being Iraq’s most precious natural resources and thus, the greatest source of tensions between Iraq’s varied ethnic and sectarian communities. However, water will likely be the natural resource of greatest importance in the long run for the peoples of Iraq.³ Water is increasingly scarce, but unlike oil and gas, no substitute exists.

Iraq’s constitution, which was adopted in 2005, requires that the federal and regional governments ensure the “just distribution” of water in Iraq. Fulfilling this mandate will be

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² Id.

³ Brendan O’Leary, Federalizing Natural Resources, in IRAQ: PREVENTING A NEW GENERATION OF CONFLICT 189-201, 191 (David M. Malone et al. eds., 2007); Robert Worth, Once a Breadbasket, Now a Barren Land; Drought Strikes Region Covering Syria and Iraq, Bringing Deep Poverty, THE INTERNATIONAL HERALD TRIBUNE, October 14, 2010, at 1 (“Iraq, devastated by war, is now facing a water crisis that may be unprecedented in its history.”).
challenging because Iraq is considered “one of the world’s most water-stressed countries.”

In Baghdad, Iraq’s most populous city, 25% of the population remains disconnected from the water supply network; residents are forced to rely on expensive and unreliable alternative sources of drinking water. Outside of Baghdad, more than 30% of the population does not have access to potable water service delivery, and in rural areas, this figure rises to over 50%. Many Iraqis spend one-third of their income on purchasing potable water.

With the impending water crisis in Iraq as a backdrop, this article examines the implications of Iraq’s constitutional mandate to justly distribute water. With the passage of the Iraqi constitution in 2005, the legal framework for water management in Iraq is in the midst of an evolution. Power over internal water resources is shared between the federal and regional


5 Iraq: A Project to Address the Shortage in Potable Water Supply, WORLD BANK (February 2010), http://go.worldbank.org/B6ALZWAKM0 (last visited Jan 2, 2010).


7 INTERNATIONAL COMMITTEE OF THE RED CROSS, IRAQ: NO LET-UP IN THE HUMANITARIAN CRISIS 10 (2008), http://www.icrc.org/eng/assets/files/other/icrc-iraq-report-0308-eng.pdf (last visited Jan 2, 2011) (“The estimated average monthly salary in Iraq is now around 150 US dollars. As the cost of drinking water is roughly one dollar for 10 litres, each family has to spend at least US$ 50 per month on water alone.”).
governments, but not with the governorates that are not incorporated into regions. This division of power makes water governance a unique case study for understanding Iraq’s federated structure. Because water is not equally distributed across the country, tensions over access to water could exacerbate the fragile ethnic-sectarian relationships that Iraq’s system of federalism was designed to accommodate.

This article suggests that federalism disputes, which are overlaid with ethnic and sectarian tensions, could be mitigated by Iraq’s constitutional mandate to ensure the “just distribution” of water. Islamic law and international law, both of which are referenced in Iraq’s constitution, offer guidance on how the “just distribution” obligation should be interpreted. Under this mandate, Iraq must equitably allocate water across the country, and thus, across its diverse ethnic and religious communities. As Iraq looks to draft policies that ensure the fair allocation of water across the country and between different sectors, it should create a joint federal-regional commission that draws upon the principles of “equitable and reasonable utilization” in international transboundary water law. Under both traditional Islamic law and international human rights law, Iraq should also interpret its “just distribution” requirement as incorporating a human right to water. Thus, Iraq must ensure not only that sufficient water is allocated for consumption and household purposes, but also that the water is potable, affordable and accessible to even the most marginalized individuals. In short, Iraq may be able to reduce tensions over water by giving due weight to its constitutional requirement to ensure the “just distribution” of water.

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II. Iraq’s Water Challenges

Iraq derives the majority of its surface water from the Tigris and Euphrates Rivers, which join to form the Shatt al Arab before emptying into the Persian Gulf. Historically, these rivers gave Iraq access to plentiful water resources, enabling the region to develop a strong system of irrigated agriculture. However, “[t]he Tigris and the Euphrates Rivers, once the source of prosperity for ancient Mesopotamia, have fallen to less than a third of their normal capacity, and at this rate, could dry up by 2040.” Iraq also has a limited amount of ground water, but that these sources are rapidly deteriorating because withdrawals far exceed natural recharge rates.

The decrease in Iraq’s water supply is largely the result of upstream activities by Iraq’s neighbors. In the 1980s, Turkey undertook a $32 billion dam-building project known as the

9 MOSTAFA DOLATYAR & TIM S. GRAY, WATER POLITICS IN THE MIDDLE EAST: A CONTEXT FOR CONFLICT OR COOPERATION? 124-125 (2000). But see Zoran Stevanovic & Adrian Iurkiewicz, Groundwater Management in Northern Iraq, 17 HYDROGEOLOGY JOURNAL 367, 367 (2009) (“Although Iraq in its central part, the historical region of Mesopotamia, is well-known for rich river-water reserves (where the first world irrigation systems were introduced), other areas are not so rich in surface-water resources such as the Lower Zagros foothills in the Kurdistan region of northern Iraq.”).

10 UNESCO, supra note 6; Gabriel Eckstein, Water Scarcity, Conflict, and Security in a Climate Change World: Challenges & Opportunities for International Law and Policy, 27 WIS. INT’L L.J. 409, 416 (2009) (Scientists expect that by the end of the century, the annual mean discharge in the Euphrates river basin will decrease by 38%).


12 DOLATYAR AND GRAY, supra note 9 at 135 (“Although until the mid-1970s no international conflict had ever arisen over water usage in the Euphrates-Tigris basin, the water resource situation began to change when, in the 1960s, both Turkey and Syria started to draw up plans for large-scale exploitation of the Euphrates and, to a lesser extent, the Tigris.”); Frederick Michael Lorenz, Strategic Water for Iraq: The Need for Planning and Action, 24 AM.
Southeastern Anatolia Project or “GAP,” an acronym for its Turkish name, in order to promote economic and agricultural development in the southeastern, majority Kurdish region of the country. As part of GAP, Turkey constructed a series of 22 dams and 19 power plants along the Euphrates and Tigris rivers to maximize surface and groundwater resources in the river basins. Under Saddam Hussein, Iraq became by isolated by its belligerence and was unable to stop its upstream neighbors from damming and diverting water. In 1980, a Joint Technical Committee for Regional Waters was established between Iraq, Syria and Turkey. The committee has had meetings intermittently since its inception, but the process has not reaped

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16 DOLATYAR AND GRAY, *supra* note 9 at 140.
significant results for Iraq. In addition, the flow of water to the Shatt al Arab in southern Iraq has been reduced by upstream activities in Iran. For example, in 2009, Iran cut the flow entirely from the Karun River, which meets the Shatt al Arab south of Basra, for 10 months; when the flow was resumed, it was at a fraction of earlier levels.

In the 1970s, Iraq was at the top of the Arab world’s development index. However, the country’s water infrastructure became severely degraded during the eight year Iran-Iraq war in the 1980s, the Gulf War in 1990-1991 and the resulting economic sanctions of the 1990s.  

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17 Dogan Altinbilek, Development and Management of the Euphrates–Tigris basin, 20 INTERNATIONAL JOURNAL OF WATER RESOURCES DEVELOPMENT 15 (2004) (noting that although no agreement was reached with Turkey, “an agreement between Syria and Iraq was reached in 1990 on the use of Euphrates waters, stating that Iraq would receive 58% of the waters flowing in the Euphrates on the Turkish-Syrian border; Syria's share is fixed at 42”).

18 Myers, supra note 15.


Attacks on electric grids also severely impaired the effectiveness of water and sanitation treatment facilities that rely on electricity.\textsuperscript{21} For example, in 1995, approximately half of all sewage produced by Baghdad’s four million residents was discharged untreated into the Tigris River, which is the principal source of drinking water for densely populated governorates in southern Iraq.\textsuperscript{22} Prior to the Gulf War, almost all urban residents and 72 percent of rural dwellers had access to clean water,\textsuperscript{23} with a daily per capita provision of drinking water of about 330 liters per day.\textsuperscript{24} By 2000, the water production in Baghdad was estimated at 150 per person and in rural areas, it was estimated at 65 liters per person. However, given that an estimated 50\% of water was lost during distribution, the amount of water individuals actually had access to

\textsuperscript{21} Eric Hoskins, \textit{Public Health and the Persian Gulf War, in War and Public Health} 263 (Barry S. Levy & Victor W. Sidel eds., 1997). (“The lack of electricity resulted in a total paralysis of the water purification and supply networks.”); Richard McCutcheon, \textit{Rethinking the War against Iraq}, \textit{Anthropologica} \textbf{11-28} (2006); STARR, \textit{supra} note 12 at 145 (noting that during Desert Storm, “[c]hlorine sources and aluminum sulfate factories were hit by allied bombing, along with electrical power and fuel plants, with the result that five hundred sites in Baghdad were left ankle-deep in sewage”).

\textsuperscript{22} Hoskins, \textit{supra} note 21 at 264-265.

\textsuperscript{23} \textit{Id.} at 263.

was far lower. Moreover, the poor water quality meant that some Iraqis had virtually no access to clean, potable water.25

Iraq still does not have adequate water treatment facilities. In many places, raw sewage is discharged directly into the Tigris and Euphrates Rivers.26 In 2010, less than 8% of homes outside of Baghdad were connected to a sewage system.27 In 2008, only 17% of sewage in Iraq was treated.28 The remaining 83% of untreated sewage was dumped back into neighborhoods and ultimately the very waterways that are meant to provide clean water to the population.29 The unsanitary conditions pose serious public health threats. For example, in 2007, more than 30,000 fell ill from acute diarrhea, of which approximately 4,500 were confirmed cases of cholera.30

25 Sen, supra note 24; STARR, supra note 12 at 145. (“During Desert Storm, . . . half of the country’s citizens had been exposed to drinking water contaminated by the waste of combat. For the first time in Iraqi history, waterborne diseases reached epidemic proportions, with hepatitis alone up one hundredfold.”).
26 UNESCO, supra note 6 (“Only 17% of sewage in Iraq is treated. The rest, along with effluent from farming and industry, is discharged into rivers and waterways which have become increasingly polluted and saline.”); World Bank, supra note 5 (noting that outside of Baghdad, less than 8% of the population is connected to sewerage systems); Associated Press, Iraq Suffers from Dirty Water, USA TODAY, August 1, 2008, http://www.usatoday.com/news/world/iraq/2008-08-01-Iraq-water_N.htm (last visited Jan 2, 2011).
27 World Bank, supra note 5.
28 Ban Dhayi, IRAQ'S WATER AND SANITATION CRISIS ADDS TO DANGERS FACED BY CHILDREN AND FAMILIES, UNICEF (2008), http://www.unicef.org/wash/iraq_43232.html (last visited Oct 26, 2010). (noting that the amount of untreated water from Baghdad alone is enough to fill 370 Olympic swimming pools every day).
29 Id.
Diarrhea as a result of contaminated water and poor hygiene is one of the two main causes of death of children in Iraq.\footnote{Environmental News Service, \textit{IRAQ'S DRINKING WATER DRYING UP, SEWAGE POLLUTES SHRINKING RIVERS} (2010), http://www.ens-newswire.com/ens/may2010/2010-05-14-01.html (last visited Jul 8, 2010).}

In addition to sewage, agricultural and industrial runoff also flows into Iraq’s waterways. Some of this wastewater is assumed to be coming in from neighboring countries. For example, a study from the University of Basra’s Marine Science Center found traces of heavy metals and other pollutants flowing into the rivers from an Iranian oil refinery, which regularly discharges wastewater into a tributary of the Tigris River.\footnote{Myers, \textit{supra} note 15.}

By some estimates, it will take $15 billion to restore Iraq’s water system.\footnote{Lorenz, \textit{supra} note 12 at 288-289.} After the fall of Saddam Hussein, the U.S., the U.N., the World Bank and other agencies began funding numerous water and sanitation projects.\footnote{See, e.g., UNDP Iraq, \textit{Clean Water for a Healthy Life, FOOTPRINT, 2010}, at 18 http://www.iq.undp.org/UploadedFiles/Sections/435a3047-21d9-4ed5-aac7-f8fd4cbb7166.pdf (last visited Jan 2, 2011) (“In November 2005 UNDP initiated a project to restore the Karama Water Treatment Plant (WTP) and increase production, thus restoring safe potable water supply to an approximately one million inhabitants of the Karkh area of Baghdad, specifically Kadhimya and a few quarters in Rasafa.”); UNESCO, \textit{supra} note 6 (describing how UNESCO is helping to restore traditional aqueduct systems, called karez, in Northern Iraq to improve access to clean water because many rural Iraqi households still depend on the traditional aqueducts for drinking water and growing crops); World Bank, \textit{supra} note 5 (“In December 2004, the World Bank approved the Iraq Trust Fund (ITF)-financed Emergency Water Supply, Sanitation and Urban Reconstruction Project (total grant amount of $110 million). The project aims to upgrade and rehabilitate basic water supply and sanitation services in eight cities (Karbala, Al Majar, Beiji, Kena’an, Al Hussainia, Al Samawa, Badawa and Arbil), and conduct urban reconstruction in the poorest areas of the two cities (Badawa and Basra), choosing subprojects that will have high impact.”); Martin
water resources and sanitation, seeing the provision of these services as integral to its counter-insurgency and post-war reconstruction strategies, especially in embattled cities like Falluja and Sadr City. However, between 2004 and 2005, the U.S. cut $2.2 billion from the water sector. The reduced funding for water projects reflected the U.S. government’s response to the changing conditions in Iraq, namely the increasingly violent security situation. According to a report from UNICEF, between 2005 and 2008, over 600 workers from the Ministry of Municipalities

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36 **BOWEN AND SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION, supra** note 35 at 187 (noting that of the $2.13 billion that was spent on water projects, approximately $1.5 billion went to clean drinking projects. The U.S. spent the remaining $630 million on building sewerage systems, improving irrigation, and repairing the 149-mile Sweetwater Canal in southern Iraq, which provided fresh water to Basrah).

37 *Id.* at 167 - 168 (describing how the U.S. reappropriated $1.94 billion away from the water sector, and then by December 2004, reprogrammed another $457 million, mostly from water treatment, waste management and irrigation projects. According to the Special Inspector of Iraq, when the Minister of Municipal and Public Works, Nesreen Berwari, heard the news of the additional cuts, she told U.S. Ambassador Taylor that “she never wanted to see him in her office again.” According to Taylor, “‘[s]he said it with a little bit of a smile, but not much.’”).
and Public Works were killed while attempting to repair water networks. Their deaths critically damaged the sector and cut off entire communities from essential services.\(^{38}\)

Problems persist with Iraq’s water and sanitation infrastructure as a result of poor planning, fraud, insufficient and incomplete equipment, as well as a lack of chemicals, qualified personnel and training.\(^{39}\) For example, the U.S. spent six years and $104 million on a sewage treatment plant in Falluja that will only serve about one-sixth of the population and that is expected to emit a foul odor even after it is completed.\(^{40}\) Originally, the project was expected to cost $32.5 million, be completed in 18 months and be able to serve all of Falluja’s 200,000 residents, as well as handle a 50% increase in the city’s growth.\(^{41}\) Now, the sewage treatment system may not even meet its scaled back goals because the city lacks a reliable supply of electricity and skilled personnel who can operate the mechanical system.\(^{42}\) As a result, most of

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\(^{38}\) Dhayi, supra note 28.


\(^{40}\) Williams, supra note 35 (reporting in 2010 that “the new, diminished system will serve only 4,300 homes, or about one-sixth of Falluja’s population, according to American and Iraqi officials”). Compare Office of the Special Inspector General for Iraq Reconstruction, Falluja Waste Water Treatment System, Falluja, Iraq i (2008), http://www.sigir.mil/files/assessments/PA-08-144-to-148.pdf (last visited Jan 2, 2011) (estimating in 2008 that the project would cost $98 million and serve “9,300 homes or 38% of the homes originally planned”).

\(^{41}\) Office of the Special Inspector General for Iraq Reconstruction, supra note 35 at i; Williams, supra note 35.

\(^{42}\) Office of the Special Inspector General for Iraq Reconstruction, supra note 35 at iv-v; Williams, supra note 35.
Falluja’s residents still depend upon septic tanks that leak raw waste into streets and storms drains that lead to the Euphrates River, the primary source of drinking water.\textsuperscript{43} Climate change, unchecked pollution and salinity present additional threats.\textsuperscript{44} Recent droughts across most of Iraq have exacerbated water scarcity.\textsuperscript{45} From 2007 to 2009, rainfall was 70 percent lower than usual in most of Iraq’s 18 governorates.\textsuperscript{46} As of 2009, approximately 100,000 have been displaced by drought.\textsuperscript{47} Although the Kurdistan region has recently been suffering from drought-like conditions,\textsuperscript{48} it also experienced heavy rains and flooding in 2007 and 2008.\textsuperscript{49} Moreover, in much of Iraq, salinity has increased, rendering the water more difficult to treat for consumption, agriculture and industrial purposes.\textsuperscript{50} As a result of the reduced water flow, salt water has pushed further up the Shatt al-Arab, ravaging fresh-

\textsuperscript{43} Williams, \textit{supra} note 35.


\textsuperscript{46} Chulov, \textit{supra} note 34 at 35.

\textsuperscript{47} Worth, \textit{supra} note 3.


water fisheries, livestock, crops and date palm groves. In addition to debilitating agricultural and industrial production, high water salinity inhibits the functioning of water treatment plants and therefore the capacity of the state to provide adequate clean water. The reduced volume of water has also negatively impacted hydropower production. Moreover, in southern Iraq, the local ecosystem and natural flow of water was disrupted when Saddam Hussein drained the Mesopotamian marshes in the early 1990s, displacing tens of thousands of Marsh Arabs.

As U.S. Secretary of State Hillary Clinton has observed, Iraq’s political stability depends in part on its ability to provide its people with water: “A lack of water, sanitation, and irrigation we know leads to economic decline, and even can lead to unrest and instability.”

To effectively provide water for its population and for economic development, Iraq must ensure that

51 Myers, supra note 15 (“Withered by decades of dictatorial mismanagement and then neglect, by drought and the thirst of Iraq’s neighbors, the river formed by the convergence of the Tigris and the Euphrates no longer has the strength to keep the sea at bay.”)

52 Chulov, supra note 34 at 37 (noting that there was not enough moving water on the Euphrates to power a turbine in Nasiriyah)


its increasingly scarce water resources are managed and allocated appropriately, and that it has
the infrastructure required to treat and deliver clean water. However, because water is not
equally distributed throughout Iraq, control over water could exacerbate ethnic and sectarian
tensions across the country. The next section examines how the division of water governance
power across Iraq’s federated structure has the potential to create conflicts over access to water.

III. Iraq’s Federal Structure

The current constitutional division of power over water across Iraq’s federated structure
could aggravate the ethnic and sectarian tensions in the country. Federalism is a form of
government whereby political authority is divided between national government and sub-national
units, where each has some exclusive or residual power, neither level is entirely subordinate to
the other, and where each enjoys a direct relationship with the people.\textsuperscript{55} Federalism was one of

\textsuperscript{55} See Public International Law & Policy Group & The Century Foundation, Establishing a Stable Democratic
multi-tiered governments that involve a combination of shared-rule through central government institutions for some
purposes and regional self-rule through the governments of constituent units for others within a single political
system so that neither is subordinate to the other.”); Peter Schuck, Federalism, 38 CASE W. RES. J. INT’L L. 5, 5
(2006) (defining federalism as “a system that divides political authority between a nation-state and sub-national
polities within its territory so that both the national and sub-national polities directly govern individuals within their
jurisdiction, and that confers both national and sub-national citizeships”); THOMAS O. HUEGLIN & ALAN FENNA,
COMPARATIVE FEDERALISM: A SYSTEMATIC INQUIRY 32-33, 37 (2006) (noting that federalism constructs “political
systems in which a balance is maintained between different forms of identity, individual, local, regional, national
and increasingly, transnational”).
the most controversial issues at the time that Iraq’s constitution was being drafted. The Iraqi federalism negotiations fundamentally revolved around balancing the power between the federal authorities in Baghdad and the Kurdish regional government, which had been the *de facto* government in Kurdistan since the end of the Gulf War in 1991. It sought greater autonomy, if not independence, from Baghdad. During the constitutional negotiations, “[t]he strongest disagreements concerned the status and evolution of Iraqi federalism, and, in particular, the creation of new federal regions outside of Iraqi Kurdistan.”

Iraq’s final constitution recognized 18 governorates and one region, Kurdistan, which comprised three of those governorates and limited areas of other governorates. In this respect, Iraq embraced an asymmetrical form of consociational federalism. Consociationalism refers to a power-sharing arrangement that is based on a group affinity, such as ethnicity and religion.

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58 See Public International Law & Policy Group and The Century Foundation, *supra* note 55 at 76.

59 Feldman and Martinez, *supra* note 56 at 898.

60 See Public International Law & Policy Group and The Century Foundation, *supra* note 55 at 72 (noting that under Saddam Hussein’s regime, Iraq was divided into eighteen administrative units); Ashley S. Deeks & Michael D. Burton, *Iraq’s Constitution: A Drafting History*, 40 CORNELL INT’L L. J. 1, n.6 (2007). (“Iraq is divided into eighteen governorates, and currently has one region, governed by the Kurdistan Regional Government (“KRG”), which encompasses three governorates (Arbil, Sulaimaniya, and Dohuk) and certain more limited areas within other governorates.”).

Asymmetric refers to the fact that the governments at the federal, regional and governorate level each have a distinct amount of power. If certain conditions are met, Iraq’s governorates can join together to form regions. This “phased and asymmetric approach to the assumption of powers by sub-federal governments” has been lauded as providing governorates with the “crucial time to build capacity and infrastructure.” It also avoided the hard partitioning of the country into Shia, Sunni and Kurdish regions, and allowed for a more liberal, locally-driven form of consociational federalism.

In Iraq, federalism was perceived as a way “to reduce centrifugal forces by providing an avenue for diverse ethnic, religious, and geographic groups to participate in the regional and national government, and thereby hopefully reduce the grievances that [gave] rise to their desire

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62 See Public International Law & Policy Group and The Century Foundation, supra note 55 at 75-76 (noting that Iraq’s treatment of Kurdistan would not be unique because Belgium, Canada, Malaysia, India, Spain, and Russia also provide for asymmetric powers to certain sub-national constituent units); Nicole Herther-Spiro, Can Ethnic Federalism Prevent “Recourse to Rebellion?” A Comparative Analysis of the Ethiopian and Iraqi Constitutional Structures, 21 EMORY INT’L L. REV. 321, 331 (2007) (noting that “ethnic federal structures are usually asymmetrical in nature, affording each group different rights and privileges”).

63 Williams and Simpson, supra note 57 at 224-225 (describing constitutional provisions for how governorates may reorganize into regions and the Law on Formation of Regions passed in 2006).

64 Id. at 234.

65 McGarry and O’Leary, supra note 61 at 686-687 (“Iraq’s Constitution actually eschews both the one-size-fits-all preference of the integrationists and the inclination of the three-regions advocates, in favor of a bespoke, flexible, or voluntarily asymmetrical federation tailored to whatever (legitimate) preferences exist, or come to exist, among Iraq’s democratic constituencies. In this respect, the Constitution takes a liberal consociational approach that is focused on democratic preferences rather than on predetermined ethnic or communal categories.”).
to separate from the state."66 Yet, disputes over control of Iraq’s natural resources have tugged at those centrifugal forces, fueling tensions that the federal structure was designed to accommodate.67 The constitutional negotiations over Iraq’s vast oil and gas reserves were particularly contentious because the reserves are not evenly distributed across the country.68 As a result, a push for greater regional control over natural resources was perceived as a power-grab for Kurdistan. In addition, given that Shia Arabs were expected to dominate the federal government, greater national control was seen as giving greater authority to that previously deprived sect.

66 Public International Law & Policy Group and The Century Foundation, supra note 55 at 69; See also Peter Schuck, Citizenship in Federal Systems, 48 AM. J. COMP. L. 195, 211 (2000) (identifying four ways that federations originate, including creating sub-national units that “correspond to pre-existing cultural or political entities”); Henry Steiner, The Rights of Ethnic Minorities, 66 NOTRE DAME L. REV. 1539, 1545-1547 (1991) (noting that enabling ethnic minorities to seek autonomy is an ideal embodied in several important human rights instruments); Donald Horowitz, The Many Uses of Federalism, 55 DRAKE L. REV. 953, 962-963 (2007) (identifying eight ways that federal institutions can affect ethnic conflict).

67 See Schuck, supra note 55 at 9-10 (identifying categories of power that can be devolved, including control over physical resources); Public International Law & Policy Group and The Century Foundation, supra note 55 at 70-71 (noting that control over natural resources are usually among the “minimal powers” usually allocated to the sub-units, but that powers concerning the environment are generally shared).

The constitutional negotiations over Iraq’s water have received less attention than those of oil and gas. But as the Kurdistan Regional Government’s President, Massoud Barzani, recently stated in an interview, “water is now more important than oil.” With the growing scarcity of fresh water in Iraq, the relationship between water governance and federalism, and the potential for these divisions of power to create jurisdictional conflict deserve scrutiny.

Iraq’s constitution gives the federal government exclusive authority over sources of water outside Iraq, but grants the federal and regional governments concurrent authority over sources of water inside Iraq. Article 110 of Iraq’s Constitution states:

The federal government shall have exclusive authorities in the following matters: . . .

Eighth: Planning policies relating to water sources from outside Iraq and guaranteeing the rate of water flow to Iraq and its just distribution inside Iraq in accordance with international laws and conventions.

[Kurdistan Regional Government Press Releases, President Barzani Praises Turkey’s Efforts to Engage with Kurds, http://www.krg.org/articles/detail.asp?rnr=223&lngnr=12&smap=02010100&anr=32016 (last visited Jan 2, 2011)] (In an interview to CNN Turk television on Oct. 15, 2009, President Masoud Barzani said that “The Kurdistan Region is very rich in oil resources. We should take mutual benefit from this and it will no doubt provide a strong basis for our relations. Turkey is very rich in water resources and water is now more important than oil.”)

[IRAQI CONSTITUTION, supra note 8.]

[Deeks and Michael D. Burton, supra note 60 at 59-60 (noting that the final language of Article 110, governing the federal government’s exclusive authorities, reflected a broader formulation than originally proposed. The July 22, 2005 draft only gave the federal government power to “‘[o]versee the exploitation of the main water resources and regulate irrigation and dams . . . whose waters flow into the Tigris and Euphrates.’ But, by August 17, the federal government had the more general authority to formulate the ‘policy of water resources’ and guarantee its ‘fair distribution.’” The August 22 draft bolstered the federal exclusive authorities and included the language regarding control over external sources that was codified in Article 110.).]
Article 114 of Iraq’s Constitution states that:

The following competencies shall be shared between the federal authorities and regional authorities:


Seventh: To formulate and regulate the internal water resources policy in a way that guarantees their just distribution, and this shall be regulated by a law.

In contrast to the regions, the governorates do not have guaranteed constitutional authority over any aspect of internal water resources policy under the most straightforward interpretation of the Iraqi constitution unless the federal government devolves it to them in accordance with Article 123.72

Kurdistan is currently the only region in Iraq, and thus, the only sub-federal entity that has power to determine internal water policy under Article 114. Kurdistan is rich in water resources, as compared to the rest of Iraq.73 Cities in Kurdistan rely on surface water from rivers, reservoirs and groundwater. Rural areas of this region rely predominantly on groundwater, using a traditional system of wells and aqueducts known as karez.74 Major tributaries to the Tigris River run through Kurdistan, giving it great control over the water supply in many downstream

72 Article 123 states that “Powers exercised by the federal government can be delegated to the governorates or vice versa, with the consent of both governments, and this shall be regulated by law.” IRAQ CONSTITUTION, supra note 8. See also USAID, IRAQ LOCAL GOVERNANCE PROGRAM, LAW OF GOVERNORATES NOT INCORPORATED INTO A REGION: AN ANNOTATED TEXT 16 (2008), http://pdf.usaid.gov/pdf_docs/PNADN071.pdf (last visited Jan 2, 2011) (“By agreement between a central ministry and a region/governorate, power and authority may be transferred in either direction.”).

73 Voices of Iraq, supra note 49 (“Iraq's Kurdistan region, which includes Sulaimaniyah, Duhuk and Arbil, receives more rain compared to other parts of Iraq, due to its topography rich in mountains.”) See also Lorenz, supra note 12 at 289-291.

74 Stevanovic and Iurkiewicz, supra note 9 at 371.
areas, including Baghdad, that rely on surface water for drinking and sanitation.\textsuperscript{75} Moreover, two of Iraq’s largest hydroelectric power plants, the Dokan and Darbandikhan, are located in the Kurdish governorates in the north.\textsuperscript{76} The country’s largest and the Middle East’s fourth-largest dam, the 320-megawatt Mosul Dam, is located just outside of the Kurdish region, in Mosul, the capital of the contested Ninawa governorate.\textsuperscript{77} The Mosul Dam is currently under the joint control of the Kurdish Democratic Party and the Patriotic Union of Kurdistan. According to one commentator, the dam represents “a valuable prize in the Kurds’ ongoing struggle with Baghdad for increased autonomy.”\textsuperscript{78} Another has observed that “[t]he Kurds in northern Iraq have long recognized the importance of controlling their own water resources. It is no accident that an influential Kurd, Latif Rashid, was appointed to lead the newly formed Ministry of Water Resources in Baghdad soon after the U.S. led invasion in 2003.”\textsuperscript{79} If Kurdistan expands regional irrigation or builds new dams, the already delicate water situation in the south of Iraq could be exacerbated.\textsuperscript{80}

During the constitutional negotiations, the Kurds ensured that the Constitution would enshrine their autonomy over their water resources. According to Ashley Deeks and Matthew

\begin{footnotesize}
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\textsuperscript{76} Daly, \textit{supra} note 20.
\textsuperscript{77} Id.
\textsuperscript{78} Id.
\textsuperscript{79} Lorenz, \textit{supra} note 12 at 290.
\textsuperscript{80} Id. at 290.
\end{tabular}
\end{footnotesize}
Burton, who were the Legal Adviser and Deputy Legal Adviser, respectively, at the U.S.
Embassy in Baghdad, Iraq from June until December 2005.\textsuperscript{81}

The Kurds wanted as much regional control as possible over the rivers passing through Iraqi Kurdistan. Thus, they pushed the Shia to accept an “exclusive authorities” formulation that did not include central government authority to guarantee the “just distribution” of water resources within Iraq. The Shia objected to the Kurdish position, fearing that the Kurds would divert significant amounts of water from rivers flowing through the northern part of Iraq, such as the Tigris and its tributaries, away from the central and southern parts. . . . With the inclusion of “just distribution inside Iraq” in the exclusive authority provision, the compromise reflected something of a Shia victory. Nevertheless, the final language created significantly overlapping authority between the federal government and the regions to the extent that external water sources flowing into Iraq join with water sources originating in and remaining inside Iraq, and because both provisions appear to cover the just distribution of water inside Iraq. Ultimately, as with other areas of overlapping authority, the Federal Supreme Court could be well positioned to resolve any conflicts that arose between the federal and regional governments.\textsuperscript{82}

As Deeks and Burton suggest, disputes could arise if the Kurdistan region and the federal government develop conflicting internal water policies.\textsuperscript{83} Several provisions in the constitution

\textsuperscript{81} Writing in their personal capacities, Deeks and Burton stated that their goal was to create “a drafting history of the most significant and controversial provisions of the 2005 Iraqi constitution.” Deeks and Michael D. Burton, \textit{supra} note 60 at n.1, 2.

\textsuperscript{82} \textit{Id.} at 62-63.

\textsuperscript{83} As will be discussed \textit{infra} in Section IV.C, the reference to “internal water resources policy” in Article 114 should encompass both the allocation of water and the treatment of water, each of which is regulated by different government agencies. The Ministry of Water Resources in Iraq oversees water infrastructure and irrigation projects, such as the building of dams and canals and the reclamation of land for agriculture. \textit{See} Republic of Iraq, Ministry of Water Resources, http://www.mowr.gov.iq/english/ (last visited Dec 1, 2010). The Ministry of Municipalities and Public Works is responsible for water treatment and delivery, as well as for sanitation services. \textit{See} GlobalSecurity.org, \textbf{MINISTRY OF MUNICIPALITIES AND PUBLIC WORKS},
http://www.globalsecurity.org/military/world/iraq/public_works.htm (last visited Dec 1, 2010). The Kurdistan
suggest that in the event of such jurisdictional disputes, regional policy would take precedent.

Article 115 states:

All powers not stipulated in the exclusive powers of the federal government belong to the authorities of the regions and governorates that are not organized in a region. With regard to other powers shared between the federal government and the regional government, priority shall be given to the law of the regions and governorates not organized in a region in case of dispute.  

The “shared competency” phrase and the word “policy” in Article 114 could be interpreted as requiring the federal and regional governments to develop one joint policy on internal water resources. Such an interpretation, however, seems at odd with the constitutional drafting history. The language of Article 115, which gives regional law priority over federal law, anticipates jurisdictional conflict. Moreover, Article 121 of Iraq’s constitution states that “[i]n case of a contradiction between regional and national legislation in respect to a matter outside the exclusive authorities of the federal government, then regional power shall have the right to


84 The language of Article 115 could suggest that the regions and governorates have exclusive authority over powers not explicitly stated in Article 110. However, according to U.S. embassy lawyers involved in the constitutional negotiations, “despite all of the discussion of federalism during the negotiations, the parties never proposed exclusive areas of regional or governorate authority. This fact is not surprising in light of the unitary, centrally-organized system that defined Iraq’s political structure for generations. The result is that there are no provisions--other than perhaps the ambiguous and conflicting language of Article 115--that prohibit federal legislation in any particular substantive area.” Deeks and Michael D. Burton, supra note 60 at 71.
amend the application of the national legislation within that region.”  

85 A more likely interpretation is that under Article 114, the federal and regional governments exercise concurrent, but independent, powers.

In contrast to the regions, Iraq’s governorates do not have any guaranteed constitutional power over water policy under Article 114. Article 114 begins by stating that “[t]he following competencies shall be shared between the federal authorities and regional authorities.” It then lists seven enumerated concurrent powers. Of these seven, four (customs management, environmental regulation, health policy, and educational policy) declare that the powers must be exercised in consultation, in coordination or in cooperation with the governorates.  

86 The exclusive powers of the Iraqi federal government are outlined in Article 110. These include foreign policy and diplomacy; national security; fiscal and customs policy; regulating standards, weights and measures; creating the investment and general budget for the nation; general population statistics and census; and planning policies relating to water sources from outside Iraq.

86 According to Deeks and Burton, “the drafters agreed to give governorates concurrent authority in customs management, environmental regulation, health policy, and educational policy.” Id. at 62. But a strict reading of Article 114 suggests that have governorates have less constitutional authority over the four shared competencies - customs, the environment, health, and education – than the federal government and the regions. The governorates are not mentioned in the chapeau sentence of Article 114. When they are mentioned, it is after one of these clauses: “in consultation,” “in cooperation,” or “in consultation.” Their placement in the clauses suggests that they cannot independently undertake to develop policies on those four competences. Rather, the phrasing suggests that governorates can only become involved in the development of such policies once the federal or regional government has initiated the process. As a result, the governorates arguably have less authority than the federal and regional governments. The awkward phrasing could also unintentionally suggest that in formulating customs management, environmental regulation, health policy, and educational policy, the regions and federal government should develop a uniform policy – and coordinate with the governorates in doing so.
remaining three powers – internal water policy, electricity regulation, development and general planning policies – do not mention the governorates.\textsuperscript{87}

The constitutional provisions governing the governorates’ power were influenced by several conflicting factors. The Shia Alliance initially sought a strong central government, but then late in the constitutional negotiations, pushed to expand the governorates’ power.\textsuperscript{88} Concerned that it could become even more difficult to create a region as powerful as Kurdistan in the future, “the Shia Alliance made a concerted effort to give governorates the same or similar governmental authority that the constitution gave regions.”\textsuperscript{89} However, the governorates only share some of the concurrent powers of Article 114 – and water is not one of them.

That the governorates were not provided any guaranteed authority over water or electricity may have reflected a recognition that the governorates were not yet ready to manage resources and services that had historically been managed by federal ministries based in Baghdad. “Saddam’s regime had been like a giant octopus with tentacles reaching down into every village in Iraq through a system of ministry ‘directors general.’ Through these directors general,

\textsuperscript{87} Somewhat inconsistently, Article 115 could be interpreted to suggest that the governorates do in fact have power over internal water policy. Article 115 states in part that “[a]ll powers not stipulated in the exclusive powers of the federal government belong to the authorities of the regions and governorates that are not organized in a region.” Internal water policy is not an exclusive power under Article 110; thus, Article 115 could be interpreted to suggest that the governorates have this power. However, Article 114 is clear that only the regions and federal governments have authority over internal water policy.

\textsuperscript{88} Feldman and Martinez, \textit{supra} note 56 at 914 (“By the summer of 2005, however, the battle lines on federalism had changed considerably. The official position of the Shi‘i Islamists had shifted from passive acquiescence to the status quo regarding Kurdistan to an affirmative desire to create quasi-autonomous federal regions of their own.”)

\textsuperscript{89} Deeks and Michael D. Burton, \textit{supra} note 60 at 62.
ministries controlled the disbursement of resources in each Iraqi governorate."\textsuperscript{90} Iraq’s federal ministries and directorates continue to operate today, though the structure has been evolving as a result of a trend towards decentralization that was set in motion after 2003.\textsuperscript{91}

Given the unequal distribution of water in Iraq, a hypothetical but plausible example can be used to illustrate the challenges of Iraq’s federated water governance approach.\textsuperscript{92} If the Kurds

\begin{itemize}
  \item \textsuperscript{91} See Patrick Cockburn, Iraq Embraces the Election that will Shape its Future; Crucial Test for Prime Minister Maliki and Democracy as American forces begin Withdrawal, The Independent (London), January 31, 2009, at 28; Silva-Morales, supra note 89; Law of Governorates Not Incorporated into a Region (Provincial Powers Act), Law No. 21 (2008), http://www.lgp-iraq.org/publications/index.cfm?CatId=73&domainStartNode=73&showStartNode=1 (last visited Dec 9, 2010) (providing text of the Provincial Powers Act, passed in 2008, which defines the powers of the governorates). In what should probably be understood as an express delegation of constitutional authority under Article 123 of the Iraq Constitution, the Provincial Powers Act gives the sub-governorate district level authority to “endeavor to develop agriculture and irrigation,” but does not otherwise mention water. See USAID, Iraq Local Governance Program, supra note 72 at 22 (stating that Article 9 of the PPA provides some authority to the qada’a (sub-governorate district level) to “monitor and organize the utilization of public lands within the geographic location of the qada’a and endeavor to develop agriculture and irrigation.”).
\end{itemize}
began diverting the tributaries of the Tigris River for hydropower or irrigation, they might be able to justly distribute water within Kurdistan. In doing so, Kurdistan would be treating water consistently with its own draft regional constitution, which views surface and underground water as “national resources for the region.” However, such a diversion could leave less water for downstream users in the rest of Iraq. Does a governorate further south that relies on the Tigris River have a right to contest Kurdistan’s policies under the theory that the water has not been justly distributed?

What if the diversion activities in Kurdistan conflicted with efforts by the

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92 If Iraq was divided into three regions comprised of Sunni, Shia and Kurdish states, the potential for sectarian conflict over water would also exist. Although the Shia areas have better access to oil reserves, the Sunni areas are upstream and thus, have better access to water. See Douglas R. Still, Water Scarcity as a Cause of Conflict in the Nile, Euphrates, and Jordan River Basins 12 (2006) (noting that Euphrates traces its path past Ramadi and near Falluja as it runs through the Anbar province, the Sunni region that “is Iraq’s most violent province.”); Sean Kane, Iraq’s Oil Politics: Where Agreement Might be Found, Peaceworks, U.S. Institute of Peace 8 (2010) (noting that a Shia region “would control southern Iraq’s vast oil reserves and the oil fields that generate two-thirds of Iraq’s current oil production”).

93 Kurdistan’s draft constitution, which has not yet been approved by its voters, adopts a view of water ownership that is favorable to the region. Article 17 of the Kurdish constitution states in clause two that “The natural resources, surface and underground water[,] unextracted minerals, quarries and mines are national resources for the Region. Their extraction, management and disposal are organized by law to protect the interests of current and future generations.” Michael J. Kelly, The Kurdish Regional Constitution within the Framework of the Iraqi Federal Constitution: A Struggle for Sovereignty, Oil, Ethnic Identity, and the Prospects for a Reverse Supremacy Clause, 114 Penn. St. L. Rev. 707, 777 (2010), (including full text of the draft Kurdish Constitution as an appendix) (emphasis added)

94 Under Article 93 of the Constitution, the Federal Supreme Court of Iraq has jurisdiction over “[s]ettling disputes that arise between the governments of the regions and governments of the governorates.” Iraqi Constitution, supra note 8.
federal government to justly distribute water from outside Iraq under Article 110? Would Kurdistan’s water governance policies take priority over those of the federal government under Article 115? Or, given fungible nature of water, does the federal government’s exclusive right under Article 110 to ensure the just distribution of waters from outside Iraq mean that it can preempt Kurdistan’s water policies?95

Brendan O’Leary, who served as an advisor to the Kurdistan Regional Government during the constitutional negotiations, offers an interpretation of the “apparent clash” between the “just distribution” provisions of Articles 110 and 114:

[A]ny regional government is entitled to nullify (or modify) within its region any application of the law [under Article 110] as regards “just distribution,” since the determination of “just distribution” is specified as a shared competence [under Article 114]. The relevant articles express the technical acknowledgement of Iraq’s interdependence as regards water and grant the federal government the minimum necessary planning authority, but they also express the historic distrust of Baghdad governments by Kurdistan – and ensure that the Kurdish Regional Government can veto any law that in its judgment does not match international law and conventions on “just distribution.”

. . . The relevant clauses recognize interdependence but also the hidden power and importance of Kurdistan. . . . Given the present and future importance of water resources for Iraq’s urban populations, and for agriculture, the necessary interdependence between water policy and hydroelectric power, and Saddam’s past abuse of central authority to build huge dams without any degree of local consultation or planning, these articles and subsections express a principled

95 This hypothetical concerns the allocation of water, but jurisdictional conflicts could also arise with respect to the treatment and delivery of water. For example, suppose a governorate or region upstream does not treat its sewage before the refuse enters the surface water and this causes a downstream governorate to have to spend more resources on water treatment. If the trend towards decentralization in Iraq continues, whose responsibility would it be to pay for the increased water treatment? Could the federal government adjust budget allocations to upstream or the downstream governorates accordingly? Such fiscal federalism conflicts could become an issue in Iraq.
bargain – one which ensures that regions can block misbehavior by the federal government.⁹⁶

O’Leary’s interpretation may make sense from Kurdistan’s perspective, but it could lead to the creation of conflicting policies within Iraq. The division of power over water governance illustrates how the very concept of federalism “bears an ambivalent, even paradoxical, relationship to nation building.”⁹⁷ The Kurds were the driving force behind the definition of regional power in Iraq’s constitution.⁹⁸ Having suffered brutally at the hands of Saddam Hussein and having enjoyed a degree of autonomy since 1991, they were reluctant to surrender any of that authority. Although Iraq adopted a federated system largely to accommodate Kurdish demands for increased autonomy, disputes over control of vital natural resources – like oil or water – could increase tensions. It is perhaps not surprising, then, that federalism has been described as “a strategy for conflict management and not for conflict resolution.”⁹⁹

As Iraq looks to the future, it must create an internal water resources policy as required by Article 114 of the Constitution. In doing so, Iraq should consider how to adapt its asymmetric, consociational federal structure to create an effective water governance strategy that minimize

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⁹⁶ O’Leary, supra note 3 at 193. See also Philip Hadji, The Case for Kurdish Statehood, 41 CASE W. RES. J. INT’L L. 513, 526 (2009) (suggesting that under the Iraq constitution, the KRG has the right to “control the oil and water in the region”).

⁹⁷ Schuck, supra note 55 at 8 (“The forces that prompt the creation of a federal system in the first place are the very forces that may impel disaggregation and prevent the nation, once established, from maintaining its unity and perpetuating itself.”).

⁹⁸ Deeks and Michael D. Burton, supra note 60 at 64.

disputes, which would no doubt be laced with ethnic and sectarian tensions. As will be discussed in the next section, Iraq’s constitutional mandate to ensure the “just distribution” of water could help Iraq achieve this goal.

IV. Interpreting “Just Distribution”

The prior section of this article explored Articles 110 and 114 of the Iraqi constitution from the perspective of federalism, examining how an asymmetrical, consociational division of authority could impact water governance in Iraq and create tensions over natural resources. This section now suggests that the potential for disputes over water in Iraq could be mitigated by the constitutional mandate to ensure the “just distribution” of water within the country. With respect to “water sources from outside Iraq,” Article 110 requires that the federal government guarantee “its just distribution inside Iraq” in accordance with international law.100 With respect to “internal water resources,” Article 114 requires that the federal and regional government develop a policy “that guarantees their just distribution” and states the details “shall be regulated by a law.”101 This section looks to two bodies of law to help understand the meaning of Iraq’s

100 IRAQI CONSTITUTION, supra note 8. See generally Deeks and Michael D. Burton, supra note 60 at 59-60. (“The final language of Article 110, governing the federal government’s exclusive authorities, reflected a broader formulation than originally proposed. The July 22, 2005 draft only gave the federal government power to oversee the exploitation of the main water resources and regulate irrigation and dams . . . whose waters flow into the Tigris and Euphrates.’ But, by August 17, the federal government had the more general authority to formulate the ‘policy of water resources’ and guarantee its ‘fair distribution.’” The August 22 draft bolstered the federal exclusive authorities and included the language regarding control over external sources that was codified in Article 110.”).

101 IRAQI CONSTITUTION, supra note 8.
constitutional mandate to ensure the “just distribution” of water: Islamic law and international law.

A. Islamic Law

Iraq’s constitutional drafting history suggests that the “just distribution” of water phrase is grounded in Islamic religious traditions. According to U.S. embassy lawyers involved in the constitutional drafting process, Shia leaders involved sought the “just distribution” language in Article 110 because, as explained by some of the negotiators, “a particular hadith (recorded sayings and deeds of the Prophet Mohammed) mandated that water should be accessible to all Iraqis.”

Iraq’s Constitution does not explicitly define ownership of water resources. The Transitional Administrative Law, which had served as Iraq’s interim constitution, had stated that “all natural resources are vested in the people.” In contrast, the Constitution does not contain such broad language about natural resources, a phrase that could encompass water. The only

102 Deeks and Michael D. Burton, supra note 60 at n.361.

103 Feisal Amin al-Istrabadi, Reviving Constitutionalism in Iraq: Key Provisions of the Transitional Administrative Law, 50 N.Y.L. SCH. L. REV. 269, 291-292 (2005) (describing how during the TAL negotiations, a senior drafter from the Shia block, Dr. Adnan Pachachi, wondered, “If northern regions and/or governorates controlled their oil reserves, and if the south did the same, what incentive would the central region have to cooperate in national rebuilding? He also wondered who would control the water. Could upstream governorates claim they had ‘ownership’ of Iraq’s water resources? For their part, the Shia religious parties were agnostic on the subject. A representative of one of the more prominent of these groups stated that it was in essence of no moment to him how the issue was resolved, but that he would insist ‘whatever the Kurds get, the Shia must get.’ In the end, Dr. Pachachi’s view prevailed, and Article 25(E) was the result. Ownership of Iraq’s natural resources was vested in all the people, but the Federal Government would control distribution of the funds derived from sale of those resources.”).
natural resources that are explicitly addressed in ownership terms under the Constitution are oil and gas. Article 111 states that “[o]il and gas are owned by all the people of Iraq in all the regions and governorates.”104 U.S. embassy lawyers involved in the drafting of the Iraqi constitution offer some insight into the reason that the Constitution specifically describes oil and gas and does not use a generic term like natural resources:

Operating under the presumption that any powers not given expressly to the federal government by the constitution would go to the regions, the Kurds wanted to limit the objects of regulation as much as possible. The Shia had pushed for “natural resources,” then “oil, gas, and minerals,” and finally relented, accepting the more limited “oil and gas,” which exclude the phosphate industry, described as profitable by some negotiators.105

Although the Constitution is silent on the ownership of water, it is appropriate to look to Islam for interpretative guidance because it is considered “a fundamental source of legislation” under Article 2 of Iraq’s Constitution.106 The large role that Islam was accorded in Iraq’s

104 IRAQI CONSTITUTION, supra note 8.

105 Deeks and Michael D. Burton, supra note 60 at 58. See also Karna Eklund, Brendan O’Leary & Paul R. Williams, Negotiating a Federation in Iraq, in THE FUTURE OF KURDISTAN IN IRAQ 116-142, 129 (2005). (“Kurdistan might differentiate oil from other natural resources such as water, natural gas, and minerals. . . . Regional ownership of non-oil natural resources would help insure that no future federal government could suffocate Kurdistan’s development.”).

106 See Feldman and Martinez, supra note 56 at 902-907 (discussing role of Islam in Iraq’s Constitution); Isobel Coleman, Women, Islam, and the New Iraq, 85 FOREIGN AFFAIRS, 2006, at 24 (“Article 2 of the final version of the constitution makes Islam the official religion of the state, cites it as a basic source of legislation, and says that no law can be passed that contradicts its “undisputed” rulings. Interpreting this provision will fall to the Supreme Court, which the new constitution says may include clerics; their number and method of selection were not specified, but will be defined by a subsequent law that must be approved by a two-thirds majority of parliament.”).
constitution is, in some respects, a consequence of the federalism compromise. According to Noah Feldman and Roman Martinez:

[T]he Shi’is and Kurds struck a strategic bargain in which Shi’i concessions to Kurdish autonomy were matched by a Kurdish willingness to allow the Islamists a freer hand outside of Northern Iraq. . . . Ultimately, the Shi’i-Kurd understanding on federalism allowed a larger role for Islam at the national level than might otherwise have been possible.107

The Koran recognizes the importance of water, stating at 21:30 that, “[b]y means of water, we give life to everything.”108 Water is part of the purification process needed to enter into “the state of divine grace.”109 The Koran instructs, “Anyone who gives water to a living creature will be rewarded . . . . To the man who refuses his surplus water, Allah will say: ‘Today I refuse thee my favor, just as thou refused the surplus of something that thou hadst not made thyself.’”110

The importance of water to traditional Islamic societies is underscored by the fact that the Arabic word for Islamic law, Sharia, literally means the “way to water.”111

Under traditional Islamic law, water is held in the public trust. “Access to water, at least for the purpose of human sustenance, is considered to be a right of all persons, within and without the community, and whether on private or publicly held property.”112 Ancient Islamic principles promoted a communal approach to water use and close community or state

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107 Feldman and Martinez, supra note 56 at 915.
111 Id. at 100.
administrative control over water.\textsuperscript{113} Under Islamic law, individuals could not acquire property interests in natural water resources, which some commentators have interpreted to mean “that the Prophet established a community right to water use.”\textsuperscript{114} Islamic tradition preserves different categories of public water: groundwater, natural wells, seas and great lakes, and rivers in the public domain.\textsuperscript{115}

In compliance with Sharia, Islamic tradition considered the sharing of water to be a “holy duty”\textsuperscript{116} and preserved two fundamental water rights.\textsuperscript{117} First, Islam recognizes the “right of thirst,” which is “juridically the right to take water to quench one's thirst or to water one's animals.”\textsuperscript{118} Second, Islamic law also recognizes the right of irrigation, which means the right to water land, trees, and plants. Consistent with the “public trust” view of water, a person can use public water sources for irrigation, provided that he does not infringe upon a third party or

\textsuperscript{113} Civic, \textit{supra} note 107 at 291.

\textsuperscript{114} Ian J. Silverbrand, \textit{The History and Potential Future of the Israeli-Palestinian Water Conflict}, 44 \textit{STAN. J. INT'L L.} 221, 241 (2008) (citing \textsc{Hilal Elver}, \textsc{Peaceful Uses of International Rivers: The Euphrates and Tigris Rivers Dispute} 41 (2002))

\textsuperscript{115} Hughes, \textit{supra} note 108 at 521 (suggesting that this right extends to \textit{all} persons). \textit{But see} Dante Augusto Caponera & Marcella Nanni, \textsc{Principles of Water Law and Administration: National and International} 62 (2nd / rev. and updated by Marcella Nanni. ed. 2007) (suggesting that Islamic law purports “to ensure that water is available to all members of the Moslem community”) (emphasis added).

\textsuperscript{116} Civic, \textit{supra} note 111 at 442. \textit{But see} Silverbrand, \textit{supra} note 113 at 241 (noting that “despite traditional Judaism's and Islam's common perspectives with respect to water distribution, the relevant religious mandates have not been a basis for cooperation” between Israel and Palestine).

\textsuperscript{117} Caponera and Nanni, \textit{supra} note 114 at 62-64 (describing historic differences in water law between three major Islamic schools of thought: the Sunnites, the Shi’ites, and the Ibadites).

\textsuperscript{118} Hughes, \textit{supra} note 108 at 521.
damage the community. “Value added to water by labour in the form of retaining it in a recipient and/or through distribution or conservation works may create a qualified right of ownership.” However, any “right of prior appropriation” generally must be “combined with the required distribution of surplus.” In addition, “[l]iability attaches to withholding or misuse of water, including for polluting or degrading clean water.” Over the centuries, “[t]hese rights and principles were interpreted variously by the Islamic branches and transmitted in customary law, until they were codified in the Mejelle Code (1870-76) of the Ottoman Empire.” This Code has remained as “residual legislation” in several Middle Eastern countries, including Iraq.

Under traditional Islamic principles, Iraq’s constitutional mandate to “justly distribute” water could be understood as incorporating a right of thirst and a right of irrigation. Moreover, it also suggests that water in Iraq should be held in the public trust for the benefit of all Iraqis. The next section will examine how these Islamic principles are consistent with an interpretation of “just distribution” under international water law and human rights law.

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120 *Id.* at 129-130.

121 *Id.* at 103.

122 Hughes, supra note 108.

123 Mallat, supra note 118 at 130.
B. International Water Law

In addition to Islamic law, Iraq’s constitution looks to international law as a source of guidance. Article 110 of the Iraqi constitution gives the federal government authority over “planning policies relating to water sources from outside Iraq” and requires that it guarantee “its just distribution inside Iraq” in accordance with “international law and conventions.” The Euphrates and Tigris Rivers are generally considered to be international, transboundary rivers whose appropriation and use are subject to international law and custom. The 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (hereinafter “U.N. Watercourses Convention”) is widely regarded as codifying the fundamental rules of customary international water law, even though it is not yet in force.124

The U.N. Watercourses Convention has three primary principles.125 First, states are to use an international watercourse in a way that is “equitable and reasonable” vis-à-vis other states sharing the watercourse.126 Second, states should take “all appropriate measures” to prevent causing “significant harm” to co-riparian states.127 Third, states should “consult” with the other international watercourse states and provide prior, “timely notification” about any new use or change in an existing use of an international watercourse that could have significant adverse


125 For an in-depth treatment of international transboundary law, see generally STEPHEN C MCCAFFREY, THE LAW OF INTERNATIONAL WATERCOURSES (2nd ed. 2007).

126 Gryzbowski, McCaffrey, and Paisley, supra note 123 at 141.

127 Id. at 141.
effects on co-riparian states.\textsuperscript{128} The Convention also outlines seven factors that are designed to ensure that an international watercourse is utilized in an “equitable and reasonable manner.”\textsuperscript{129} Notably, the U.N. Watercourses Convention states that in the absence of agreement or custom to the contrary, no use of an international watercourse enjoys priority over other uses but that disputes be resolved with “special regard being given to the requirement of vital human needs.”\textsuperscript{130}

Because Iraq is not in a position of power with respect to its upstream neighbors, Iraq would no doubt benefit by the application of the U.N. Watercourses Convention in the regional management of the Euphrates and Tigris Rivers.\textsuperscript{131} Iraq has already ratified the Convention;\textsuperscript{132}

\textsuperscript{128} Id. at 141. \textit{See also} Erica J. Thorson, \textit{Sharing Himalayan Glacial Meltwater: The Role of Territorial Sovereignty}, 19 DUKE J. COMP. \\& INT’L L. 487, 493-499 (2009) (noting that the Convention reflects the principle of limited territorial sovereignty, which is a compromise position of absolute territorial sovereignty, often advocated by upstream users, and absolute territorial integrity, generally promoted by downstream users).

\textsuperscript{129} \textit{See} CAPONERA AND NANNI, supra note 114 at 217 (“The equitable and reasonable utilization theory derives from the International Law Association Helsinki Rules of 1966 and asserts that the right of a co-basin state is to be regarded in the light of the similar right of another co-basin state.”); Tarlock, \textit{supra} note 12 at 719; Ahmad Slaibi \\& Ian J. Silverbrand, \textit{Efficiency and Equity in the Distribution of Renewable Resources: Water Allocation in the Jordan River Watershed}, 26 VA. ENVTL. L. J. 655, 662 (2008) (“Because the Convention provides an incomplete list of seven factors to weigh in an unspecified manner, it is unclear how customary international law may be harnessed in a way that would readily inform the distribution of shared watercourses.”).


\textsuperscript{131} \textit{See generally} Hakki, \textit{supra} note 13. \textit{But see} Chulov, \textit{supra} note 34 at 39 (noting that according to Turkey, Iraq has suffered from “atrocious water management practices. It is not uncommon to see burst water-mains spouting geysers through Baghdad’s parched suburbs or across village roads quickly mixing with refuse and oil, turning into giant molasses-like pools.”).
in contrast, Turkey was one of three countries to vote against it in 1997.\textsuperscript{133} Notably, the reference to “international laws and conventions” in Article 110 comes directly after the mandate to ensure the just distribution of water “inside Iraq.”\textsuperscript{134} A close reading of Article 110 of Iraq’s constitution suggests that the reference to international law was meant to apply not only to Iraq’s federal government’s interactions with neighboring countries, but also to it’s interactions with regions (and perhaps governorates) inside the state. In theory, the U.N. Watercourse Convention only governs actions between nation-states. However, international transboundary law could be an appropriate framework for governing the interactions between the federal and regional governments in Iraq. Indeed, in the quote excerpted \textit{supra}, O’Leary suggests that that this may have been how the Kurds understood Article 110.\textsuperscript{135} In other words, as Iraq looks to create a water governance strategy across its federated structure that minimizes the potential for disputes,

\begin{itemize}
\item \textsuperscript{132} Karlie Shea Clemmons, \textit{HydroElectric Dams: Transboundary Environmental Effects and International Law}, 36 FLA. ST. U. L. REV. 487, 510, n.183 (2009) (noting that as Iraq was only one of only seventeen countries to have ratified, accepted, acceded or approved the Convention).
\item \textsuperscript{133} See \textsc{Salman and McInerny-Lankford}, \textit{supra} note 129 at 12, n.35.; Daly, \textit{supra} note 20.
\item \textsuperscript{134} Article 110 states that the federal government has exclusive authority over “[p]lanning policies relating to water sources from outside Iraq and guaranteeing the rate of water flow to Iraq and its just distribution inside Iraq in accordance with international laws and conventions.” \textsc{Iraqi Constitution}, \textit{supra} note 8.
\item \textsuperscript{135} O’Leary, \textit{supra} note 3 at 193 (Articles 110 and 114 “express the technical acknowledgement of Iraq’s interdependence as regards water and grant the federal government the minimum necessary planning authority, but they also express the historic distrust of Baghdad governments by Kurdistan – and ensure that the Kurdish Regional Government can veto any law that in its judgment does not match international law and conventions on ‘just distribution.”
\end{itemize}
it could define “just distribution” by looking to the international principles of “equitable and reasonable utilization” and by giving priority to the satisfaction of vital human needs.\textsuperscript{136}

\textbf{C. Human Rights Law}

If the reference to “international law and conventions” in Article 110 is understood as a modifier of the “just distribution” of water mandate, then Iraq’s constitution would also incorporate by reference the growing body of international law that is emerging around the human right to water.\textsuperscript{137} Because human rights law governs the obligations that states have towards individuals, this is an appropriate source of law for understanding Iraq’s obligations \textit{inside} Iraq – i.e. towards its own people - under Article 110.\textsuperscript{138}

On July 28, 2010, the U.N. General Assembly adopted a resolution recognizing access to clean water and sanitation as a human right by a vote of 122 in favor, none against and 41

\begin{footnotesize}
\begin{enumerate}
\item[\textsuperscript{136}] SALMAN AND McINERNY-LANKFORD, supra note 129 at 12.
\item[\textsuperscript{138}] Other provisions in Iraq’s constitution specifically reference human rights. For example, Article 9, First, D states that “The Iraqi National Intelligence Services … shall operate in accordance with the law and pursuant to the recognized principles of human rights.” Article 45, Second states “The State shall prohibit the tribal traditions that are in contradiction with human rights.” Also, Article 102 also creates an independent High Commission for Human Rights. IRAQI CONSTITUTION, supra note 8.
\end{enumerate}
\end{footnotesize}
abstentions. Forty-one countries, including the United States, abstained largely over concerns that the General Assembly resolution created new obligations and threatened the work of the Human Rights Council’s Independent Expert on human rights obligations relating to safe drinking water and sanitation. However, on September 30, 2010, the Human Rights Council adopted the General Assembly resolution. Iraq, along with most of the Arab and Muslim world, voted in favor of the General Assembly resolution that recognized a human right to water and sanitation. This may be because, as discussed supra, traditional Islamic law recognizes a “right of thirst” and attaches liability for degrading water quality.

Prior to this resolution, the strongest legal authority for recognizing a human right to water came from General Comment No. 15 (2002) of the Committee of the Economic, Social and Cultural Rights on the right to water (arts. 11 and 12 of the International Covenant on

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142 See, e.g., Mallat, supra note 118 at 129.
Economic, Social and Cultural Rights). The Committee determined that the right to water was inseparably related to the right to an adequate standard of living (art. 11.1), the right to health (art. 12) and the rights to adequate housing and adequate food (art. 11.1). Comment 15 defined the right as “[e]veryone’s entitlement to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.” The Committee stated that “the right to water clearly falls within the category of guarantees essential for securing an adequate standard of living, particularly since it is one of the most fundamental conditions for survival.” Moreover, the Comment appears to embrace a public trust view of water, declaring in its opening sentence that “[w]ater is a limited natural resource and a public good fundamental for life and health.”


145 Economic and Social Council, Committee on Economic, Social and Cultural Rights, supra note 142 at 1. Comment 15 also describes the right to water as emanating from an expanded concept of the right to the highest attainable health. In this respect, it is consistent with Article 30 of the Iraqi constitution, which states “[t]he State shall guarantee to the individual and the family – especially children and women – social and health security, the basic requirements for living a free and decent life, and shall secure for them suitable income and appropriate housing.” IRAQI CONSTITUTION, supra note 8.
When it comes to understanding the treatment of water in Iraq’s constitution, an important parallel exists between international transboundary law, international human rights law and traditional Islamic law. The special regard the U.N. Watercourses Convention gives to “vital human needs” and the growing recognition of a human right to water under international human rights law are both consistent with the Islamic right of thirst. Moreover, the requirement under international transboundary water law not to cause significant harm is analogous to the attachment of liability for withholding or misusing water under Islamic law. In other words, Iraq’s constitutional mandate to justly distribute water incorporates both a negative right (ensuring the water is not unjustly polluted) and a positive right (affirmatively providing access).146

Whether international law or Islamic law is applied, Iraq’s constitutional mandate to ensure the just distribution of water can be understood as incorporating a human right to water. This understanding offers a way to reconcile the meaning of “just distribution” under both Articles 110 and 114 of Iraq’s constitution. Article 110 explicitly references international laws and conventions, while Article 114 does not. The foregoing analysis suggests that the phrase “just distribution” has the same meaning in Articles 110 and 114 because the reference to international law does not fundamentally alter the definition of “just distribution” under Islamic law. This interpretation is consistent with Iraq’s constitutional drafting history. As discussed in Section III, as a result of negotiations with Kurdish and Shia leaders, the language of Articles 110 and 114 “created significantly overlapping authority . . . because both provisions appear to cover the just distribution of water inside Iraq.”147

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146 See Vrinda Narain, Water as a Fundamental Right: A Perspective from India, 34 VT. L. REV. 917, 923 (2010).
147 Deeks and Michael D. Burton, supra note 60 at 63.
D. The Implications of Interpreting Iraq’s “Just Distribution” of Water Mandate under Islamic Law, International Water Law and Human Rights Law

Interpreting Iraq’s constitutional mandate to “justly distribute” water consistently with Islam, international law and human rights principles has important implications for the development of an effective water governance strategy in Iraq. The recommendations set forth below could enable Iraq to mitigate federalism-based disputes that would otherwise fuel ethnic and sectarian tensions in the fragile democracy.

First, Iraq should look to the principles set forth in the U.N. Watercourses Convention to create a “cooperative federalism” scheme that promotes effective water management. As discussed in Section III, jurisdictional disputes are likely because the federal and regional governments exercise concurrent – not joint – powers under Article 114. Indeed, under Articles 115 and 121, in the event of a conflict, the law of the region would take precedence over that of the federal government. However, Article 114’s requirement that water be “justly distributed” means that the regional and federal governments each have an obligation to ensure that their respective actions do not negatively impact the allocation of water in any part of the country.

The regional and federal governments of Iraq should create a joint commission for management

148 See Robert L. Glicksman, From Cooperative to Inoperative Federalism: The Perverse Mutation of Environmental Law and Policy, 41 WAKE FOREST L. REV. 719, 725-726 (2006) (noting that in the U.S., “the rhetoric of ‘cooperative federalism’ is routinely invoked by the courts in a variety of regulatory and other contexts.”);
Horowitz, supra note 66 at 962-963 (noting that “federalism is not cheap. It involves duplication of facilities, functions, personnel, and infrastructure, including provincial capitals. It also risks jurisdictional disputes . . .”).

149 See Williams and Simpson, supra note 57 at 23 (“Joint resource authorities promote sub-federal participation in the control of certain resources within a state as they encourage power sharing between the federal and sub-federal governments.”); CAPONERA AND NANNI, supra note 114 at 235-255 (describing the use of such commissions in international watercourses).
of the Tigris and Euphrates Rivers that embraces the principles of “equitable utilization” and “no significant harm,” as outlined under international transboundary water law. As Stephen McCaffrey has explained, the “principle of equitable and reasonable utilization is much better suited to implementation through very close cooperation between the states concerned, ideally through a joint commission, a court, or other third party.” The application of international water law to the creation of Iraq’s internal water policy makes sense in light of the constitutional history and because the phrase “just distribution” has the same meaning under both Articles 110 and 114.

Second, interpreting the “just distribution” provisions of Article 110 and 114 of Iraq’s constitution as incorporating a human right to water and the Islamic right of thirst would be an important tool for improving equitable distribution of clean water by enabling Iraqis to demand greater transparency and accountability in water governance strategies. Every Iraqi would

151 Id.
have a right to affordable access to quantity of water required for a dignified human existence, regardless of whether that person is Arab, Kurdish or another ethnicity. The government’s affirmative obligations would be subject to “progressive realization,” but those responsible for water governance decisions – whether at the regional or federal level – would need to develop policies that strive to protect the human rights of all Iraqis. By framing the constitutional mandate to justly distribute water in human rights terms, Articles 110 and 114 effectively become justiciable. Such an interpretation “gives the judiciary the possibility of holding the state

153 Defining what would constitute the minimum core of the right to water in Iraq is beyond the scope of this article. See generally Katharine Young, The Minimum Core of Economic and Social Rights: A Concept in Search of Content, 33 YALE J. INT’L L. 113 (2008). Peter Gleick of the Pacific Institute has proposed that the minimum amount for a dignified existence is fifty liters per person per day (lpcd), of which 25 lpcd would go to basic human needs, 15 lpcd would be for bathing and 10 lpcd would be for cooking. See Peter H. Gleick, The Human Right to Water, 1 WATER POLICY 487, 496 (1998). However, he has also noted that “the specific number is less important than the principle of setting a goal and implementing actions to reach that goal.” Id. at 496. See also WORLD HEALTH ORGANIZATION, supra note 150 at 13. (describing 20 lpcd as basic access; 50 lpcd as intermediate access; and 100-200 lpcd as optimal access).

154 See International Covenant on Economic, Social and Cultural Rights, G.A. Res. 2200A (XXI), 21 UN GAOR Supp. (No. 16) at 49, UN Doc. A/6316 (1966); 993 UNTS 3; 6 ILM 368 (1967) (stating in Article 2 that “[e]ach State Party to the present Covenant undertakes to take steps . . . to the maximum of its available resources, with a view to achieving progressively the full realization of the rights . . .); Economic and Social Council, Committee on Economic, Social and Cultural Rights, supra note 142 (Comment 15 states that “[w]hile the Covenant provides for progressive realization and acknowledges the constraints due to the limits of available resources, it also imposes on States parties various obligations which are of immediate effect. States parties have immediate obligations in relation to the right to water, such as the guarantee that the right will be exercised without discrimination of any kind (art. 2, para. 2) and the obligation to take steps (art. 2, para.1) towards the full realization of articles 11, paragraph 1, and 12. Such steps must be deliberate, concrete and targeted towards the full realization of the right to water.”).
accountable to ordinary citizens, and it permits disempowered groups to claim their rights in the face of state power.”

For guidance in developing an appropriate policy and legal framework, Iraq could look to the experiences of other countries, such as India and South Africa, that have grappled with these issues.

Whether legal recourse for redressing human rights violations will be effective in Iraq has yet to be seen. For much of the twentieth century, prior to the Baath Party coming to power, Iraq’s “judiciary had a tradition of independence from the executive.”

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155 Narain, supra note 146 at 925. Iraq’s constitution states in Article 89 that “The federal judicial power is comprised of the Higher Juridical Council, the Federal Supreme Court, the Federal Court of Cassation, the Public Prosecution Department, the Judiciary Oversight Commission, and other federal courts that are regulated in accordance with the law.” IRAQI CONSTITUTION, supra note 8; See also Deeks and Burton, supra note 60, at 45-53 (discussing constitutional negotiations on the federal judiciary).

156 See Narain, supra note 146 at 920 (“The fundamental right to water has evolved in India, not through legislative action but through judicial interpretation. Indian Supreme Court decisions deem such a right to be implied in Article 21, the right to life, interpreted to include all facets of life and to also include the right to a clean environment to sustain life.”); Malcolm Langford & Anna Russell, ‘Global Precedent’ or ‘Reasonable No More?’: The Mazibuko Case, 19 JOURNAL OF WATER LAW 73, 74 (2008) (noting that the constitution of South Africa recognizes a human right to water and its implementing regulation has defined the minimum amount as 25 liters per person per day, or 6kL per household per month); Linda Stewart, Adjudicating Socio-Economic Rights under a Transformative Constitution, 28 PENN ST. INT’L L. REV. 487, 509 (2010) (arguing that the South African Constitutional Court’s task is to formulate a universal norm and not prescribe exact measures. “Describing the right as nothing less than a right of access to that quantity of water that is required for dignified human existence is a normative standard that still allows for context sensitive matters.”); Young, supra note 151 at 140 (arguing that the South African “Constitutional Court has balked at efforts to define the minimum core” of social and economic rights).

the Iraqi legal profession became largely defunct;\textsuperscript{158} the judiciary lacked independence and suffered from corruption.\textsuperscript{159} In the wake of the U.S. invasion, Iraq’s court system needed significant reform. But, given that Iraq still had qualified lawyers and judges,\textsuperscript{160} the rule of law has been strengthened through judiciary education programs.\textsuperscript{161} Creating a legal mechanism for enforcing a right to water in Iraq would be consistent with the core ideas of “democracy, Islam, federalism, pluralism and human rights” that were enshrined in Iraq’s constitution.\textsuperscript{162} Moreover, by re-framing the just distribution mandate in “rights” language, Iraq would be providing its citizens not only with a mechanism for legal enforcement, but also with a community organizing tool that could be used to create political change.\textsuperscript{163}

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\textit{Policing in Iraq - a Personal Perspective}, 1 POLICING 102 (2007) (finding that prior to U.N. sanctions, Iraq’s “judiciary was regarded as independent and effective albeit politically controlled”).


\textsuperscript{159} Ian Wexler, \textit{A Comfortable SOFA: The Need for an Equitable Foreign Criminal Jurisdiction Agreement with Iraq}, 56 NAVAL LAW REVIEW 43 (2008).

\textsuperscript{160} Coleman, \textit{supra} note 105; Wexler, \textit{supra} note 159 (“Upon the invasion and occupation of Iraq, the U.S. found the Iraqi criminal justice system in total chaos. Most of the court buildings and other Ministry of Justice facilities had been looted or damaged through vandalism. Furthermore, few members of the Iraqi Ministry of Justice remained to govern the existing system.”) (internal citations omitted).


\textsuperscript{162} Feldman and Martinez, \textit{supra} note 56 at 884.

\textsuperscript{163} The enforcement of human rights principles around the world is often most effective when legal action is partnered with community organizing strategies. \textit{See, e.g. Lani Guinier & Gerald Torres, The Miner’s Canary: Enlisting Race, Resisting Power, Transforming Democracy} 131-147 (2002) (describing how struggle to unionize K-Mart distribution center in North Carolina successfully paired community organizing and legal
Third, interpreting the “just distribution” of water mandate consistent with a human right to water and the right of thirst would also have implications for Iraq’s regulatory structure. The reference to “internal water resources policy” in Article 114 of Iraq’s constitution may have been intended to include only activities that fall within the jurisdiction of the Ministry of Water Resources (i.e. dams, irrigation, etc.) and not those within the Ministry of Municipalities and Public Works (i.e. water treatment and sanitation services). However, given the dire state of water quality in many parts of Iraq, it is impossible for a water resources policy to fulfill the constitutional mandate of “just distribution” unless the water allocations is treated. It would hardly be a just distribution if the only water made available is contaminated with sewage. Indeed, most people would probably prefer a small quantity of potable water as compared to copious amounts of polluted water. Accordingly, the mandate of Article 114 must transcend the jurisdiction of the Ministry of Water Resources and encompass also those water and sanitation related activities that traditionally fall within the purview of the Ministry of Municipalities and Public Works. The same would be true for the corresponding agencies within the Kurdistan region.

strategies); Jackie Dugard, Civic Action and Legal Mobilization: The Phiri Water Meters Case, in MOBILISING SOCIAL JUSTICE IN SOUTH AFRICA: PERSPECTIVES FROM RESEARCHERS AND PRACTITIONERS, 71-99 (J. Handmaker & R. Berkhout eds., 2010) (discussing intertwined strategies of direct protest and legal mobilization in Phiri case, which challenged use of prepaid water meters in South Africa); Flora Cornish, 43 COMMUNITY DEV. J. 100, 101 (2008) (reviewing Ela Bhatt, WE ARE POOR BUT SO MANY: THE STORY OF SELF-EMPLOYED WOMEN IN INDIA (2006)) (“SEWA’s experience and their multi-pronged approach make it clear that community development is highly compatible with, and in fact depends upon very active efforts to change policies and laws that disadvantage self-employed women.”).
Finally, Iraq’s constitutional mandate to “justly distribute” water also suggests that Iraq must be mindful of how water is distributed not only across the country, but also between sectors. Iraq devotes only 6.5 percent of its water supply to consumption, sanitation and other domestic needs. In contrast, approximately 79 percent of water in Iraq is used for agriculture and 14.5 percent is used for industry. With respect to the latter, water is needed to maintain pressure in old, degraded oil fields, which is the primary source of profit for Iraq. Because approximately 90% of all state fiscal resources come from the sales of oil, Iraq could have an incentive to prioritize water for oil production, despite the dire need for water for drinking and sanitation. Although oil might result in a higher market value, the recognition of a human right to water would suggest that vital human needs take priority. Comment 15 states that “priority in the

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164 Food and Agriculture Organization of the United Nations, AQUASTAT - FAO'S INFORMATION SYSTEM ON WATER AND AGRICULTURE (2008), http://www.fao.org/nt/water/aquastat/countries/iraq/index.stm (last visited Jan 2, 2011) (“In 2000, total water withdrawal was estimated at 66 km3, of which 79 percent for agricultural purposes, 6.5 percent for domestic supplies and 14.5 percent for industrial use.”).

165 Id.

166 BOWEN AND SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION, supra note 35 at 181. (describing how failure to finish refurbishing the Qarmat Ali water treatment plant “prevented the system from injecting the necessary amounts of water into the oil fields” and thus, “significantly limited the productivity of the southern oil fields”).

167 See ESAM YOUNIS ET AL., REVENUE ASSIGNMENT AND FISCAL INTERGOVERNMENTAL ISSUES IN THE NEW CONSTITUTION INTERIM PERIOD IN IRAQ, USAID DISCUSSION PAPER NUMBER 8, 7 (2007).

168 In Sri Lanka, for example, the Supreme Court held that the right to local, sustainable agricultural use should be given priority over use by a multinational corporation, even if the latter would result in greater profits. See Saby Ghoshray, Searching for Human Rights to Water Amidst Corporate Privatization in India: Hindustan Coca-Cola Pvt. Ltd. v. Perumatty Grama Panchayat, 19 GEO. INT'L. ENVTL. L. REV. 643, 665, n.82 (2007).
allocation of water must be given to the right to water for personal and domestic uses.”¹⁶⁹ Similarly, Iraq must decide to what extent the constitutional mandate to justly distribute water also requires that it devote resources to improving faulty and old water treatment infrastructure. If the word just is to be given its full meaning under Islamic and international law, then Iraq must prioritize spending resources on improving access to clean water for drinking, sanitation and food-related irrigation purposes.

**V. Conclusion**

As clean water becomes scarcer in Iraq, the potential for conflict increases. This article examined how Iraq’s asymmetrical, consociational federal structure could lead to jurisdictional disputes, and thereby fuel ethnic and sectarian tensions over water in Iraq. It focused primarily on two articles in Iraq’s constitution: Article 110, which grants the federal government power over external policy; and Article 114, which gives the federal and regional governments concurrent power over internal water policy. The federal and regional governments could develop water policies that conflict; if that occurs, then the law of the regions would take precedence under Iraq’s constitution. Given the unequal distribution of water in Iraq, such an outcome could negatively impact downstream users and exacerbate ethnic and sectarian relationships. This article suggests that such concerns could be alleviated by the creation of policies deriving from the federal and regional governments’ constitutional mandate to ensure the “just distribution” of water. Looking to Islamic law, international transboundary law and human rights law, this article concluded that the “just distribution” requirement would encourage Iraq to develop a water governance scheme that promotes “cooperative federalism” and that recognizes a human right to water.

¹⁶⁹ Economic and Social Council, Committee on Economic, Social and Cultural Rights, supra note 142.