

**ANALYSIS OF THE SYRIAN-TURKISH WATER CONFLICT
IN THE RAPPROCHEMENT PERIOD:
A HISTORICAL CHANCE FOR RESOLUTION?**

by
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ANALYSIS OF THE SYRIAN-TURKISH WATER CONFLICT
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A HISTORICAL CHANCE FOR RESOLUTION?

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Abstract

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MA Thesis, 2006

Dr. Ibrahim al-Marashi

Keywords: Syria, Turkey, Euphrates, Orontes, Rapprochement

After the 1998 Adana Agreement, Syria and Turkey entered a rapprochement period, and their bilateral relations have developed significantly. Based on this assumption, this study focuses on the Syrian-Turkish conflict over the Euphrates and Orontes rivers, and questions the potential of resolution within this context. The framework of analysis is based on Pruitt and Kim's three preconditions for problem-solving initiatives: a stalemate for one or both parties, optimism to resolve the conflict in a mutually acceptable way, and cost-benefit analyses of parties that favor the resolution. For this purpose, this study conducted a qualitative case study depending on the events data, and created a Syrian-Turkish Water Events Database, comprising 111 water incidents for the period January 1983-May 2006. The findings indicate that Turkey, the upper riparian state on the Euphrates river, has neither a significant optimism, nor a cost-benefit analysis favoring the resolution, although Syria has entered a stalemate and demanded a final agreement. In the final part, this study makes an alternative cost-benefit analysis for Turkey, and advocates that this party's accession negotiations with the European Union are posing a risk to change her traditional water policies in the upcoming decade, which may deteriorate her bargaining power at water negotiations. Accordingly, this study suggests that Turkish policy-makers consider a problem-solving initiative with Syria, while Turkey's bargaining power is at a maximum, and the two countries are enjoying a positive period unprecedented in their relations.

Özet

YAKINLAŞMA DÖNEMİNDE TÜRKİYE-SURİYE SU SORUNUNUN ANALİZİ: ÇÖZÜM İÇİN TARİHİ BİR FIRSAT MI?

Murat Bayar

Yüksek Lisans Tezi, 2006

Dr. Ibrahim al-Marashi

Anahtar Kelimeler: Suriye, Türkiye, Fırat, Asi, Yakınlaşma

Türkiye ve Suriye 1998 Adana Antlaşması'ndan sonra bir yakınlaşma sürecine girmiş ve ikili ilişkileri belirgin düzeyde geliştirmiştir. Bu varsayımdan hareketle, bu çalışma Türkiye ve Suriye'nin Fırat ve Asi nehirleri üzerindeki ihtilafına yoğunlaşmakta ve söz konusu ortamda çözüm potansiyelini sorgulamaktadır. Analizin çerçevesi, Pruitt ve Kim'in sorun çözümü için gerekli gördüğü üç ön koşula dayanmaktadır: bir veya iki tarafın çıkmaza girmiş olması, ihtilafın iki tarafca da kabul edilecek şekilde çözülebileceğine dair iyimserlik, ve tarafların çözümü ön plana çıkararak maliyet-getiri analizleri. Bu amaçla, vaka verilerine dayalı bir nitel vaka çalışması yapılmış, ve 111 su olayından oluşan ve Ocak 1983-Mayıs 2006 dönemini kapsayan bir Türkiye-Suriye Su Vakaları Veritabanı oluşturulmuştur. Sonuçlar göstermektedir ki, Suriye bir çıkmaza girmiş ve nihai çözüm istiyor olmasına karşın, Fırat'ta üst kıyıdaş ülke konumundaki Türkiye'nin çözüme yönelik ne belirgin bir iyimserliği, ne de maliyet-getiri analizi bulunmaktadır. Son bölümde, bu çalışma Türkiye için alternatif bir maliyet-getiri analizi yapmakta ve Avrupa Birliği'yle üyelik müzakerelerinin önümüzdeki on yılda Türkiye'yi geleneksel su politikalarını değiştirmek zorunda bırakabileceğini, bu nedenle de gelecekteki su müzakerelerinde pazarlık gücünü azaltabileceğini savunmaktadır. Buna bağlı olarak, bu çalışma Türkiye'nin pazarlık gücü henüz en üst düzeydeyken ve Suriye ile ilişkilerde tarihlerindeki en iyi dönem yaşanmaktayken, Türk politika yapıcılarının Suriye ile bir sorun çözümü girişimini dikkate almalarını önermektedir.

DEDICATION

This thesis is dedicated to the memory of my mother, Tülin Sevim Bayar.

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CHAPTER 1

Research Aim and Methodology

1.1 Introduction

One of the most arid regions of the world, the Middle East has always been prone to water conflicts between the riparians of the Nile, the Euphrates, and other transboundary rivers. In fact, the only water war in world history occurred about 4,500 years ago, between two Sumerian city-states of Lagash and Umma in the Euphrates-Tigris-Shatt al-Arab river basin (Wolf, 1998). However, sovereignty over the international watercourses has become a focal issue in the regional politics in the second half of the 20th century, in parallel to the initiation of ambitious waterworks, and growth in demand for water.

This study focuses on the Syrian-Turkish conflict over the Euphrates and Orontes rivers. The rivalry of Syria and Turkey on water dates back to 1956, when Syria began a dam construction on the Orontes as the upstream state. In 1966, Turkey started a dam on the Euphrates, on which she is the upstream. Both of these waterworks were significant attempts to control the flow of these rivers, and regarded as threats to the water security by the downstream states (El-Fadel et al., 2002). Iraq became a part of this conflict in 1975, when the Turkish Keban dam and the Syrian Tabqa dam, both constructed on the Euphrates river, were filled, decreasing the quantity of water flowing into Iraq's territory significantly (Kiran, 2005).

The Syrian-Turkish water conflict has mainly revolved around the issues of sovereignty, and quantity and quality of water released from the Syrian-Turkish border. From the beginning, Turkey has claimed full sovereignty on her part of the Euphrates (and Tigris) river, and opposed the joint management demands of Iraq and Syria. Syria has employed a similar approach for the Orontes, and disregarded Turkey's water needs from this river (Zehir, 2003).

Turkey's initiation of the massive Southeastern Anatolia Project [*Güneydoğu Anadolu Projesi* (GAP) in Turkish], involving 22 dams and 19 hydroelectric terminals on the Euphrates and Tigris rivers,¹ and Syria's support for terrorist organizations against Turkey have intensified the conflict in the 1980-90s. Finally, two countries came to the brink of war in 1998, but managed to agree on a security protocol, named the Adana Agreement (Appendix 1), with the help of third parties (Pehlivanoglu, 2004).

The 1998 Adana Agreement has been accepted as the beginning of rapprochement in the Syrian-Turkish relations by many scholars and experts (Gorvett 2004; Pelivanoglu 2004; Aydin and Aras 2005; Jung 2005). In fact, the highest officials of both countries have expressed their determination several times to improve the relations by then, and there has also been a significant growth in their bilateral trade volume and joint projects, as discussed in the Assumption section.

Chapter 1 presents the research question, the methodology, the rationale and the assumption of this study. In Chapter 2 and Chapter 3, the background and components of the Syrian-Turkish water conflict are examined. The findings and their assessment are presented in Chapter 4. In the Conclusion, the aftermath of this study is discussed.

1.2 Research question

The underlying motivation of this study is to find out whether the conditions favoring the resolution of the Syrian-Turkish water conflict exist in the rapprochement period. This analysis is essential, since the two countries are enjoying a positive period unprecedented in their overall relations, and there might be a historical opportunity to consider a problem solving initiative within this context.

Before proceeding with the research question, this study needs to clarify the basic concepts used throughout the sections. In their comprehensive work, Pruitt and Kim (2004) have presented the nature and causes of conflicts, strategies employed by parties, stages (such as escalation, stalemate, and de-escalation), alternative models to explain the shift in the positions of parties, and function of third parties in conflict resolution. Dedicating a section on

¹ GAP Regional Development Administration (2006). *What is GAP?* [online]. Available: http://www.gap.gov.tr/gap_eng.php?sayfa=English/Ggbilgi/gnedir.html. (May 3, 2006).

the dynamics of stalemate and settlement, they defined the concept perceived stalemate as, “a situation in which one (or better, both) of the parties perceives that it cannot make further progress in the conflict at an acceptable cost or risk - that further efforts to win through escalation are unworkable and/or unwise” (p. 172). According to them, there are four main causes that might lead a party to perceive its stalemate: “failure of contentious tactics, exhaustion of necessary resources, loss of social support, and unacceptable costs or risks (of continuing the confrontational tactics)”(p. 173).

Pruitt and Kim’s conceptualization of stalemate is based on the ripeness theory, developed by Zartman. Zartman (2003) argued that the timing of resolution initiatives is one of the two key components of peaceful settlements, together with the nature of proposals. For the basis of timing, Zartman has suggested the notion of ripeness, occurring when the conflicting parties perceive a mutually hurting stalemate (MHS), as a necessary precondition for the initiation of negotiations. An MHS is defined as the situation “when the parties find themselves locked in a conflict from which they cannot escalate to victory and this deadlock is painful to both of them (although not necessarily in equal degree or for the same reasons), they seek an alternative policy or way out” (p. 19).

In both Pruitt and Kim’s, and Zartman’s approaches, the point of stalemate is regarded as a necessary precondition for resolution attempts. However, Pruitt and Kim (2004) opposed Zartman’s overemphasis of the MHS concept, since they also considered the past cases in which the resolution initiatives started with the perceived stalemate of one party only, and the optimism of the other, underlining that there is no need for both parties’ entering the stalemate.

For the concept of problem solving, Pruitt and Kim (2004) made the definition “any effort to identify a formula that will satisfy both sides’ aspirations” (p. 189), and conflict resolution as the outcome when “problem solving is really successful” (p. 191). Furthermore, Wallensteen (2002) has described the term conflict resolution as a situation “where the conflicting parties enter into an agreement that solves their central incompatibilities, accept each other’s continued existence as parties and cease all violent action against each other”. Pruitt and Kim (2004) have set the three preconditions for problem solving negotiations as, one or both parties’ perception of the further use of contentious tactics as unwise (point of stalemate), optimism for a final agreement, and cost-benefit analyses (of both parties for themselves) that favor the resolution.

As Pruitt (1995) argued, the problem-solving strategy in negotiations involves an option that reconciles the objectives of conflicting parties. Quoting Walton and McKersie, Pruitt (1995) has underlined two conditions that increased the attractiveness of problem-solving strategy

significantly: “When there is high integrative potential (through expanding the pie and so on)” and “When both parties maintain high (but not too high) aspirations” (p. 28). Here aspirations are needed to be high in order to fuel the creativity in integrative proposals, but not too high to make a common ground impossible.

Based on Pruitt and Kim (2004)’s framework of analysis, this study aims to find out whether the preconditions of a problem solving initiative have been satisfied for the Syrian-Turkish water conflict in the rapprochement period, beginning with the 1998 Adana Agreement. Specifically, the research question is formulated as “Have the three preconditions of a problem solving initiative (one or both parties’ stalemate, optimism for a final agreement, and cost-benefit analyses favoring the resolution) been satisfied for the Syrian-Turkish water conflict in the rapprochement period?” The preconditions are developed as:

P₁: The Syrian-Turkish water conflict has entered a stalemate for one or both parties after the 1998 Adana Agreement.

P₂: Syria and Turkey have optimism to resolve their water conflict in a mutually acceptable way.

P₃: The cost-benefit analyses of both parties favor the resolution of their water conflict.

The preconditions are looked for by analyzing the water incidents and policy statements of the highest officials of both parties, as discussed in the Methodology section. In order to support this analysis, the Syrian-Turkish water conflict is analyzed in depth, from historical, political, environmental, and other aspects throughout the study.

1.3 Methodology

The assessment of Precondition 1 requires the illustration of the stages of the Syrian-Turkish water conflict on a time scale, in order to clarify whether there has been a change after the 1998 Adana Agreement, and a stalemate has begun. This analysis is supported by the consideration of the policy expressions and actions of both parties, which are also required for the analysis of Precondition 2 and Precondition 3.

The methodology of this research is qualitative case study, depending on the analysis of event data. For this purpose, this study conducted a content analysis on the Syrian-Turkish water incidents for the period 1983-2006, derived mainly from the International Water Events Database of the Basins At Risk (BAR) project.²

Coordinated by Assoc. Prof. Dr. Aaron Wolf, a group of researchers³ at the Department of Geosciences of Oregon State University (OSU) have collected “all reported instances of conflict and cooperation over international freshwater resources in the world from 1948 to 1999”, and provided a quantitative, global scale presentation of the link between freshwater resources and international conflict (Yoffe et al., 2003, p. 1110). So as to satisfy the compatibility with their findings, this study employed the definitions, methods, and techniques used in the BAR project,.

Yoffe et al. have defined the water incidents as “instances of conflict and cooperation that occur within an international river basin, involve the nations riparian to that basin, and concern freshwater as a scarce or consumable resource (e.g., water quantity, water quality) or as a quantity to be managed (e.g., flooding or flood control, water levels for navigational purposes)”. On the other hand, events that did not fall into the above category were left aside: “e.g., navigation or construction of ports; boundary or territorial disputes such as control over river islands; purchasing and selling of hydroelectricity; involvement of a third party, that is, a nonbasin country; and issues internal to a country” (Yoffe et al., 2003, p. 1110).

In the BAR project, the main unit of analysis was the international river basin, which was defined as a basin that comprised “... all the land that drains through that river and its tributaries into the ocean or an internal lake or sea and that includes territory of more than one country” (Yoffe et al., 2003, p. 1110). Within this framework, the Euphrates-Tigris-Shatt al-Arab and the Orontes were defined as two separate river basins (Yoffe, 2001).

Yoffe et al. have gathered the event data from political science databases, historical and case analyses of international river basins, and news databases. The outcome is the International Water Events Database, comprising almost 1,800 incidents for 122 international river basins (Yoffe et al., 2003). These incidents were then coded on the 15-point BAR scale (Appendix 2), according to their direction and intensity. On this scale, the most cooperative

² Oregon State University (2003). International Water Events Database: 1948-1999. [online]. Available: <http://www.transboundarywaters.orst.edu/projects/events/>. (March 4, 2006).

³ Oregon State University (2004). About us. [online]. Available: <http://www.transboundarywaters.orst.edu/about>. (March 4, 2006).

(voluntary unification into one nation) and the most conflictive (formal declaration of war) incidences were defined as +7 and -7, respectively, whereas zero was defined as “neutral or non-significant acts for the inter-nation situation” (Yoffe et al., 2003).

1.4 Rationale

This study defined the case as the Syrian-Turkish water conflict over the Euphrates and Orontes rivers, rather than the Iraqi-Syrian-Turkish conflict over the Euphrates and Tigris rivers, and sought for the potential of a bilateral resolution, before the tripartite conflict is settled. The rationale of this focus came from the following facts:

First of all, the Euphrates is the Syria’s longest river (675 km), crossing the country from north to east, and constituting 80% of its water resources in terms of cubic meters per second.⁴ Syria built her biggest dam, the Tabqa, on this river, meaning that she is heavily dependent on the Euphrates not only for irrigation and domestic consumption, but also for hydroelectric power. On the other hand, the Tigris is a minor river for Syria, for a 32 km long strip at her northeastern border with Turkey, whereas it is a vital source of water for Iraq. In fact, Iraq’s policy was the avoidance of any Syrian influence on the fate of the Tigris river, and the current Iraqi government has not signaled a change in this objective (Durmazucar, 2002; MacQuarrie, 2004).

Another major river of Syria is the Orontes, originating from Lebanon (35 km), passing through Syria (120 km), forming a part of the Syrian-Turkish border (22 km), and ending in the Hatay province of Turkey (88 km). In other words, Syria is the lower riparian of the Euphrates, but the upper riparian of the Orontes with respect to Turkey, whereas Iraq is not a riparian of the latter river. Although a local river for Turkey, the Orontes is vital for her Amik plain in Hatay, status of which has not been officially recognized by Syria. Therefore, the Syrian-Turkish water conflict has involved some critical issues that have no direct relevance to Iraq, such as the status of the Hatay province, and the Orontes river.

Secondly, Turkey’s arguments in her water conflicts have been weakened in the international arena, after the Convention on the Protection and Use of Transboundary Watercourses and International Lakes ([Helsinki Agreement](#)), and the Convention on the Law of the Non-Navigational Uses of International Watercourses were adopted by the United

⁴ (author unidentified) (1987). [Syria](#). [online]. Available: <http://www.country-data.com/cgi-bin/query/r-13489.html>. (February 23, 2006).

Nations (UN) General Assembly in 1992 and 1997, respectively. Although Turkey is not a signatory of these conventions, so not bounded with their terms, her accession negotiations with the European Union (EU) and the twinning process for its *acquis communautaire* have signaled a risk for such an obligation in the upcoming decade, since the EU has adopted the Helsinki Agreement as its Water Framework Directive 2000/60/EC.⁵

The EU has already underlined the water conflicts of Turkey in its progress reports, and many of its suggestions for resolution are against Turkey's traditional argument of territorial sovereignty (Kibaroglu et al., 2006). Therefore, Turkey needs to respond to these developments proactively and fast, as stated by the experts of her State Hydraulic Works [*Devlet Su İşleri* (DSI) in Turkish], in order to protect her interests on the transboundary rivers (Akkaya et al., 2006).

While considering the alternative policies for the upcoming developments, Turkey, the geographically superior riparian (for the Euphrates and Tigris rivers), might have a rationale to resolve her water conflicts in the mid-run, before her bargaining power is weakened by the EU's political pressure. However, Iraq's current state-making process has made a tripartite agreement over the Euphrates-Tigris rivers highly unlikely, before her internal turmoil is settled (Carkoglu and Eder, 2005). Therefore, a Syrian-Turkish resolution on the troubled rivers might be a prospective alternative, since these two countries have already developed a cooperation on water resources in the post-Adana Agreement period, signaling a rapprochement in this area as well.

Finally, the OSU's Transboundary Freshwater Dispute Database, comprising 145 international water treaties worldwide, has presented that 86% of the international water treaties are bilateral (Hamner and Wolf, 1998). An explanation for this figure comes from the negotiation theory: the bilateral negotiations are generally less complex than the multilateral negotiations, since the number of parties, issues, interactions and roles are increased in the latter one (Zartman, 1994). In our case, this evidence is not presented to disregard the role of Iraq in the Syrian-Turkish water conflict, but to consider the possibility of two countries' final agreement before the tripartite conflict is settled. Therefore, a concentration on the Syrian-Turkish water conflict might not be only possible in terms of issues, but also meaningful, when seeking for a resolution opportunity in the rapprochement context.

⁵ Wouters, P. (2001). The legal response to international water scarcity and water conflicts: The un watercourses convention and beyond. [online]. Available: http://www.thewaterpage.com/pat_wouters1.htm#_ftnref56. (May 29, 2006).

1.5 Assumption

This study has grounded its research question on the assumption that, the 1998 Adana Agreement has been the turning point and beginning of rapprochement in the Syrian-Turkish relations. The basis of this assumption is as follows:

Before the Adana Agreement, Turkey had been requesting the end of Syrian support to the terrorist organization PKK [*Partia Karkaren Kürdistan* in Kurdish - Kurdistan Workers' Party], the prosecution of its militants, and extradition of its leader Abdullah Ocalan. Although these demands had been conveyed to Syria through diplomatic channels, no result was achieved until 1998 (Appendix 1). Finally, the protracted fight with the PKK led Turkish President Suleyman Demirel declare at the Turkish Grand National Assembly on October 1, 1998, that Turkey's patience for Syria ended. Few days later, the same statement was repeated by the Commander of the Turkish Land Forces, Major-General Atilla Ates, during his inspection of the troops at the Syrian-Turkish border. The rising tension made President Husnu Mubarek of Egypt and Minister of Foreign Affairs Kemal Kharrazi of Iran visit Ankara and Damascus as mediators, in order to prevent an armed confrontation in the region (Pehlivanoglu, 2004).

The mediators were successful to convince Syria of Turkey's decisiveness, and a security protocol was signed by the Syrian and Turkish delegations in Adana on October 20, 1998 (Pehlivanoglu, 2004). With this agreement, Syria has recognized the PKK as a terrorist organization and agreed not to support it. The Adana Agreement underlined that the PKK and Abdullah Ocalan would not be allowed to enter Syria thereafter, and two countries decided to establish a close and transparent cooperation against terrorism (Appendix 1). Deported from Syria on October 9, 1998, Ocalan was captured by Turkish officers in Nairobi, Kenya on February 15, 1999, after his four month escape through Greece, Russia, and Italy.⁶

Right after the Adana Agreement, the highest government officials of both countries expressed their positive expectations for the future of the Syrian-Turkish relations. For instance, the Syrian Foreign Minister Faruq al-Shara' said in March 2000:

⁶ *Insan Hakları Derneği İstanbul Şubesi* (in Turkish – Human Rights Association, Istanbul Branch) (2003). *Öcalan / Türkiye Aleyhinde Davası* (in Turkish - Ocalan vs. Turkey trial). [online]. Available: <http://www.ihdist.org/ocalan.asp>. (February 18, 2006).

We (Syria and Turkey) are embarking on a new era. I am very optimistic. The relations between Turkey and Syria will be excellent in all fields in the next few years... It can take time, but the beginning has been very good... A very good atmosphere will prevail in these relations. Our cooperation will increase... I do not want to go back and open old wounds, because I believe that this will not benefit either country; on the contrary, it will harm them. Let us open a new page.⁷

The death of President Hafez al-Assad of Syria and his succession by his son Bashar al-Assad in June 2000 took place within this context. A reformist and mild leader, President Bashar al-Assad immediately displayed his determination to construct positive relations with Turkey. In this respect, Turkish Prime Minister Recep Tayyip Erdogan's meeting with President Bashar al-Assad in Damascus, in December 2004, was fruitful. By the end of this visit, two parties agreed to carry the Egyptian natural gas jointly to the Western markets,⁸ facilitate their mutual trade and direct investment, and lift extra taxes on businessmen.⁹

Turkish President Ahmet Necdet Sezer's visit to Syria in April 2005 was especially symbolic to show Turkey's friendly attitude towards this country. This visit took place when Syria was being accused by the United States of America (US) and many other countries of the assassination of Refik Hariri of Lebanon. In fact, the US ambassador to Ankara, Eric Edelman, expressed the US' will to see Turkey within the international front against Syria, few days before Sezer's visit. However, President Sezer both disregarded the US' implications, and refrained from asking Syria publicly to withdraw her troops from Lebanon, in order to avoid a disturbance in the Syrian-Turkish relations.¹⁰

⁷ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Interview by Mehmet Ali Birand in Damascus, Istanbul CNN TURK Television, 9 March 2000.

⁸ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Cairo MENA, 23 December 2004.

⁹ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Istanbul CNN TURK Television, 22 December 2004.

¹⁰ Aral, A. (2005). *Cumhurbaşkanı Sezer Suriye 'de* (in Turkish – President Sezer is in Syria). [online]. Available: <http://voanews.com/turkish/archive/2005-04/2005-04-13-voa7.cfm>. (March 3, 2006).

The existence of rapprochement has been expressed by both parties several other times. For instance, the Syrian Ambassador in Ankara, Khalid Ra'ad, said in June 2005 that, "Since the Adana Agreement, very positive and sincere relations have been displayed by the governments of the two countries (Syria and Turkey). And the most significant indicator of the level of these relations was the visits that Mr. Erdogan and Mr. Sezer made to Syria".¹¹ Later in December 2005, Syrian President Bashar al-Assad mentioned that, "There are no problems in our relationship. This relationship is developing in every area. Despite all the external interference and efforts to thwart it, I am very hopeful for the future of this relationship".¹²

On the other side of the border, the Turkish Directorate General of the Press and Information was announcing the mutual official visits as follows:

Improvement in the Turkish-Syrian relations in recent years has led to mutual visits at the highest official levels and these visits have boosted the relations further. In this respect, Syria's President Bashar al-Assad made the first presidential visit from Syria to Turkey after 57 years, on 6-8 January 2004. After Syria's Prime Minister Naci Otri's visit to our country on 13-15 July 2004, our Prime Minister visited Syria between 22-23 December 2004. Finally, our President, as a response to Syria's President Bashar al-Assad's visit, made an official visit to Syria between 13-14 April 2005.¹³

Positive developments in the Syrian-Turkish relations have been reflected on the trade figures as well. Between 1998 and 2005, their mutual trade volume was increased by 33% and rose as high as USD 823 million, making Turkey one of the biggest trading partners of Syria. At the same period, Turkey's exports to Syria grew by 78%, indicating a huge change when compared to the 17% increase between 1991 and 1998.¹⁴ As Aydin and Aras (2005)

¹¹ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Interview, Istanbul Cumhuriyet, 27 June 2005.

¹² Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Interview by Husnu Mahalli, Istanbul Turkiye'de Aksam, 26 December 2005.

¹³ Office of the Prime Minister, Directorate General of Press and Information (2005). Official Web Site. [online]. Available: <http://www.byegm.gov.tr/>. (March 19-June 6, 2006)

¹⁴ Undersecretariat of the Prime Ministry for Foreign Trade, Turkey (2006). Dış Ticaret İstatistikleri (in Turkish – Foreign Trade Statistics). [online]. Available: <http://www.dtm.gov.tr/ead/istatistik.htm>. (March 15, 2006).

mentioned, the economic interdependence of countries has a central role in creating cooperative relations, rather than conflictive, and the initiation of the EU by France and Germany is one of the most obvious examples to this inclination.

Furthermore, Syria and Turkey signed a Joint Communiqué in 2001 (Appendix 3), and a subsequent protocol in 2002,¹⁵ developing a close cooperation on the water resources as well. Last but not the least, the two countries have developed a joint dam project on the Orontes, which would probably be unthinkable before the rapprochement period, due to the conflict over this river and the status of Hatay (Entry 109, 110-1, Appendix 4).

1.6 Data collection

The International Water Events Database contains 182 incidents for the Euphrates-Tigris-Shatt al-Arab river basin for the period 1966-1999, and 17 incidents for the Orontes river basin for the period 1963-1998. The last dates of entry for these river basins are December 29, 1999, and October 2, 1998, respectively.

In order to create a single database for the Syrian-Turkish conflict over the Euphrates and Orontes rivers, the Euphrates-Tigris-Shatt al-Arab and the Orontes databases were combined by this study, by omitting the incidents that did not take place between Syria and Turkey. For instance, Iraq and Syria studied together the effects of dams in Syria in May 1966. Coded as 1 in the Euphrates-Tigris-Shatt al-Arab database, this incident was omitted from the Syrian-Turkish database. The outcome was 90 incidents for the Syrian-Turkish water conflict for the period January 1983–December 1999.

The following step was the collection of data for the period January 2000-May 2006. From the news databases, and official web sites of both states, the incidents in the Syrian-Turkish water conflict were collected. In accordance with the BAR project, the incidents were defined as the instances of conflict and cooperation within the Euphrates and Orontes rivers; involve Syria and Turkey; and concern freshwater as a scarce or consumable resource.

¹⁵ Kibaroglu, A. (date unidentified). Water for sustainable development in the Euphrates-tigris river basin. [online]. Available: <http://www.gap.metu.edu.tr/html/yayinlar/waterforsustainableAKibaroglu.pdf>. (June 14, 2006).

The data were collected from the following sources:

1. The Open Source Center (OSC):¹⁶ Founded by the US government in 1941 (in the name of Foreign Broadcast Monitoring Service, and later, Foreign Broadcast Information Service), the OSC was originally commissioned to follow Japanese broadcasts during the World War II.¹⁷ Presently, the OSC is collecting the daily broadcasts, official statements, and news from all around the world, and presenting them in English to its members.

With its coverage of prominent Arabic and Turkish news sources, the OSC provided the newspapers, policy statements, and other types of sources relevant to the Syrian-Turkish water conflict, and became a major database for this study. The search results for the period January 1, 2000-May 1, 2006 (inclusive) are presented below.

Table 1: Open Source Center search results

Key Words	Number of Search Results	Number of Relevant Results
Countries : (no entry) Search Text : Euphrates	2,661	9
Countries : (no entry) Search Text : Southeastern Anatolia Project	154	0
Countries : (no entry) Search Text : Southeast Anatolia Project	90	0
Countries : (no entry) Search Text : Orontes	23	0
Countries : Syria, Turkey Search Text : <i>Asi</i>	71	3
Countries : Syria, Turkey Search Text : GAP	2,234	0
Countries : Syria, Turkey Search Text : Water	5,769	6
Countries : Syria, Turkey Search Text : River	1,491	1

¹⁶ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006).

¹⁷ Mercado, S.C. (2001). Open? Source Intelligence From the Airwaves: FBIS Against the Axis, 1941-1945. [online]. Available: http://www.cia.gov/csi/studies/fall_winter_2001/article04.html. (May 5, 2006).

The terms “Euphrates”, “Southeast(ern) Anatolia Project”, “Orontes”, “*Asi*” (in Arabic and Turkish), “GAP”, “water” and “river” were finalized as the key words according to the literature review. The first three words were processed without any restriction with the words “Syria, Turkey”, in order to capture all relevant incidents from all actors, primary or not. On the other hand, such a restriction was necessary for “*Asi*”, “GAP”, “water” and “river”, in order to avoid thousands of irrelevant results.

2. The Directorate General of Press and Information (DGPI), Office of the Prime Minister, Republic of Turkey [*T.C. Başbakanlık Basın-Yayın ve Enformasyon Genel Müdürlüğü*, in Turkish]:¹⁸ Founded as a governmental institution in 1920, the DGPI provides information to the state and public in Turkey.¹⁹

Table 2: Directorate General of Press and Information search results

Key Words (in Turkish)	Number of Search Results	Number of Relevant Results
<i>Firat</i> (Euphrates)	500	0
<i>Asi</i> (Orontes)	500	0
<i>Suriye</i> (Syria)	500	0
<i>Güneydoğu Anadolu Projesi</i> (Southeast Anatolia Project)	208	0

3. The Ministry of Foreign Affairs (MFA),²⁰ and Turkish General Staff (TGS),²¹ Republic of Turkey: The search in the MFA’s and TGS’ web sites covers all press releases, announcements, speeches and other statements for the period stated above.

¹⁸ Office of the Prime Minister, Directorate General of Press and Information (2006). Official Web Site. [online]. Available: <http://www.byegm.gov.tr/>. (March 19-June 6, 2006).

¹⁹ Office of the Prime Minister, Directorate General of Press and Information (2006). About us. [online]. Available: <http://www.byegm.gov.tr/BASIN-YAYIN/functions.htm>. (May 2, 2006).

²⁰ Republic of Turkey, Ministry of Foreign Affairs (2006). Official Web Site. [online]. Available: <http://www.mfa.gov.tr/mfa>. (May 5-June 8).

²¹ Turkish General Staff (2006). Official Web Site. [online]. Available: <http://www.tsk.mil.tr/eng/index.htm>. (May 10-June, 3).

Table 3: Ministry of Foreign Affairs search results

Key Words (in Turkish)	Number of Search Results	Number of Relevant Results
<i>Firat</i> (Euphrates)	0	0
<i>Asi</i> (Orontes)	0	0
<i>Suriye</i> (Syria)	10	0
<i>Su Sorunu</i> (Water Conflict) ²²	0	0
<i>Güneydoğu Anadolu Projesi</i> (Southeast Anatolia Project)	0	0

4. Syrian news sources: The most comprehensive Syrian sources in English were found as the Syria Daily,²³ the Syrian Arab News Agency,²⁴ and the Ministries of Syria.²⁵ However, the first source enabled the archive search only for the dates after 2003. The second source, on the other hand, did not provide any result for “Euphrates”, “Orontes/*Asi*” or “river”, whereas gave 12 and 7 irrelevant hits for “Turkey” and “water”, respectively. The official web sites of the Ministries were not offering search engines.

5. Databases and Other Sources: From the OSU’s Transboundary Freshwater Dispute Database, the full text of the Joint Communiqué, signed by Syria and Turkey on August 23, 2001, was acquired (Appendix 3). This agreement has involved joint training programs and projects to be carried out by the Syrian Ministry of Irrigation and the Turkish GAP Administration. Another water incident was derived from an article,²⁶ indicating an implementation protocol signed by Syria and Turkey in June 2002, as a subsequent step of the 2001 Joint Communiqué. This protocol has created a coordination mechanism to manage the common water resources effectively, in order to enhance socio-economic development in the region.

²² This term is added, because no match came out for the words “Euphrates” and “Orontes”.

²³ Syria Daily (2006). Official Web Site. [online]. Available: <http://www.syriadaily.com/>. (May 6, 2006).

²⁴ Syrian Arab News Agency (2006). Official Web Site. [online]. Available: http://www.sana.org/index_eng.html. (May 7, 2006).

²⁵ Ministry of Economy, Syria (2006). Official Web Site. [online]. Available: http://www.syrecon.org/main_frame.html. (May 11, 2006).

²⁶ Kibaroglu, A. (date unidentified). Water for sustainable development in the Euphrates-tigris river basin. [online]. Available: <http://www.gap.metu.edu.tr/html/yayinlar/waterforsustainableAKibaroglu.pdf>. (June 14, 2006).

1.7 Limitations

Nevertheless, this study suffers from the common deficiencies of the content analysis technique. As Druckman (2005) mentioned, the collection of data is restricted to the available sources, and even if all sources are accessed, the researcher can encounter only the material that was saved, or broadcasted publicly. In addition, this study was unable to hire a second data-analyst to be used for the classification of the thousands of hits from the news databases as relevant or irrelevant, which would otherwise provide this study with a reliability check at that step.

1.8 Syrian-Turkish Water Events Database

After all data were derived from the above sources, and the relevant ones were determined, 21 new entries were made to the Syrian-Turkish Water Events Database for the period January 2000-May 2006 (Appendix 4). Next, these new data were coded according to the 15-point BAR scale (Water Event Intensity Scale; Appendix 2) at the following steps:

1. First of all, this study examined the Water Event Intensity Scale, in order to grasp the rationale behind each category. In addition, the coding of the Nile river basin incidents in the International Water Events Database were studied for the same purpose. The Nile river basin was preferred, because it shares a similar regional context with the Euphrates and the Orontes rivers.
2. The combined Syrian-Turkish database, derived from the OSU's International Water Events Database, was coded again by this study, without looking at the original coding results. Out of 90 entries, 88 were the same as the original ones, indicating a 98% reliability. The two aberrations are given below:

Table 4: Modifications in the OSU’s coding

Event Summary	Date	OSU’s Code	New Code
“A Protocol of the Joint Economic Committee was established between Turkey and Iraq in 1980, which allowed for Joint Technical Committee meetings relating to water resources. Syria began participating in 1983, although meetings have been intermittent at best.” (Entry 1, Appendix 4)	January 1, 1983	4	3
“Turkey says it deals fairly with others over water. Arab states don't share oil, why should Turkey share water? It's not Turks fault if Syria is wasteful with water. Also, Turkey says it will sell Manavgat waters to Israel or anyone else.” (Entry 72, Appendix 4)	May 12, 1996	-1	-2

For Entry 1, this study’s code was preferred over the OSU’s code, because the Protocol for the Joint Technical Committee was regarded by this study as an “Agreement(s) to set up cooperative working groups”, instead of “Legal, cooperative actions between nations that are not treaties; cooperative projects for watershed management, irrigation, poverty-alleviation”, as suggested by the event descriptions of the code 3 and code 4, respectively (Appendix 2). For the second case, the OSU’s code was left as it was.

3. The new 21 data were added to the Syrian-Turkish database, and coded according to the Water Event Intensity Scale, borrowing validity (i.e. definition of the coding categories) from the OSU researchers. As Druckman (2005) argued, a study’s adoption of a scale developed by other researchers indicates an emphasis on reliability, or coding accuracy, rather than validity, which would require the development of original coding categories. This preference was made in order to satisfy the compatibility of the this study’s findings with the OSU’s research.

4. An independent coder²⁷ was used to check the reliability. First, the second coder studied the Water Event Intensity Scale, and the Nile river basin database. Then, uninformed about the aims and preconditions of this study as Druckman (2005) suggested, the second coder coded the entire Syrian-Turkish database, including the new 21 entries. Coding of the second coder was 91% consistent with the results of this study, meaning 10 aberrations out of 111. In neither of these 10 cases the absolute difference of this study’s coding from the second

²⁷ B.A. in International Relations, 2000, Bogazici University.

coder's coding was more than 1. After the re-assessment of each case, no change was found necessary, and 91% reliability was regarded as satisfactory.

5. The new database was organized in columns both as a single BAR code for each incident, like the OSU researchers did, and as the breakdown of these codes as Syrian and/or Turkish, according to their sources.

As a result, an up-to-date Syrian-Turkish Water Events Database was created. The database provides the direction and intensity of the 111 Syrian-Turkish water incidents for the period January 1983-May 2006 (Appendix 4).

CHAPTER 2

Global, Regional, and Historical Background

2.1 Introduction

The scarcity of water resources and protracted water conflicts have led many scholars and diplomats to discuss the risk of water wars (Homer-Dixon, 1991; Gleick, 1993; O'Hanlon, 2001). The main issue in this literature has been the linkage between the population growth, political instability, vital and limited resources, and conflict (Homer-Dixon, 1991; Gurr, 1985; Yoffe et al., 2004). The former Secretary-General of the United Nations (UN), Boutros Boutros-Ghali, for instance, has been over quoted for his statement in 1985, "the next war in the Middle East will be fought over water, not politics", when he was the foreign minister of Egypt (Simon, 1998, p. 47). Later, his successor Kofi Annan made a similar comment by saying, "fierce competition for freshwater may well become a source of conflict and wars in the future" (Postel and Wolf, 2001, p. 3). Before proceeding with the components of the Syrian-Turkish water conflict, this chapter presents the general background, in order to place the Syrian-Turkish case at its global, regional, and historical context.

2.2 Water question in the world

In the upcoming decades, population growth and its uneven distribution worldwide are expected to have dramatic effects on the demand for food and freshwater, especially in the less developed regions. The world's population in 2002 was estimated as 6,225 million by the

United Nations (UN) and its forecast for 2050 is 9,076 million; only 14% live in more developed regions, whereas 19% live in the least developed areas.²⁸

Table 5: Estimate of world's population and annual rate of increase, 2002²⁹

Region	Population	Percentage	Rate of Increase
Africa	832 million	13%	2,2
Latin America and Caribbean	535 million	8%	1,4
Northern America	322 million	5%	0,1
Asia	3.776 million	61%	1,3
Europe	727 million	12%	-0,1
Oceania	32 million	1%	1,2
World Total	6.225 million	100%	1,2

Freshwater is needed for domestic consumption (drinking, bathing, and so on), irrigation, and industry, which make up 6%, 74% and 20% of total freshwater usage, respectively.³⁰ Although the proper amount of freshwater for domestic consumption may vary from society to society, most of the experts suggest a daily supply of at least 50 liters per person (an annual supply of 18.25 m³ per person) in order to match the basic requirements. However, almost a billion people were unable to obtain this amount as early as 1990 (The World Commission on Dams, 2000).

Homer-Dixon (1994) defined the term environmental scarcity as environmental change (human induced), population growth, and unequal social distribution of resources causing scarcity of renewable sources, such as freshwater. In fact, the UN's projection for the number of people to face water scarcity by 2050 is 2 billion in 48 countries at least, whereas it may be as high as 7 billion in 60 countries.³¹ In addition to population and consumption

²⁸ UN Department of Economic and Social Affairs (2005). Demographics. [online]. Available: <http://www.un.org/esa/sustdev/sdissues/demographics/demographics.htm>. (March 26, 2006).

UN Population Division (2005). World population prospects. [online]. Available: <http://esa.un.org/unpp/>. (March 26, 2006).

²⁹ UN Statistics Division (2006). Demographic and social statistics. [online]. Available: <http://unstats.un.org/unsd/demographic/products/dyb/DYB2002/Table01.xls>. (March 26, 2006)

³⁰ UN Department of Economic and Social Affairs (2005). Documents. [online]. Available: <http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter18.htm>. (March 26, 2006).

³¹ UN (2004). 2003 international year of freshwater. [online]. Available: http://www.wateryear2003.org/en/ev.php-URL_ID=3697&URL_DO=DO_TOPIC&URL_SECTION=201.html. (March 27, 2006)

growth, the UN has pointed out other pressures of freshwater ecosystems as global warming (i.e. causes more evaporation), infrastructure development (dams, dikes, and so on), land conversion (i.e. alters runoff patterns), over harvesting, and release of pollutants (UNESCO-WWAP, 2003).

Freshwater is available from rivers, lakes, and reservoirs (0.3% of all freshwater), groundwater (30%), and remote arctic/mountainous ice sheets (around 70%).³² Considering the fact that no living thing can survive without water and only 2.5% of the world's water is fresh, anyone might predict an increasing competition for this vital resource, in parallel to population growth and economic development. Ironically enough, the word "rivalry" derives from Latin "*rivalis* or *rivus*", meaning someone who share the same river (Simon, 1998; Biswas, 1999a).

A major source of freshwater, groundwater is recharged by rivers, streams and precipitation, meaning that arid and semi-arid regions also lack a sufficient amount of this source as well (Haddad et al., 2000). On the other hand, groundwater is used excessively in several countries with motorized pumps, giving irreversible harm to its long-term viability (Grey and Sadoff, 2006). Like international rivers, several groundwater systems are beyond the borders of individual states and need to be managed in a cooperative manner (Jarvis et al., 2005).

Aside from the distant and often inaccessible frozen water sheets, the second most important freshwater resources are rivers, lakes, and reservoirs. Of various sizes, the number of lakes around the world is millions. A reservoir, on the other hand, is a human-made lake constructed as a dam, mainly to supply freshwater and/or energy. Currently, there are 45,000 large dams, providing freshwater for 30-40% of irrigated land and generating 19% of electricity worldwide (The World Commission on Dams, 2000).

Finally, covering 45.3% of the earth's land surface (except for Antarctica), 261 international rivers pass through a total of 145 countries. Among these countries, twenty-one are completely within international basins and nineteen basins are shared by at least five countries (Wolf et al. 1999).

³² UN (2004). 2003 international year of freshwater. [online]. Available: http://www.wateryear2003.org/en/ev.php-URL_ID=1462&URL_DO=DO_TOPIC&URL_SECTION=201.html. (March 27, 2006).

Table 6: Number of international river basins³³

Continent	Number of Int. Basins
Africa	60
Asia	53
Europe	71
North America	39
South America	38
Total	261

Briefly, the disparity between the water supply and the demand for international rivers, combined with the uncompromising policies of some riparian states, lack of a binding legal framework, and conflict management institutions are indicated as the major reasons behind the outbreak of water conflicts (Klare, 2001; Giordano and Wolf, 2003).

The problem with water security is not only the likelihood of violent conflicts, but also the potential of water to be the victim of human-induced ecological disasters (Dimitrov, 2002). Dimitrov has indicated that different aspects of water security, namely food supply, environment, risk of violence, and economic growth are not compatible goals, making the international water conflicts as win-lose situations. On the other hand, Uitto and Wolf (2002) have cited Munther Haddadin and Undala Alam to underline the potential of water to be a source of cooperation as well.

The Indian-Pakistani cooperation on water, marked by the Indus Waters Treaty in 1960, has been a serious evidence against the water wars rationale. Despite their water scarcity, Kashmir dispute, and two wars, the two riparians have achieved to keep their water agreement alive. Alam (2002) indicated the possible reasons for this success as the international financial assistance for joint management, and the rational choice to secure long-term availability of water. On the other hand, the two countries' cooperation on water has not had a positive impact on their overall relations.

In order to follow the global trends in conflict and cooperation on water, Hamner and Wolf (1998) have collected 145 international water treaties worldwide in the Transboundary Freshwater Dispute Database. An overview of the database has shown that 86% of the treaties were bilateral. Hamner and Wolf have argued that the dominance of bilateral agreements might have arisen from the facts that most of the international river basins are shared by two riparian states, and reaching a common ground is more difficult in multilateral negotiations than in bilateral ones.

³³ Wolf et al. 1999.

2.3 Water question in the Middle East

Hosting most of the world's poorest countries in terms of water,³⁴ the Middle East has been a region for potential water conflicts. In the second half of the 20th century and onwards, the water question has become an essential part of the Middle East peace process, as well as the relations between the riparian states of the Nile, Euphrates, Tigris, and other international rivers.

Table 7: Riparian states of the international rivers in the Middle East³⁵

Basin	Nile	Euphrates-Tigris Shatt al Arab ³⁶	Jordan	Orontes	Nahr El Kebir	Wadi al Izziyah
Area km ²	3,038,100	793,600	42,800	18,200	2,000	580
Riparian	Sudan	Turkey	Jordan	Lebanon	Syria	Lebanon
Riparian	Ethiopia	Syria	Israel	Syria	Turkey	Israel
Riparian	Egypt	Iraq	Syria	Turkey		
Riparian	Uganda	Iran	West Bank			
Riparian	Tanzania, UR	Jordan	Egypt			
Riparian	Kenya	Saudi Arabia	Lebanon			
Riparian	Congo, DR					
Riparian	Rwanda					
Riparian	Burundi					
Riparian	Eritrea					

Beuomont (2002) has defined the borders of the Middle East as North Africa, Sudan, Ethiopia, the Arabian peninsula and south-western Asia countries, including Turkey and Afghanistan. He has pointed out the major factors behind the rapid change in the region in the 20th century as steep population growth and economic development, both of which have put heavy pressure on the existing water resources.

³⁴ UN (2004). 2003 international year of freshwater. [online]. Available: http://www.wateryear2003.org/en/ev.php-URL_ID=3697&URL_DO=DO_TOPIC&URL_SECTION=201.html. (March 27, 2006). Kuwait 10 m³ per capita, Gaza Strip (though not a state) 52 m³ per capita, United Arab Emirates 58 m³ per capita, Qatar 94 m³ per capita, Libyan Arab Jamahiriya 113 m³ per capita, Saudi Arabia 118 m³ per capita. Other poorest countries in terms of water are Bahamas, Maldives, Malta, and Singapore.

³⁵ Wolf et al. 1999

³⁶ Iran, Iraq and Saudi Arabia are considered within the Euphrates-Tigris-Shatt al-Arab river basin, due to topographical, rather than hydrological, reasons (Wolf et al., 1999).

Although a broad categorization, the policy literature can be divided into the pessimistic and the optimistic estimates on the likelihood of water conflicts to turn into major scale wars in the Middle East. Both journalists, Bulloch and Darwish have named their book as *Water Wars: Coming Conflicts in the Middle East*, which examined this problem in the MENA region (Middle East and North Africa). In their concluding remarks, they stated that, the water problem in the MENA region would be the only reason of conflicts in the future, whether the surface-level issues were borders, autonomy, and so on, and the water wars were on the horizon (Bulloch and Darwish, 1994).

Gleick (1993) has pointed out four characteristics that make water as a potential source of international conflict: level of water scarcity, multiple number of riparian states, relative power of the parties, and availability of alternative freshwater sources. He commented that these conditions were all exist unfavorably in the Middle East, and led to a strategic rivalry between the riparian states.

In contrast to the pessimistic scenarios given above, a developing literature has illustrated the likelihood of water conflicts to be resolved or managed peacefully. Coordinated Prof. Aaron Wolf, a group of scholars at Oregon State University (OSU) have conducted a global-scale analysis of water conflicts. Their findings have demonstrated that, "...over water, historically countries have exhibited greater cooperation than violent conflict" (Yoffe et al., 2001, p. 93). In addition, they showed that many of the so-called indicators of water conflict, such as the scarcity of water, and construction of large water development projects, proved to be statistically insignificant worldwide. Even the seemingly more relevant factors such as the GDP (Gross Domestic Product) per capita and population density could explain only a small percentage of the data (Yoffe et al., 2001).

However, the OSU's research also underlined that the Middle Eastern water conflicts deviated significantly from the rest of the world's: three of the world's four river basins that are prone to higher degrees of water conflict are located in the Middle East.³⁷ Moreover, the Middle East appeared to be the only region where the riparian countries' relations on water are worse than their overall diplomatic relations with each other (Yoffe et al., 2001).

Yoffe et al.'s findings were supported by Alcamo and Henrichs' (2002) and Stahl's (2005) studies. Alcamo and Henrichs have indicated that the Middle East is one of the most critical regions for water stress, an indicator negatively correlated with water availability.

³⁷ The Jordan, Nile and Euphrates-Tigris river basins. The fourth is the Aral Sea in the Central Asia.

Together with the Central Asia, Stahl has pointed out the Middle East as the most conflictive region on water, since the population density has made this resource a focus of international concern at this dry climate.

The population figures of the Middle East are not encouraging either. Charrier et al. (1998) indicated that the MENA region hosted 5% of the world's population, but only 1% of the freshwater resources. In parallel to the sharp population growth (3% annually) in the region,³⁸ available freshwater per capita has fallen by 62% in the last 40 years, and is expected to decrease further by 50% in the next 30 years. Similar to many other assessments, Charrier et al. (1998) stated that, the population pressures, unsustainable water withdrawals, continuing territorial dispute and growing nationalism, environmental degradation, and water scarcity are the major factors to turn water deficiencies into water conflicts in the MENA region.

Yetim (2003) has underlined the political calculations of the riparian states as another source of water conflicts in the Middle East. Although the basin-wide management of watercourses is the most rational option for efficient use, the riparians have generally followed confrontational tactics. Yetim gave Turkey as an example to the hegemonic upstream states, due to her policy of postponing a final resolution before the completion of her GAP. Since Turkey is the geographically and militarily more advantageous riparian with respect to Syria and Iraq on the Euphrates-Tigris rivers, she has preferred the status-quo. On the other hand, Turkey has been unable to impose her terms on the lower riparian states, which have perceived the potential cost of dependency for water on another country unbearable.

Harris (2002) has gone beyond the overstated negative correlation between the progress in GAP and the quality-quantity of the Euphrates-Tigris rivers, as a potential source of war. She has argued that "any significant landscape/waterscape change is likely to have important implications for conflict geographies" (p. 743). Harris has defined the term conflict geography as a specific place connected to inter/national, historical, ecological and other conflicts. In this respect, the conflict over the Euphrates-Tigris rivers has been the byproduct of not only the claims on scarce resources, but also of the nationalist discourses, the Kurdish question, the Gulf War (Kurdish refugees, etc.), and other unfavorable conditions in the Middle East.

³⁸ Center for Educational Technologies (2002). Middle east. [online]. Available: <http://www.cet.edu/earthinfo/meast/MEeco.html>. (April 12, 2006).

Harris has also introduced the term conflicts of sustainability to refer to different and conflicting approaches to sustainability of a resource. To be more precise, the riparians might have different methods to deal with sustainability of scarce water resources, in the areas of water use practices or selection of crops. Her approach extends the limit of this water conflict from the Iraqi-Syrian-Turkish relations, to the outbreak of local disputes related to gender, the power dynamics of tribes, and the ethnic problems, fueled after the initiation of GAP and changed the regional production patterns.

According to Selby (2005), pessimistic forecasts for the future of interstate water conflicts have been exaggerated, due to the low marginal significance of water in the political economy of the Middle East. Arguing against Falkenmark's analogy, who indicated the steep population growth and limited water resources as antecedents of water conflicts, Selby has underlined the determining factors as the political economy of development, and state formation in the Middle East. As the Middle Eastern states have become more dependent on oil revenues and foreign capital, the relative importance of agriculture and rural regions in the domestic politics has fallen. In this respect, the nationalist Turkish state has considered GAP mainly for its potential to ease the tension in the pre-dominantly Kurdish regions.

Freeman (2001) has stated that the Middle Eastern states tend to compensate for their scarce water resources with agricultural imports. Import of water-intensive commodities (virtual water, and agricultural products) are options for water-scarce countries. It should be noted that Freeman's argument is valid for rich, oil-producing countries, but not for Syria. As Morrissette and Borer (2004) have argued, importer countries must have the economic or political capacity to acquire the necessary virtual water, in order to avoid intense water conflicts.

Freeman (2001) has referred to Homer-Dixon's explanation for the rarity of water wars, by listing the conditions that must simultaneously be met for their (wars') occurrence: the lower riparians' high dependency on water supply; the upstream country's control on the flow of water; historical rivalry; and finally, military superiority of the lower riparian states. In the Euphrates-Tigris basin, the first three conditions are met, but Turkey's superior military capacity, and her membership in the North Atlantic Treaty Organization (NATO) might have been a reason for Iraq and Syria's avoidance of a water war. As a comparison, the manpower (i.e. males age 18/20-49, depending on the conscription regulations) for military service is 14 million in Turkey, which is much more than the total of that in Iraq (5 million) and Syria (3.5

million).³⁹ Since Iraq has been weakened militarily after the 2003 US-led operation, a water war in the Euphrates-Tigris basin is even less likely now, according to this approach.

Selby (2005) has also given the example of the 2003 US-led operation in Iraq, which has seemingly no relevance to the water issue, as a disproof of the forecasts claiming that the next war in the Middle East would be on water. In addition, Selby mentioned the Israeli arguments in the Oslo peace process, which diminished water to a secondary issue, after the status of Jerusalem and refugees.

Several scholars still underline water as a potential source of violent conflict in the Middle East. Haddadin (2002) has pointed out water question as one of the most crucial issues of the Middle East peace process and the Israeli-Jordanian relations. These two countries signed a peace treaty in October 1994, with an agreement on the allocation of the Jordan and Yarmuk rivers. However, this agreement was not implemented fully, due to the drought years and unwillingness of the parties. The 1997 Israeli-Jordanian agreement on water produced nothing for the same reasons (Pamukcu, 2003).

The water problem of Syria is not only limited to the Euphrates, Tigris and Orontes rivers. The upper riparian with respect to Israel on the Yarmuk river basin, Syria's attempt to divert water to its farmlands was regarded by Pamukcu (2003) as the main reason of the Six-Day War and Israeli occupation of the Golan Heights in 1967. The end of Israeli occupation in the Golan Heights and West Bank is unlikely, without a final agreement on the flow of water. Lowi (1993) has argued that the significance of water for Israel also stems from the Zionist's ideology of agriculture, as a way of honest living.

The Hasbani river is another example for water conflicts in the region. Constituting 10% of Israel's water, this river caused a crisis between Israel and Lebanon, the upstream country, in September 2002, when Lebanon built a small pumping-station (Pamukcu, 2003). Lebanon's plans to utilize the Hasbani and Wazzani rivers have been regarded as *casus belli* by Israel (Pamukcu, 2003). The Palestinian guerilla activity and Israeli occupation along the Israeli-Lebanon border have been the other reasons of under-utilization of water resources by Lebanon (Amery, 2002).

Thus, there are negligible conditions for the persistence of water conflicts in the Middle East in the foreseeable future. Medzini and Wolf (2004) have pointed out the vagueness of international water laws as another source of this deadlock. While some

³⁹ Central Intelligence Agency (2006). The world fact book. [online]. Available: <http://www.cia.gov/cia/publications/factbook/>. (May 3, 2006).

peaceful, cooperative options have been developed, such as the import of virtual water, they may not resolve the water conflicts permanently. As Allan (1997) argued, the problem with water scarcity does not only stem from its potential to cause wars, but also from its social, economic, and environmental drawbacks, which can be addressed by basin-wide cooperation of the riparian states.

2.4 International law on watercourses

International law has defined three types of rivers: national rivers born and end within the same country; border rivers define the national borders between two or more countries, and their division lines generally pass through the middle points. The Euphrates, Tigris and Orontes rivers are in the third category, international/transboundary rivers, passing through two or more countries (Zehir, 2003).

Two extreme approaches have dominated the international legal framework on watercourses in the first half of the 20th century: the absolute territorial sovereignty (Harmon Doctrine) and the absolute territorial integrity. The first approach allows the upper riparian states, like Turkey on the Euphrates river, to manage their international rivers without consulting the lower riparians. On the other hand, the absolute integrity principle recognizes the equal rights of lower riparians on international/transboundary rivers (Kiser, 2000).

Other approaches, such as the acquired rights of downstream riparians based on their ancestral irrigations, are in the middle of these extreme approaches (Ankara Paper 8, 2003). Kaya (2001) has underscored the limited territorial sovereignty-integrity principle as a compromise, since it allows the riparian states to utilize their water resources to the extent that they do not harm the reasonable utilization of other riparian states.

The lack of a legal framework for international watercourses has been a concern for more than a century. The Institute of International Law (IIL) encouraged the joint management of international watercourses for purposes other than navigation in the 1911 Madrid Declaration on the International Regulation. In this initiative, the aim was to limit the unilateral utilization by the upper riparian countries. Based on this objective, the Helsinki Rules of 1966 on the Uses of the Waters of International Rivers (rejected by Turkey) brought the principle of equitable utilization and protection of common water resources by all riparian states (UNEP, 2002; Lupu, 2002).

The UN International Law Commission (ILC) began to prepare a legal framework for the non-navigational uses of international watercourses in 1970. Superseding the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes ([Helsinki Agreement](#)),⁴⁰ the Convention on the Law of the Non-Navigational Uses of International Watercourses was finally adopted in 1997 by the UN General Assembly.⁴¹ The 1997 Convention has set the basic principles as equitable and reasonable utilization, and participation in the management of the international watercourses by the watercourse states (i.e. riparian countries and regional economic integration organizations in that international watercourse basin) (UNEP, 2002; McCaffrey 1995).

According to the 1997 Convention, the criteria for equitable and reasonable utilization would be discussed and determined by all watercourse states, considering their own social, economic, and environmental conditions. This cooperation would be implemented through the exchange of data, and joint management mechanisms, based on the principles of equal sovereignty and territorial integrity. In case of a disagreement, the vital human needs and the principle of causing no harm would be the bases of the final decision of the watercourse states. If the dispute was not resolved by the parties themselves within a certain time, the Convention suggested further negotiation, mediation/facilitation by an impartial third party, and a fact-finding commission to help them. The last resort to reach a binding settlement would be an arbitral tribunal, subject to the International Court of Justice.

The 1997 Convention was signed by 103 countries with 3 negative votes: Burundi, China and Turkey –all upper riparian states. Turkey and China objected to the Convention’s mandatory dispute settlement mechanism and approach that favors downstream states. In addition, Turkey demanded “the primacy of the principle of equitable reasonable utilization over the obligation of not causing significant harm.”⁴² Similarly, China has rejected to participate any joint management initiative, such as the Mekong River Commission. Liebman

⁴⁰ UN (2001). [Helsinki agreement](#). [online]. Available: <http://www.thewaterpage.com/helsinki.htm>. (April 17, 2006).

⁴¹ UN (2001). [Convention on the law of the non-navigational uses of international watercourses](#). [online]. Available: http://www.thewaterpage.com/UN_Convention_97.html. (April 16, 2006).

⁴² UN (2001). [United nations general assembly press release](#). [online]. Available: <http://www.thewaterpage.com/UNPressWater.htm>. (April 16, 2006).

(2005) described this opposition as typical for the powerful upper riparian states, valuing power politics over cooperation.

The voting patterns of the Middle Eastern states for the 1997 Convention gave valuable insights about their positions in water conflicts. The members of the Arab League, which have intervened in the conflict over the Euphrates-Tigris rivers several times, accepted the 1997 Convention with majority, without any negative vote. This position is consistent with the Arab League’s traditional policy, which opposes Turkey’s potential to use water as a tool in the Middle Eastern power politics (Zehir, 2003).

Table 8: Voting Patterns of the MENA and Arab League⁴³ states for the 1997 Convention⁴⁴

In Favor	Against	Abstaining	Absent
Algeria	Turkey	Egypt	Comoros
Bahrain		Israel	Lebanon
Djibouti			Mauritania
Iran			
Jordan			
Kuwait			
Libya			
Morocco			
Oman			
Qatar			
Saudi Arabia			
Sudan			
Syria			
Tunisia			
United Arab Emirates			
Yemen			

Giving the example of the nuclear non-proliferation treaty negotiations, Biswas (1999a) underscored the strength of the national interests for the non-signatory states, which disregarded the moral pressure to sign the ‘integrative’ 1997 Convention. On the other hand,

⁴³ BBC News (2006). Profile: Arab league. [online]. Available: http://news.bbc.co.uk/1/hi/world/middle_east/country_profiles/1550797.stm . (April 16, 2006). The official web site of the League of Arab States (<http://www.arableagueonline.org/las/index.jsp>) was not cited, because it was under construction during the preparation of this study.

⁴⁴ UN (2001). United nations general assembly press release. [online]. Available: <http://www.thewaterpage.com/UNPressWater.htm> April 17, 2006). Iraq and Somalia were not involved in the voting.

Biswas criticized the 1997 Convention for its vagueness on the settlement of disputes, providing only a general framework for negotiations.

The 1997 Convention has been ineffective from the beginning, due to the opposition of Turkey and China (constructing the Three Gorges Dam on the Yangtze river), which are two key actors in major water conflicts. Consequently, the 1997 Convention fell short of the necessary number of ratifications to be put into force, but it has still been used by the downstream riparian states as a source of legitimacy for their arguments (Conca et al, 2003). It should be noted that some of the absentees in the voting were downstream states. As Biswas (1999b) argued, not only the upstream, but also some downstream states prefer to resolve their water conflicts through bi/multilateral agreements, rather than arbitration, which would constrain their flexibility.

2.5 Legal framework for the Euphrates, Tigris and Orontes rivers

The legal framework for the rivers shared by Iraq, Syria and Turkey was prematurely defined by the Treaty of Bouillon-Kemal (between France and Turkey) in 1921, the Treaty of Lausanne (between Turkey and the Allied powers of the World War I) in 1923, the Treaty of Friendship and Good Neighborliness (between France and Turkey) in 1926, the Treaty of Aleppo (between Syria and Turkey) in 1930, and the Treaty of Friendship and Good Neighborliness (between Iraq and Turkey) in 1946. These treaties were neither comprehensive, nor detailed enough to regulate the flow of the Euphrates and Orontes (and Tigris) rivers, and respond to the current problems. For instance, the 1946 Treaty of Iraq and Turkey was only about the control of flood originating in Turkey and flowing into the Iraqi soil, but did not put any restriction on the construction of waterworks (Kiran, 2005).

Turkey has defined the Euphrates and Tigris rivers as transboundary waters, and rejected any kind of equal sovereignty over them. This party's view was based on the Harmon Doctrine, formed in 1895, when the conflict on the Rio Grande river arose between Mexico and the US. The upper riparian, the US claimed that it had full sovereignty on her part of the Rio Grande river, and would solely decide the allocation of water flowing to Mexico. Nevertheless, the US has adjusted her strict position beginning from 1944, and left completely in 1955, due to her lower riparian position on the Columbia river with respect to Canada (Kiran, 2005). To note, the US is a signatory of the 1997 Convention.

On the contrary, Iraq and Syria have defined the Euphrates and Tigris as international rivers, and demanded an equitable, if not equal, division of their water (Pehlivanoglu, 2004). However, Syria has not defined the Orontes as an international river, since it ends in the Turkish province of Hatay, the status of which has not been officially recognized by Syria.

There is a working agreement on the Orontes river between Syria and Lebanon, the upper riparian state. Signed in 1972 and put into effect in 1994, this agreement has allocated 323 m³/sec of the Orontes waters at the Lebanon-Syrian border to Syria, leaving 80 m³/sec to Lebanon (Zehir, 2003). On the other hand, Syria built two dams and began two more on this river, meaning an aberration from the 1939 Syrian-Turkish bilateral protocol, that required an equal division of the Orontes waters (Pehlivanoglu, 2004).

The first attempt to reach a tripartite agreement on water rights was initiated in 1965, but failed due to Syria's negligence of the Iraqi opposition to the construction of Tabqa dam. During the filling of the Tabqa dam (Lake Assad) by Syria in 1975, Iraq's share of the Euphrates river dropped by 67%, causing a huge crop failure (Lupu, 2002). This period also witnessed the initiation of big dams in Iraq, which opened the Dokan, Derbendi and Hamrin dams in 1958, 1962 and 1981, respectively, all constructed on the Euphrates river.

In 1980, Iraq and Turkey formed the Joint Technical Committee (JTC) to search for an acceptable allocation of water, but Syria did not participate until 1983. Throughout the meetings, the parties could not overcome their disagreements on the status of these rivers and other basic issues, and the talks were halted by the 1990-91 Gulf War (Gruen 2000). During the meetings, Iraq claimed her acquired and historical rights, stemming from the existing water installations and ancestral irrigation systems. This party rejected the Turkish suggestion to consider the Euphrates-Tigris rivers as a single basin. On the other hand, Syria defined these rivers as international watercourses, from which riparian states would benefit on the basis of their declared quotas (Zehir, 2003).

The 1987 Protocol for Economic Cooperation has been the only significant document between Syria and Turkey on the regulation of the Euphrates waters. With this protocol, Turkey has guaranteed to release an average of 500 m³/sec water Euphrates from the Turkish-Syrian border, until a final resolution is reached (Versan, 1993). Since then, Turkey has kept her commitment to supply the agreed average amount of water, except for the short periods of filling the new dams. For instance, the Euphrates river fell under 100 m³/sec at its source in 1991, but Turkey continued to supply 500 m³/sec from her reservoirs (Alacakaptan, 1993).

Another bilateral agreement took place between Iraq and Syria. Signed in 1990, this protocol divided their part of the Euphrates waters (from the Syrian-Turkish border) as 58%

and 42%, respectively (Altınbilek, 2004). Before the agreement, Syria was employing the Harmon Doctrine against her lower riparian Iraq, while defending the absolute integrity principle against Turkey (Lupu, 2002).

Homer-Dixon (1991) has defined the Iraqi-Syrian-Turkish water conflict as an example of simple scarcity conflicts, in which parties have perceived their confrontation as a zero-sum game, within a realist approach to international relations. In the end, the arguments on water-rights are based on zero-sum thinking, whereas arguments on water-needs might make equitable allocations more likely in the arid regions like the Middle East (UNEP, 2002). As Wolf (1996) argued, in the settled water conflicts of the Middle East, the basis of negotiations was needs, not rights of the riparian states. For instance, in the 1959 Egyptian-Sudanese Agreement, the rationale of the allocation of the Nile waters were the population and irrigation infrastructures of the parties. However, Wolf also noted that this agreement was between only two of the Nile's nine riparian countries, so did not mean a basin-wide resolution. It should also be kept in mind that the downstream country, Egypt, is the militarily superior party in this case, which is just the opposite of the situation in the Euphrates (and Tigris) case, affecting the bargaining power significantly.

2.6 Historical background

After the collapse of the Ottoman Empire at the end of the World War I, several states were founded on her former territory. Inheriting the bureaucratic and territorial nucleus of the Empire, the Republic of Turkey was founded in 1923, and the Syrian Arab Republic has become its independent southern neighbor in 1946, after 28 years of French mandate.

The Syrian-Turkish relations have been problematic from the beginning, due to the status of Hatay (Alexandretta). The province of Hatay became a part of the French mandate in Syria after the World War I, and joined to Turkey after a plebiscite in 1939 (Gruen, 2000). This result was not accepted by Syria, claiming that the French administration disregarded the Arab majority in favor of Turkey, whose support was needed against the Nazi Germany.⁴⁵ For this reason, Syria was showing Hatay on maps as a part of her territory until the rapprochement period, causing a serious tension with Turkey (Pipes, 1996). Still, Syria has not recognized the status of Hatay officially.

⁴⁵ US Library of Congress (date unidentified). The middle east. [online]. Available: <http://countrystudies.us/turkey/88.htm>. (June 24, 2006).

Aras and Koni (2002) have sought for the underlying causes of the rivalry between Syria and Turkey in the mindset of the Turkish state, constructed in the early Republican era. The main aim of the state was to create a modern nation, which cut-off her ties with the imperial Ottoman past. However, the shadow of the Ottoman heritage and the early religious/Kurdish rebellions led the young state to take a more nationalistic stance based on Turkishness. Aras and Koni also mentioned the link between the nationalistic states, such as Turkey, and their exclusionist discourses, or tendency to form enemy images. The Syrian case was similar, in the sense that the Baath regime under President Hafiz al-Assad needed its own enemies, and the conflict over Hatay was aspiring the nationalistic sentiments.

Jung (2005) argued that nationalism and secularism were among the core principles of the early Turkish Republic, and the state elite regarded the Ottoman institutions and political symbols, such as the Caliphate, as barriers against their nation-building project. In this respect, the secular West became their model, whereas Islamic Middle East was seen as the region of backwardness. As Aras and Koni (2002) argued, the Turkish state took a cautious position on the Middle East in the construction of its identity. A famous motto was “Arabs stabbing Turks in the back by cooperating with the British and French during the World War I” (p. 50). The outcome of this ‘betrayal’ was the loss of the Muslim lands to the foreign powers, who in turn divided the Middle East artificially, and also created the Israeli-Palestinian conflict.

Aras and Köni (2002) have also stressed the mutual suspicion and imaginary threshold in the Arab-Turkish relations, which caused Syria and Turkey to perceive each other’s attempts, whether benevolent, as dishonest initiatives, tactical maneuverings, and lies. Turkey’s partnership with Israel has deepened the suspicion in the Arab world, and GAP has been seen as a potential tool to be used against Arabs by this alliance. Despite this suspicion, Turkey did not use water as a threat against Iraq during the 1990-91 Gulf War, although this alternative was discussed at some meetings in the UN (Gleick in Parker ed., 1997).

The filling of the Turkey’s massive Atatürk Dam’s reservoir represented a typical example for the mistrust between the riparians of the Euphrates river. Turkey informed Iraq and Syria about the filling of the reservoir in November 1989, but the lower riparians accused her of violating the international law and using water as a political weapon, when the actual filling took place between January and February 1990 (for 30 days) by shutting off the flow of this river (Altınbilek, 1997). The tension led to tripartite meetings, cut off soon by the Iraqi invasion of Kuwait in August 1990. The meetings revived in September 1992, but broke up once again, when the Iraqi request for an increase in the flow of the Euphrates river from the Turkish border from 500 m³/sec to 700 m³/sec was rejected by Turkey (Wolf, 1996).

Allouche (2005) has underscored the limitations of the water-scarcity explanation for the outbreak of transboundary water conflicts, and suggested the water nationalism thesis. According to him, the nation making and state building experiences of the riparians have become the reason of their water conflicts. Since these states have perceived their water resources as a part of their national territories, any kind of cooperation or shared management would mean a setback on their hard-won sovereignty. In this case, especially Turkey's struggle for independence and preservation of her territorial integrity in the post-World War I era might have been the main reason for her obstinate position on the transboundary rivers.

According to Jung (2005), Turkey's negative image among Arabs stemmed from the Middle Eastern political structure in the 20th century. He has reflected his personal observations in the region and pointed out the ignorance of the Turkish history and culture by the Arab intelligentsia. Perceived as a 'Trojan-horse' of the US in the region, Turkey has lost her potential to act as a mediator or a model country for Arabs. Jung mentioned an old Arabic saying 'the terrible Turk', which depicted the Ottoman Empire as the oppressor of Arab nationalism, intensified during the Turkification and centralization policies of the Young Turks in the late Ottoman period.

Furthermore, the Cold War polarization created another rift between Syria and Turkey. Soon after the end of the World War II, the Soviet Union's claims on the Marmara straits led Turkey to approach the Western bloc and enter the NATO (Pehlivanoglu, 2004). On the contrary, Syria became an important ally of the Soviet Union and received significant military and economic aid during this period (Long and Reich eds., 2002).

As Orhan (2003) argued, Syria was unable to establish good relations with the US and Turkey, both accusing Syria of giving support to terrorism, after the fall of the Soviet Union. Consequently, the 1990-91 Gulf War has marked the emergence of the US as the sole global hegemon. Citing Anderson and Gramsci, Fouskas (2003) defined the new US-hegemonic international politics as an "hegemony through force, rather than consent" (p. 117). In this new context, Turkey was under a contradictory pressure from her predominantly Muslim population, and strategic partner (the US) with regards to her relations with the 'rouge states', Iran, Iraq, and Syria.

Bengio and Ozcan (2001) mentioned that, Arabs, although not acting together all the time, were uneasy about Turkey, not only because of the Ottoman past, but also of Turkey's recognition of the State of Israel in 1949-1950, and indifferent attitude towards the Palestinian conflict. The authors linked the Arab rejection of Turkish Prime Minister Ozal's peace-pipeline project in 1986, a plan to sell 2.2 billion m³ water of Turkey's Seyhan-Ceyhan rivers

by shipment and pipelines through the Mediterranean to the Middle East, to their suspicion of her underlying aims. These aims could be the creation of Arab dependence on Turkey for water, and also transfer water to Israel. As Aral (2001) argued, the other reasons for their rejection were the high cost of pipeline and its route through unstable regions.

Bengio and Ozcan (2001) underlined the negative Arab reaction to the Military Training and Cooperation Agreement of Israel and Turkey, signed on February 24, 1996, as another basis of their suspicion to Turkey's attempts. As a matter of fact, Syrian Vice-President Khaddam defined the Israeli-Turkish entente as "the greatest threat to the Arabs since 1948" (Inbar, 2002, p. 29), whereas Cevik Bir, former Deputy Chief of Staff of the Turkish Armed Forces from 1995 to 1998, called it as one of the most significant strategic developments for increased security and stability in the post-Cold War Middle East, between two democratic, pro-Western and non-Arab countries (Bir and Sherman, 2002).

Inbar (2002) defined the nature of the Israeli-Turkish strategic partnership not a traditional military alliance, but a mutual defense and military coordination. Israel and Turkey have agreed to perform joint military exercises, exchange intelligence, and consider each other's concerns about Syria, Islamic radicalism, the aggressiveness of Iran, and nuclear proliferation in the region. Extending this cooperation, the Israeli-Turkish agreement on August 6, 2002 has assured Turkey's export of 50 mcm of water to Israel with tankers for the next 20 years (Pamukcu, 2003).

However, some significant changes have taken place in the Israeli-Turkish relations in recent years. Less than a year before the foundation of the AKP [*Adalet ve Kalkınma Partisi* in Turkish - Justice and Development Party], Ahmet Davutoglu, then became the Chief Advisor on Foreign Policy to the Turkish Prime Minister Recep Tayyip Erdogan (leader of the AKP), accused Israel and the major powers (implying the US) for the outbreak and persistence of the water conflicts (especially of Turkey) in the Middle East to gain a strategic maneuver area (Davutoglu, 2001). Coming from the Islamist wing of politics, the AKP has cooled the relations with Israel on several occasions, after winning the November 2002 elections with 363 seats out of 550 in the Grand National Assembly. For example, the AKP invited the leaders of Hamas to Turkey, after their victory in the Palestinian parliamentary election in January 2006. In return, Israel protested Turkey strongly for holding talks with

Hamas, which was still on the list of terrorist organizations, and using violence against Israel.⁴⁶

Gruen (2004) cited Cagatay when listing the three reasons of the Turkish rapprochement with the Middle Eastern 'rouge states', such as Iran and Syria. The first reason was given as the AKP government's sympathy for the Muslim Middle East, due to its roots in the political Islam. Moreover, the objections coming from some European circles to Turkey's full membership in the EU on the basis of religion have urged many conservative and fundamentalist AKP members to perceive Muslim Middle Eastern states as their true friends.

Secondly, Turkey has perceived an independent/autonomous Kurdish state in northern Iraq as a threat to her own territorial integrity. Hosting sizable Kurdish populations, Iran, Syria and Turkey have found a common interest in developing counter policies in this circumstance. Finally, Turkey's prospective EU membership has necessitated better relations with her neighbors, and an approach to her conflicts on the basis of dialogue, rather than confrontation (Gruen, 2004).

Hence, the Syrian-Turkish water conflict has carried the heavy burden of the negative memories of the Ottoman past, nationalist ideologies of the two states, Cold War polarization, Israeli-US-Turkish cooperation, and Hatay problem, as well as the growth in demand for water, creating a conflictive environment for several decades and onwards.

⁴⁶ People's Daily Online (2006). Turkey voices uneasiness about Israel's statement on Hamas visit. [online]. Available: http://english.people.com.cn/200602/18/eng20060218_243722.html. (April 20, 2006).

CHAPTER 3

The Syrian-Turkish Water Conflict

3.1 Introduction

The Syrian-Turkish water conflict can be defined as the contradictory claims of Syria and Turkey over the Euphrates and Orontes rivers. In this chapter, the geography of these rivers, issues related to this conflict, and objectives of the parties are analyzed. While elaborating on this conflict, the ‘greater’ Iraqi-Syrian-Turkish water conflict over the Euphrates and Tigris rivers is frequently addressed, since these conflicts are interrelated in many aspects, including the disputed parties and rivers.

3.2 Rivers of conflict

3.2.1 Euphrates river

The longest river of the southwest Asia (2,700 km), the Euphrates river born in Turkey (1,080 km), passes through Syria (675 km) and Iraq (945 km), before flowing into the Persian Gulf. Along its way, the Euphrates meets with the Tigris river in Iraq, and they form the Shatt al-Arab waterway. 1,900 km long, the Tigris river originates from Turkey (380 km), forms a border with Syria for a 32 km long strip, and passes through Iraq (1,520 km) (MacQuarrie, 2004).

The conflict between Syria and Turkey on the Euphrates river dates back to the opening of the Keban (Turkey) and Tabqa (Syria) Dams in 1975, if not in the 1960s, when their construction began. Both of these initiatives were regarded by the lower riparian(s) as a

potential threat to the flow of this river. Iraq has become a part of this conflict in 1975, when the flow of the Euphrates river was reduced significantly by the mentioned dams.

Map 1: The Euphrates and Tigris rivers



The conflict intensified in the 1980s with Turkey’s initiation of the USD 32 billion GAP, involving 22 dams and 19 hydroelectric terminals on the Euphrates and Tigris rivers.⁴⁷ The contradictory claims of the parties on the legal status of these rivers, as discussed in Chapter 2, have contributed to the polarization in their positions (Okman, 1993). In the last two decades, the parties have also begun to ground their arguments on their water needs, in parallel to the progress in GAP.

The lack of coordination, trust, and transparency among the parties have resulted with some irrational and unsustainable demands, as represented in Table 9. According to these

⁴⁷ GAP Regional Development Administration (2006). *What is gap?* [online]. Available: http://www.gap.gov.tr/gap_eng.php?sayfa=English/Ggbilgi/gnedir.html. (May 11, 2006).

figures, the total water demand of the riparians exceeds the water availability of the Euphrates river by 47%, and the Tigris river by 10%. Complicating the situation further, other estimates on the total annual flow of the Euphrates and Tigris rivers vary between 28.7-30.5 billion m³ and 43-52.6 billion m³, respectively, in different studies (Allan, 2001).

Table 9: Water potential of the Euphrates-Tigris rivers and consumption targets⁴⁸

	Euphrates		Tigris	
	Water Potential (contribution)	Consumption Targets	Water Potential (contribution)	Consumption Targets
Turkey	31.58 b m ³ 88.70%	18.42 b m ³ 51.80%	25.24 b m ³ 51.90%	6.87 b m ³ 14.10%
Syria	4.00 b m ³ 11.30%	11.30 b m ³ 31.80%	0.00 0%	2.60 b m ³ 5.40%
Iraq	0.00 0%	23.00 b m ³ 64.60%	23.43 b m ³ 48.10	45.00 b m ³ 92.50%
Total	35.58 b m³ 100.00%	52.92 b m³	48.67 b m³ 100.00%	54.47 b m³

Kolars (2000) has highlighted the centrality of the interpretations and actions of the riparian states in water negotiations, based on facts. The negotiations are unlikely to produce a mutually acceptable solution without the agreement of all parties on the seemingly more objective facts, such as the annual average volume of the Euphrates river. As Kut (1993) stated, there is a significant gap between the water potential of the Euphrates-Tigris rivers, and consumption targets of the riparians, so no matter how fairly divided these scarce water resources, the problem of scarcity would not be solved.

Based on the water availability and population growth rates, Allan (1996) estimated that Syria would have an excess water of 11,750 mcm/year by 2025, although much lower than Turkey's 239,600 mcm/year. The main assumption behind these estimates was that minimum water requirement for survival was 125 m³/year per person. These figures are consistent with Falkenmark's water stress index, defining an availability of less than 1,000 cm³ per capita as chronic water scarcity (Selby, 2003).

⁴⁸ Ministry of Foreign Affairs of Turkey (1996); Carkoglu and Eder (2001). The percentages of consumption targets are out of water potential. Absolute numbers are in billion m³ per annum.

Table 10: Water resources of Iraq, Syria and Turkey⁴⁹

	Iraq	Syria	Turkey
Total internal renewable water resources (surface water + groundwater - overlap) (IRWR), 1977-2001, in cubic km	35	7	227
Per capita IRWR, 2001 (cubic meters)	1,452	411	3,311
Natural Renewable Water Resources (includes flows from other countries) Total, 1977-2001 (cubic km)	75	26	229
Per capita, 2002 (cubic meters per person)	3,111	1,541	3,344
Total withdrawals (cubic km)	42.8 (1990)	12 (1995)	35.5 (1997)
Withdrawals per capita (cubic m)	2,478 (1990)	844 (1995)	558 (1997)
Population (July 2006 est.) ⁵⁰	26,783,383	18,881,361	70,413,958
Population Growth Rate (2006 est.) ⁵¹	2.66%	2.3%	1.06%

Turkey appears to be the most fortunate state in terms of water resources among the three riparians of the Euphrates-Tigris rivers, since these rivers born in her territory, not to mention her national rivers, such as the Seyhan and Ceyhan. Nevertheless, some experts has discredited this ‘water-rich’ label: depending on the estimates of the State Hydraulic Works (*Devlet Su İşleri* (DSI) in Turkish) of Turkey, Bayazit and Avcı (1997) have underlined the need to continue the construction of dams in Turkey, in order to transfer energy from the water-rich southern regions to the industrialized and densely populated western areas. They mentioned that Turkey’s annual per capita water potential will decrease by 41% in the upcoming two decades, making the completion of GAP an inevitable goal. In addition, Tomanbay (2000) compared the average annual renewable water potential of Turkey (3,150 m³ per capita, in 1998) with that in Europe (5,000 m³) and North America (18,000 m³), in order to question this label.

The 2001 UN Environment Programme (UNEP) report noted that the storage capacity of the dams on the Euphrates river is five times greater than the river’s annual flow. This massive development is expected to decrease the quantity of water further, whereas dam

⁴⁹ World Resources Institute (2006). Country profiles. [online]. Available: http://earthtrends.wri.org/country_profiles/index.php?theme=2. (April 30, 2006).

⁵⁰ Central Intelligence Agency (2006). The world fact book. [online]. Available: <http://www.cia.gov/cia/publications/factbook/>. (May 3, 2006).

⁵¹ Central Intelligence Agency (2006). The world fact book. [online]. Available: <http://www.cia.gov/cia/publications/factbook/>. (May 3, 2006).

retention of the nutrients, saline return drainage from irrigation, agricultural chemicals and industrial/urban effluents are deteriorating water quality for the downstream countries. Lawler (2005) also accused the construction of waterworks over the Euphrates river since the 1950s, as the reason for the significant drop in water flow, and deterioration of Iraqi marshlands, once hosting a rich biodiversity. In return, UNEP has suggested an ecosystem approach, instead of quota agreements, in order to secure the sustainable development of water resources.

3.2.1.1 Southeastern Anatolia Project (GAP)

GAP was initiated by Turkey as a regional development project to enhance the economic growth, social stability, living standards, and to ease the ethnic tensions with the Kurdish population living densely in southeastern Anatolia (Carkoglu and Eder, 2001). In nine southeastern Anatolia provinces,⁵² GAP covers an area of 75,358 km², making up 9.7% of Turkey. The population of the GAP region is 6.6 million (9.7% of Turkey's population), of which 37% live in rural areas, according to the 2000 General Population Census.

Planned in the 1970s as 22 dams and 19 hydraulic power plants to be constructed on the Euphrates-Tigris rivers, the project has aimed to manage 28.5% of the water potential, and irrigate 1.7 million hectares of land of Turkey, and produce 27 billion kWh annual energy.⁵³ Tomanbay (2000) underlined that when completed, GAP would increase the ratio of the irrigated land from 2.9% to 22.9%, and the generated electricity would be 22% of the total hydroelectric potential of Turkey.

As of 2004, the hydroenergy produced by GAP (about 11.5 billion kWh as of 2001) was accounted for half of that in Turkey, and 222,617 hectares of new land was opened to irrigation.⁵⁴ The GAP Regional Development Administration announced that between the

⁵² GAP Regional Development Administration (2006). What is gap? [online]. Available: http://www.gap.gov.tr/gap_eng.php?sayfa=English/Ggbilgi/gnedir.html. (May 11, 2006). Adiyaman, Batman, Diyarbakir, Gaziantep, Kilis, Mardin, Siirt, Sanliurfa and Sirnak

⁵³ GAP Regional Development Administration (2006). What is gap? [online]. Available: http://www.gap.gov.tr/gap_eng.php?sayfa=English/Ggbilgi/gnedir.html. (May 11, 2006).

⁵⁴ GAP Regional Development Administration (2006). GAP components [online]. Available: http://www.gap.gov.tr/gap_eng.php?sayfa=English/Ggbilgi/gbilesen.html. (May 11, 2006).

years 1985 and 2005, the Gross Regional Product of the southeastern Anatolia increased by 4.5 times, as shown at Table 11. It should be noted that while the share of agriculture in the regional economy dropped between the years 1985 and 2005, the agriculture-related services and industrial production grew significantly. Mutlu (2001) mentioned that since the 1980s, the southeastern Anatolia region has received a disproportionately high portion of the public investment for dams and hydroelectric plants, and would be the sole beneficiary for irrigation of 1.7 million hectares of land by GAP.

Table 11: Figures on the gross regional product of the southeastern Anatolia⁵⁵

Sectors	1985	2005
Agriculture	40%	23%
Industry	16%	24%
Services	44%	53%
Gross Regional Product (GRP)	100%	100%
GRP Growth Index	100	445

In 1975, Turkey made a credit application to the World Bank for the construction of the Karakaya dam, the initial component of GAP. After an examination by the bank, an average monthly flow of 500 m³/sec waters from the Euphrates river to Syria was found as equitable (called as Rule of 500). However, Iraq and Syria opposed the project and the World Bank did not provide the credit according to its operating directive OD 7.50, requiring the consent of all riparian countries for large-scale waterworks (Kibaroglu and Unver, 2000).

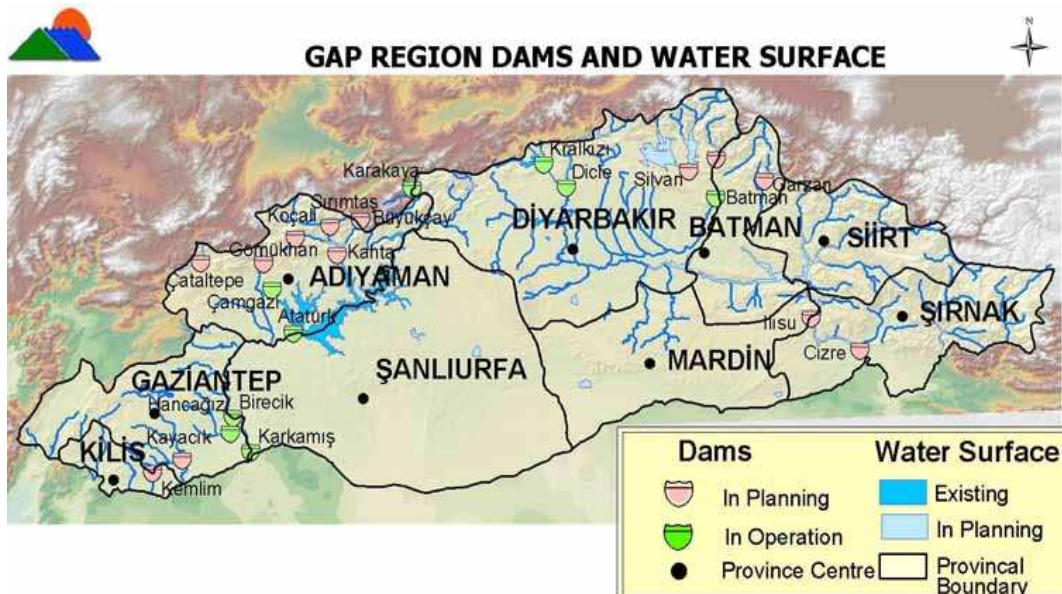
Turkey's failure in winning the lower riparians' consent for GAP, together with the PKK terrorism in the southeastern Anatolia, prevented the country from receiving the international funds. As a result, the Karakaya dam, and the Ataturk dam, the largest dam of GAP, were financed solely by Turkey until 1997 (Gruen, 2000; Allan, 2001). This expenditure caused a huge burden on the weak Turkish economy by accounting for 6-9% of the annual budget. Some experts have found GAP responsible for the unceasing budget deficit and high inflation in the 1980-90s (Swain, 2004). Recently, Turkey has increased her ability to raise international funding by diversifying her sources. For instance, the largest hydroelectric project in Turkey, the Ilisu Dam, is credited by the Union Bank of Switzerland (Demirbas et al., 2004).

⁵⁵ GAP Regional Development Administration (2006). How will gap change the socio-economic structure of southeastern anatolia? [online]. Available: http://www.gap.gov.tr/gap_eng.php?sayfa=English/Ggbilgi/gsosyo.html. (May 16, 2006).

Besides its economic premises, GAP has also become a “symbol of national pride”, and kept its priority in all budgets in Turkey (Carkoglu and Eder 2001, p. 42). This sentiment was expressed by the former President Suleyman Demirel in 1992 as, “...a symbolic achievement ... to assume its (Turkey’s) historical place in the world scene as a leading country fully able to complete the most advanced projects using the most modern technology” (Gruen, 2000, p. 566).

Although GAP is estimated by some experts to decrease the flow of the Euphrates river to Syria and Iraq as much as 40% and 90%, respectively, its ability to provide an agreed-amount of water to the downstream riparian states on a regular basis should also be noted (Simon, 1998; Bulloch and Darwish, 1994; Parker, 1997). If a final agreement is reached, this certainty in water supply will be beneficial especially in drought years, which would mean a water scarcity in the absence of GAP.

Map 2: Southeastern Anatolia region (Turkey) and the major dams of GAP



Despite these ambitious goals, GAP has brought some disappointments so far. First of all, the agricultural component of the project has fallen behind the planned stage by 1999. Secondly, the socio-economic development in the region has lagged significantly. As of 1997, the GAP region’s per capita Purchasing Power Parity income (USD 3,384) was almost half of the national income, and literacy rate (41%) was 20 percentage points lower than the national average (Carkoglu and Eder, 2001).

The local expertise and participation could not be facilitated in the GAP region either. As Carkoglu and Eder (2005) argued, the Kurdish problem has been the major reason of the

exclusion of the civil society in this region, where the mutual distrust between the Kurdish communities and Turkish state is high.

Another drawback of GAP, specifically of the discharge of domestic waste into the Ataturk Dam lake, is the fast reproduction of the Zebra mussel in the Euphrates river. One of the most severe fouling organisms in the freshwater ecosystems, the Zebra mussel consumes the base of the food chain and endangers the survival of other species. In addition, large number of the Zebra mussel can colonize the water pipes, power plants and industrial facilities, and destabilize their functions in a few years time (Bobat et al., 2004).

The domestic concerns for the success of GAP were raised as early as 1983 (Kolars and Mitchell, 1991). In their latest study, Carkoglu and Eder (2005) accused the top-down approach of this grand socio-economic engineering project as the reason for its overall failure. Since this top-down approach has disregarded the social order, GAP's long-term social objectives on education, health, and so on, have been postponed in favor of the short-term economic success, and the dams' side-effects on the displaced of people and historical remains were neglected. For instance, during the construction of the Birecik Dam between 1997 and 2000, 6,500 people from 850 households were resettled, and the total number of people affected by this project hit 30,000. The Birecik dam was also held responsible for flooding the Zeugma site, an ancient Greco-Roman city, the rescue of which initiated an international consciousness for the side-affects of damming on the Euphrates river (Hodges, 2000).

As presented above, an analysis of the Syrian-Turkish water conflict needs the incorporation of several technical, economic political and social aspects. Carkoglu and Eder (2001) have suggested a two-level game approach for the Euphrates-Tigris rivers, in order to establish the link between the domestic constituencies, and the politico-economic incentives of the international negotiation processes. In this respect, they have only foreseen a simultaneous resolution in the water conflict and Kurdish problem. Nevertheless, GAP is in a revision process, in order to turn from an engineering-based infrastructure project into a people-centered one, for the integration of the technical issues with economic, social, and environmental ones (World Water Council, 2003). The urban rehabilitation, eco-city planning and other sustainable human settlement projects have been developed in recent years, partly funded by the international sources, stressing the necessity of citizens' participation (Acma, 2005).

3.2.2 Orontes river

The Orontes is the river led to the water conflict of Syria and Turkey, when Syria commenced a dam construction on this river in 1956, and Turkey perceived this act as a potential threat to the flow of water into her farmlands (Kiran, 2005).

Born in the Bekaa valley of Lebanon (35 km), the Orontes (*al-'Asi*, in Arabic, and *Asi* in Turkish) passes through Syria (120 km), flows along the Syrian-Turkish border (22 km), and ends in the Turkish province of Hatay (88 km). Lebanon and Turkey contribute only 6% and 2% to the 1.2 billion m³ annual water potential of this river, respectively, whereas Syria makes up the rest. In line with her agreements with Syria in 1972 and 1994, Lebanon uses 80 million m³ of the Orontes waters (Kiran, 2005; Zehir, 2003).

In average, 10 m³/sec of water flows into Turkey from the Orontes river. Despite her arguments on the Euphrates river, Syria constructed the Rustam and Hilfaya-Mehardeh dams on the Orontes river, and began the Ziezoun and Kostoun dams, without consulting Turkey (Alacakaptan, 1993; Zehir, 2003). Due to the irrigation and evaporation in the Syrian dams, the Amik plain in the Turkish province of Hatay suffers from the severe drought in summer months, and underutilization of the farmlands (Durmazucar, 2002).

Map 3: The Orontes River



The Syrian-Turkish conflict over the Orontes river has been directly linked to their conflict on the status of Hatay. As discussed in Chapter 2, Syria did not accept Hatay's incorporation into Turkey in 1939 (Gruen, 2000), and reflected her uneasiness by showing this province within her territory at the official maps, causing a serious tension with Turkey (Pipes, 1996). Accordingly, Syria disregarded Turkey's water demands from the Orontes, due to her territorial claims on this province (Bulloch and Darwish, 1994). Although the status of Hatay has not been officially recognized by Syria yet, her cooperation with Turkey for a dam construction on the Orontes, and suspension of the 'map war' have signaled a significant change in her policy in the rapprochement period.

3.3 Parties and objectives

3.3.1 Syrian Arab Republic

Syria became an independent state in 1946 as a constitutional monarchy, after 400 years of Ottoman rule, and 24 years of French mandate. Beginning from 1949, Syria faced with several military coups and dictatorships, leading to the Baath party's regime in 1963 (Long and Reich eds., 2002).

The 1970s witnessed Hafiz al-Assad's rise to the power and establishment of a nationalist Baath regime, similar to that in Iraq. Among the initial objectives of President al-Assad was to achieve rapid industrial growth, which necessitated construction of dams for hydroelectricity. Syria had lost the Golan Heights to her arch enemy Israel in the 1967 War, and water of the Golan Heights had become a critical component of the Israeli-Syrian negotiations (Allan, 2001).

The US-sponsored peace talks between Israel and Syria over the Golan Heights had a connection to the Syrian-Turkish water conflict. According to Kohen (1996), Turkey worried that Israel and the US would pressure on her to release more water to Syria from the Euphrates river. In this way, Syria would be less dependent on the Golan's water, and an agreement with Israel would be more likely.

The Middle East is the world's most arid region, and Syria is by no means an exception. More than half of this country is desert or semi-desert, and heavily dependent on the Euphrates river, providing 80% of her water. The legitimacy of Syria's claims were based not only on needs, but also on historical rights. According to the worst estimates in Iraq and

Syria, GAP would refrain these countries from 90% and 40% of the Euphrates waters flowing into their territory, respectively (Bulloch and Darwish, 1994).

Syria's rivalry with Iraq for the leadership of the Arab world, and with Turkey for Hatay led her to employ confrontational tactics in their water conflicts. An important tool of the Syrian policy against Turkey was stationing various terrorist organizations in Syria and in the Syrian-controlled part of Lebanon (MacQuarrie, 2004). From her perspective, Turkey was a hegemonic state, which played for time by deferring a final agreement, and continuing the dam constructions in the meantime (Yetim, 2003).

The filling of the massive Ataturk Dam turned Syria's concerns into fears, as the Turkish control on these rivers were increased. Syria has claimed that the Euphrates and Tigris rivers were international waters, as opposed to the Turkey's definition as transboundary, and they had to be shared equitably between the three riparians. According to Syria, Turkey planned to use water as a political tool on the lower riparians, if not on the whole Arab world. The arguments of some Turkish experts, who were close to the highest officials might have contributed to these concerns. Candar (1993), for example, stated that Turkey had to preserve her full sovereignty over the Euphrates-Tigris rivers, in order to have a *waterpolitik* as a political instrument. Last but not the least, the pollution of the Euphrates waters and salinization of Syrian lands, caused by the return drainage from the irrigation in GAP region, have increased Syrian concerns about the quality of water (Cinar, 1999).

The most important issues for Syria in this conflict have been the division of the Euphrates waters and the future flow of water. Syria's objective on the first issue has been a fair division specified by water quotas (Entries 15, 35, 63, 79, 91, Appendix 4). On the second issue, Syria has asked for a final, definite agreement, which would guarantee a certain amount of water, and eliminate uncertainty as much as possible (Entries 41, 59, 73, 92, Appendix 4).

3.3.2 Republic of Turkey

Founded in 1923, Turkey has succeeded the Ottoman Empire by inheriting its bureaucratic elite and territorial remaining. Turkey has suffered from several military interventions, and engaged in a protracted conflict in Cyprus by the 1960s. The same period also witnessed Turkey's role within the NATO as a front-line country against the threat of the Soviet Union, and her commitment to become a full member of (today's) European Union.

The energy needs of the growing Turkish industry and huge income disparity between the western and south/eastern Anatolian regions have been the main motives of Turkey to build dams and hydroelectric terminals on the Euphrates-Tigris rivers. These intentions were realized with the Keban Dam in 1974, and accelerated with GAP, as discussed above.

In his detailed description, Allan (2001) divided the history of this conflict into two major periods, and presented the cognitive map of the riparians, based on Frey's technique. Before 1960s, water was not a major domestic interest for Turkey, aside from its role in agriculture. Beginning from the 1960s, water gained a domestic priority for internal security, population distribution (to stop mass immigration from the poorer regions to western provinces), higher standards of living and national image. These concerns can be understood better by considering the density of Kurdish citizens of Turkey in southeastern Anatolia, and the intense terrorist actions of the separatist PKK (*Partia Karkaren Kûrdistan* in Kurdish - Kurdistan Workers' Party). In the same period, Turkey's need for hydroelectric power also became evident due to its economic growth and industrialization.

Syria and Turkey came to the brink of war in 1998, due to Syria's support for the PKK. On October 9, 1998, Syria deported Abdullah Ocalan, the leader of the PKK, and hundreds of his militants, due to the heavy political and military pressure of Turkey. Eleven days later, Syria and Turkey signed the Adana Agreement, implying a closer cooperation on security. Although the tension in 1998 was seemingly related to the PKK terrorism, water conflict has been underlined as its real reason by some scholars. In fact, the PKK was a strategic card for Syria to force Turkey to make concessions on their water conflict (Carkoglu and Eder, 2001).

A Turkish initiative, the Manavgat Water Supply Project was completed in 2001 with a cost of USD 148 million, and potential to transfer 500,000 m³ water daily. The Manavgat is a 82 km long interior river of Turkey and flows into the Mediterranean Sea. Depending on the oil prices, the cost of Manavgat water was competitive with that of desalinated water (1.05 USD/m³) up to a transportation distance of 1,500 km (Israel's Ashkelon Harbor is 800 km away from the Manavgat shipping terminal). (Yavuz, 1997, Kiran, 2005; Yildiz, 2006). Planned to transport water by tankers or a pipeline, the project targeted the southern countries, such as Israel and Cyprus as potential customers (Nachmani, 2000; Durmazucar, 2002). However, the decreasing cost of desalinated water, high opportunity cost of tankers (carrying oil is more profitable than carrying water), the unresolved Arab-Israeli conflict, and reluctance of the Arab countries to become dependent on Turkey for water have been the major reasons for not realizing this project since 2001 (Yildiz, 2006).

According to Turkey, the conflict on the Euphrates and Tigris rivers is about the allocation of a certain amount of water to the downstream states, whereas discussion over sovereignty and equal sharing is out of question (Çandar 1993; Entries 25, 29, 35, 37, 82, 87, Appendix 4). From the beginning, Turkey has tried to negotiate the water problem on a technical basis. The main arguments of this party can be summarized as: resolution of the conflict between the riparians without any third party intervention, the consideration of the Orontes as a part of this conflict, and the consideration of the Euphrates and Tigris as a single basin.

3.3.3 Republic of Iraq: An integral part of the Syrian-Turkish water conflict

After the Ottoman rule (1534-1918) and the British mandate (1918-1932), Iraq declared her independence and was admitted to the League of Nations in 1932. The new state was founded as a constitutional monarchy, but the military coups and power struggles prevented a political stability from the beginning. The monarchy was overthrown in 1958, and the regime changed hands in revolutions and counter-revolutions for a decade. Finally, the Baath party rule, led by the Chairman Ahmad Hasan al-Bakr and the Vice-Chairman Saddam Hussein (became President in 1979), was established in 1968 (Long and Reich eds., 2002).

In 1975, when Syria and Turkey filled the Tabqa and Keban Dams on the Euphrates, respectively, Iraq was making concessions to the militarily superior Iran in the Shatt al-Arab river, in return for the end of the latter party's support to the Iraqi Kurds. It was unthinkable for a 'revolutionary' nationalist regime to allow another setback on the sovereignty of its rivers. Besides, the two thirds of Iraq is desert and the country is completely dependent on the waters of the Euphrates and Tigris rivers. In this sense, the water has emerged as a more strategic resource than oil for Iraq (Carkoglu and Eder, 2001).

Within this context, Iraq took an aggressive stance against Syria and mobilized her troops in 1975 to halt the latter country's attempts at controlling the flow of the Euphrates. In the meantime, Syria was blaming Turkey for the decrease in the flow of the Euphrates waters. The Iraqi-Syrian confrontation was moderated by the Arab League, before a military clash took place.

In the conflict over the Euphrates and Tigris rivers, Iraq has suggested the historical rights of the lower riparians, and opposed any kind of restriction on the flow of water by Turkey (Cinar, 1999). The shared and equal sovereignty on these rivers by the three riparians

has been the primary objective of Iraq. As Stauffer (2004) argued, the concerns of Iraq have been mainly about the GAP's detrimental effects on the quality and quantity of the Euphrates and Tigris rivers.

The political economy of water has been another critical issue for Iraq. A net importer of food, Iraq's water confrontation with Syria left her with the dried fields and significant crop damage in the 1970s (Long and Reich eds., 2002). Before the Kuwait War, Iraq was eager to develop extensive waterworks for irrigation and energy production, reflecting the need to utilize her water resources (Versan, 1993).

Surely, the Iraqi-Syrian-Turkish relations can not be reduced to their water conflict. There were cooperative areas between them, such as the Iraqi-Turkish oil pipeline, and border trade. Before the 1990-91 Gulf War, Turkey was supplying 60% of her oil imports from Iraq through their oil pipeline. On the other hand, Iraq's close cooperation with the Soviet Union, marked by their Friendship Treaty in 1972, was a source of the tension for her relations with Turkey during the Cold War (Long and Reich eds., 2002).

The 1990-91 Gulf War and the subsequent 2003 US-led operation have altered the picture drastically. Blanford (2002) has grounded the rapprochement of Iraq and Syria, between 1997 and 2003, due to the heavy US pressure in the post-Gulf War era. In this period the Iraqi-Syrian trade grew significantly (reached USD 1 billion in 2001, doubling the amount in 2000), and a free-trade agreement was signed. Last but not the least, their water conflict on the Euphrates river was settled with an allocation formula, indicating that under a serious threat from elsewhere, this conflict and their historical enmity were reduced to a secondary issue.

The economic infrastructure of Iraq was severely damaged during the 1990-91 Gulf War. The UN Security Council resolutions 661 and 687 deteriorated the Iraqi economy further through the oil embargo and other sanctions, such as the ban on trade and freezing the state's foreign financial assets (Alnasrawi, 2001). Finally, the country has fallen into an internal turmoil after the 2003 US-led operation, pacifying her in the international arena.

3.3.4 Secondary/third-party interventions

The first outside intervention in the Iraqi-Syrian-Turkish water conflict came from Saudi Arabia and the Soviet Union. In 1975, Iraq came close to declaring war on Syria, after

the latter country's filling the Tabqa Dam on the Euphrates. Iraq interpreted this attempt as a serious threat to the future flow of water into her territory; the two states moved their troops to the border, and Syria closed her airspace to Iraqi flights. The tension was overcome by the mediation efforts of the mentioned two parties (Swain, 2004).

In 1990, Turkey's filling of the Ataturk Dam created a tension not only with Iraq and Syria, but also with the Arab world. Syria accused Turkey of using water as a political tool when filling the Ataturk dam, although Turkey satisfied the condition of allocating an average of 500 m³/sec water in that period. For the first time in their history, the Baath regimes of Iraq and Syria united and discussed the ways to deal with Turkey jointly, including the military means (Pehlivanoglu, 2004; Bulloch and Darwish, 1994). Iraq and Syria continued to call the Arab League to unite against Turkey's aggressive GAP policy and threatened to boycott the Western companies that cooperate with Turkey in GAP (Allan, 2001). Finally, the Arab League gave a protest note to Turkey in 1996 and asked to freeze GAP. Eight Arab countries, including Egypt and Saudi Arabia, expressed their demands on the basis of equal sharing principle (Pehlivanoglu, 2004). In return, Turkey rejected the Arab League's involvement in the conflict and reasserted its three-staged plan, which is discussed below (Zehir, 2003).

In October 1998, President Suleyman Demirel and the Commander of the Turkish Land Forces, Major-General Atilla Ates of Turkey stated that Turkey's patience ended due to Syria's continuing support for the PKK. The rising tensions led President Husni Mubarek of Egypt and Minister of Foreign Affairs Kemal Kharrazi of Iran visit Ankara, and initiate mediation between Syria and Turkey, in order to prevent an armed confrontation in the region. Shortly afterwards, Syria and Turkey signed the Adana Agreement on October 20, 1998, (Pehlivanoglu, 2004).

The other Arab states have been keen to prevent a military confrontation between Iraq, Syria and Turkey throughout the course of their water conflicts. This policy became clear, when they did not take side of Syria, neither diplomatically nor military, against Turkey in October 1998. Instead, they played a mediatory role, because a war in the region would be extremely costly, in terms of human casualties and finance, and could spread to other states. Moreover, this war was unlikely to be won by Syria, considering the high military capacity of Turkey. Accordingly, a war would bring the least desired outcome; an increase in Turkey's dominance in the region as a victor.

Nevertheless, the intervention patterns of the other Arab states and the Arab League have indicated that there is a general support for the Iraqi-Syrian case against Turkey. This

policy has probably stemmed from the suspicion of Turkey's intention to become dominant in the Middle East through her military cooperation with Israel.

The interventions of the Arab states can be credited for preventing a water war, but their default position against Turkey has reduced their potential –if there is such an intention– to moderate a problem-solving initiative. In other words, the Arab League is unlikely to perform as a regional third party in the Iraqi-Syrian-Turkish water conflicts, which would otherwise increase the chance to reach a trilateral agreement, had Iraq not currently been in an internal turmoil.

3.4 Previous resolution attempts

The first significant attempt to reach a trilateral resolution in the Iraqi-Syrian-Turkish water conflict came in 1983 with the initiation of the Joint Technical Committee, focusing on the technical disagreements (Entry 1, Appendix 4). However, the disparity between the positions of the parties prevented an agreement, except for the 1987 protocol on the Turkish guarantee to allow 500 m³/sec water from the Syrian-Turkish border (Entry 3, Appendix 4).

Wolf (1996) indicated the main problem with using water as a tool for cooperative relations as the absence of agreed-upon measures for making equitable allocation between the riparian states. In order to address this problem, Turkey's proposed the three-staged plan at a tripartite meeting of ministers in Ankara in June 1990 (Altınbilek, 1997). The plan was based on two principles: recognition of the Euphrates, Tigris, and Orontes as transboundary rivers, and consideration of the Euphrates and Tigris as a single river basin, since they meet in Iraq and form Shatt al-Arab, before flowing into the Persian Gulf. According to its terms, the water resources and needs of the riparian states would be jointly decided by gathering data on the hydrological, meteorological and agricultural characteristics of their land at the first and second stages. As the third step, the appropriate water management systems would be determined in order to minimize the waste of water. Sharing all the cost of this plan equitably, the three riparians would achieve the most fair and feasible allocation of the water resources.

Although the plan had a joint management approach in practice, Turkey was keeping her sovereignty claims from the beginning. Iraq and Syria rejected the plan straight away. According to Altınbilek (1997), this attitude stemmed from the lower riparians' hesitation to lose their own sovereign rights. If all data were given to a joint committee, then their claims for water could be unjustified, because of their undeveloped water infrastructure. In other

words, technicians could accuse their inefficient water infrastructures for their water scarcity, instead of Turkey's GAP. From the Syrian perspective, her poor and indebted small farmers were unable to use their land and water optimally or to invest in irrigation devices (Perthes, 1997). The lower riparians would be dependent on Turkish agricultural production, after the joint allocation of territories for certain crops was made according to the feasibility analyses (Pehlivanoğlu, 2004; Cinar, 1999). The plan also considered the possibility of transferring water from the Tigris to the Euphrates, which was against the objectives of Iraq, trying to avoid a Syrian influence on the former river.

Altınbilek (1997) underscored Turkey's three-staged plan for an optimum utilization of water resources for all riparian states. The main advantages of this plan would be an economically more feasible management of the scarce water resources, a higher likelihood of finding international credit for the water projects, and minimization of water loss. On the other hand, the fundamental obstacles against the application of an integrated basin management were the riparians' unwillingness for dependency on others, the lack of mutual trust and understanding, and other historical problems related to water. Had it been accepted, Turkey would have benefited mostly from this plan, because her land promised more return of crops based on the same scale of irrigation (Kut, 1993).

Kolars (2000) has proposed the notion of "River Ethic" as an approach to solve the development problems in the Euphrates-Tigris-Shatt al-Arab river basin. His approach regarded these rivers as separate entities, having their own interests in this conflict. Represented by impartial participants, the Euphrates and Tigris rivers would primarily advocate their own concerns on environment and sustainability, both of which benefit the populations of the three riparian states. In this respect, there would be no victor to the conflict, besides the rivers and public. Kolars (2000) identified the initial step for the application of this approach as writing a "River Ethic", in addition to the existing international agreements.

Several scholars have made suggestions to solve the water scarcity problem, and tried to develop some principles for problem-solving negotiations at water conflicts. From an economic perspective, Fisher et al. (2000) have suggested to separate water ownership from water usage in order to optimize water management. This model aimed to resolve the water conflicts by conceptualizing the property rights in monetary terms, and selling short-term licenses for the use of water at optimized prices. Regarding water as a tradable resource, this model has altered the zero-sum thinking in quota allocation agreements, but instead brought the possibility of win-win deals and mutual construction of waterworks. However, Fisher et al. have also raised their concern for the issues of trust, water security, and psychological aspect

of trading permits to use water (not of sovereign water rights), as the barriers against the realization of this approach.

Wolf (1999b) has pointed out the economic criteria as a basis of a conflict resolution attempt, allocating the international rivers according to their economic value. In this case, water is distributed in such a way to maximize its efficient utilization among the riparian states. For instance, the mountainous Turkish terrain, having several suitable sites for dams, has a physical advantage over the flat or shallow Syrian terrain. Besides, evaporation is much higher in this downstream country. For this topographical reason, Turkey is more suited to host dams on the Euphrates river, rather than Syria (Kolars, 2000).

Unver and Gupta (2003) mentioned the central place of water pricing in controlling the waste of water in all riparian states. Considering water as an economic good, Unver and Gupta pointed out the goal of water pricing as covering the investment in infrastructure, increasing an awareness for the value of water to avoid waste, and reducing the income disparity. However, the political choice in Turkey has been for the imposition of significantly low prices on water, which are far below the actual costs. Privatization or leasing of water services are suggested as other alternatives, shifting the political burden of higher prices from the government (Simon, 1998).

Unver and Gupta (2003) have condemned the low-price policy for water for being economically irrational, and encouraging the waste. In order to alter the current, unsustainable tariff policy in Turkey, their water pricing recommendation was to cover at least the operational and managerial costs fully, if not the true opportunity cost. Also, they examined the ability of users, especially of farmers, to pay those costs, and concluded that irrigated farms would be able to pay the market rates. Studies in Egypt have shown that farmers used water excessively as much as 70% (Bulloch and Darwish, 1994). Cakmak et al. (2004) have underlined the necessity of encouraging the use of either surface or underground water through water pricing policies, in addition to balancing multiple objectives of water resources management.

Wolf (1996) has examined the two alternative solutions to water scarcity. For increasing demand, the discovery of new underground basins might be a contribution in some regions, whereas the cutting-edge technology for desalination and wastewater declamation has appeared as more viable options in the long-run. Currently, 60% of the 11,000 desalination plants in world are in the Middle East. Although the cost of the desalinated water is decreasing while that of freshwater is increasing, the gap in between is still wide. The desalination process will probably be more cost efficient by the utilization of solar energy,

which has an abundant potential in the Middle East (Simon, 1998). On the other hand, the heavy pressure on the demand side should be reduced by population controls and efficient use of available sources.

High cost is not the only disadvantage with desalination process. While fleeing from Kuwait in the 1990-91 Gulf War, Iraqi forces destroyed the oil wells of this country. Consequently, the oil diffused to the sea, reaching the Saudi Arabian coastline and desalination plants. With the help of favorable winds, Saudi Arabia, having no river and being heavily dependent on the desalinated water, could get through the situation by shutting off her desalination plants only for few days (Bulloch and Darwish, 1994).

Syria and Turkey could not utilize the international credit sources, due to their lack of cooperation on water sources. The Global Environment Facility (GEF), for example, provides scientific analysis and remedies for transboundary water problems, such as contaminants, often led to further cooperation between the parties (Uitto and Duda, 2002). Although Syria and Turkey are participant countries to the GEF since 1996 and 1994, respectively, they have only used its assistance for other water resources, but not for the Euphrates and Orontes rivers.⁵⁶

Despite all of the suggestions for problem-solving, and economic incentives, the Syrian-Turkish water has protracted for four decades. In Sandole's (1993) terms, the Syrian-Turkish water conflict is a manifest conflict process (MCP), "a situation in which at least two actors, or their representatives, try to pursue their perceptions of mutually incompatible goals by undermining, directly or indirectly, the goal-seeking capability of the other" (p. 6). The conflict turned into an aggressive MCP, when actors tried to achieve their goals by physically damaging the other, as with the case of Syrian support to the PKK (Gruen, 2004). In another perspective, Haftendorn (2000) defined the case as a distributional conflict, based on the relative shortage of water caused by the increased use of this resource by the upper riparian states.

⁵⁶ Global Environment Facility (2006) Official web site. [online]. Available: <http://www.gefweb.org/>. (April 28, 2006).

CHAPTER 4

Findings

4.1 Introduction

Based on Pruitt and Kim (2004)'s framework of analysis, the research question of this study was formulated as "Have the three preconditions of a problem solving initiative (one or both parties' stalemate, optimism for a final agreement, and cost-benefit analyses favoring the resolution) been satisfied for the Syrian-Turkish water conflict in the rapprochement period?".

In order to find out whether the preconditions

P₁: The Syrian-Turkish water conflict has entered a stalemate for one or both parties after the 1998 Adana Agreement.

P₂: Syria and Turkey have optimism to resolve their water conflict in a mutually acceptable way.

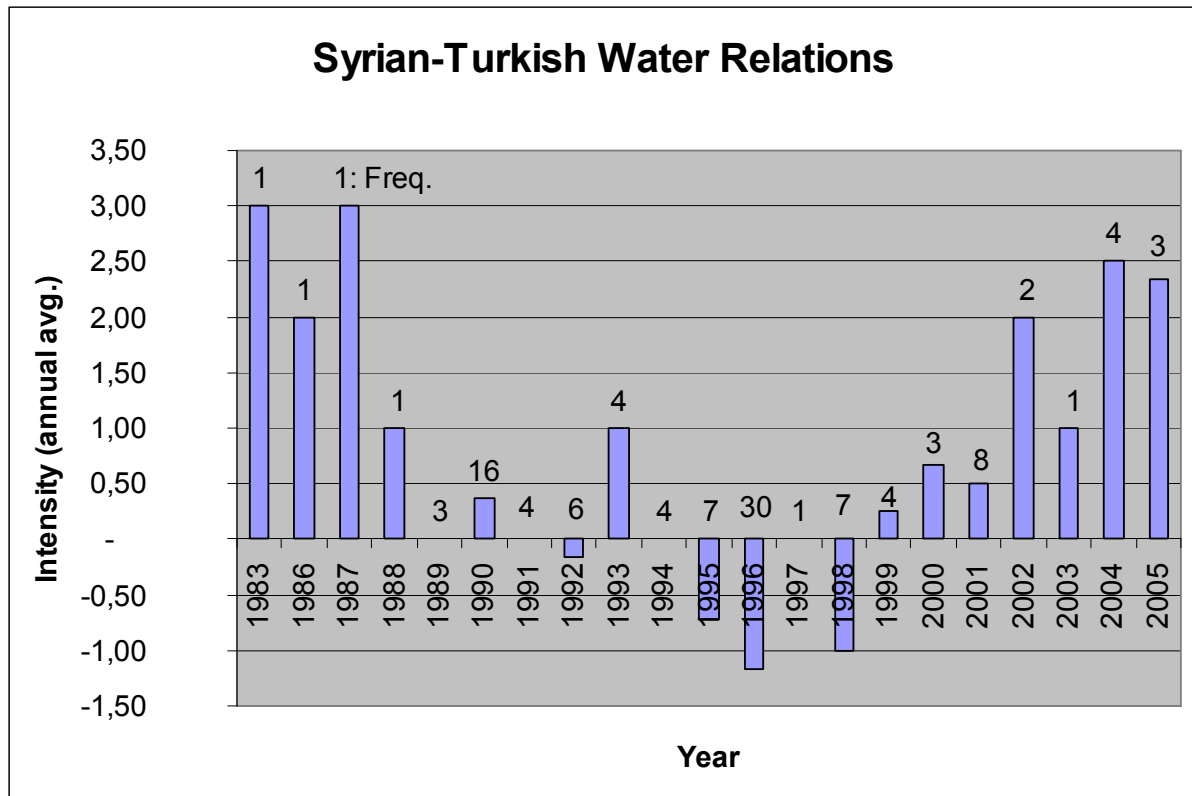
P₃: The cost-benefit analyses of both parties favor the resolution of their water conflict.

have been satisfied in the Syrian-Turkish rapprochement period, this study conducted a qualitative case study, based on the events data. As an outcome of this research, a Syrian-Turkish Water Events Database, comprising 111 incidents for the period January 1983-May 2006 was created (Appendix 4). In this chapter, the existence of the three preconditions are questioned by using the information derived from this database

4.2 Initial results

This study derived two graphs out of the Syrian-Turkish Water Events Database. The first one is the Syrian-Turkish Water Relations, showing the intensity (in annual average), frequency, and direction of the water incidents that took place between the parties:

Figure 1: The Syrian-Turkish water relations: January 1983-May 2006



According to Figure 1, the periods of 1983-1993 and 1999-2005 were predominantly cooperative intervals, whereas the period of 1994-1998 was significantly conflictive. The frequency of the data is confirming the intensity, since 1996, the most conflictive year in the Syrian-Turkish water conflict, also skyrocketed with 30 incidents.

In the second graph, the individual dynamics of Syria and Turkey is illustrated. This information is needed for further clarification, since the intensity values (codes) of incidents are averaged annually without distinguishing their sources as Syrian or Turkish in Figure 1.

Figure 2: The Syrian-Turkish water conflict (by country):

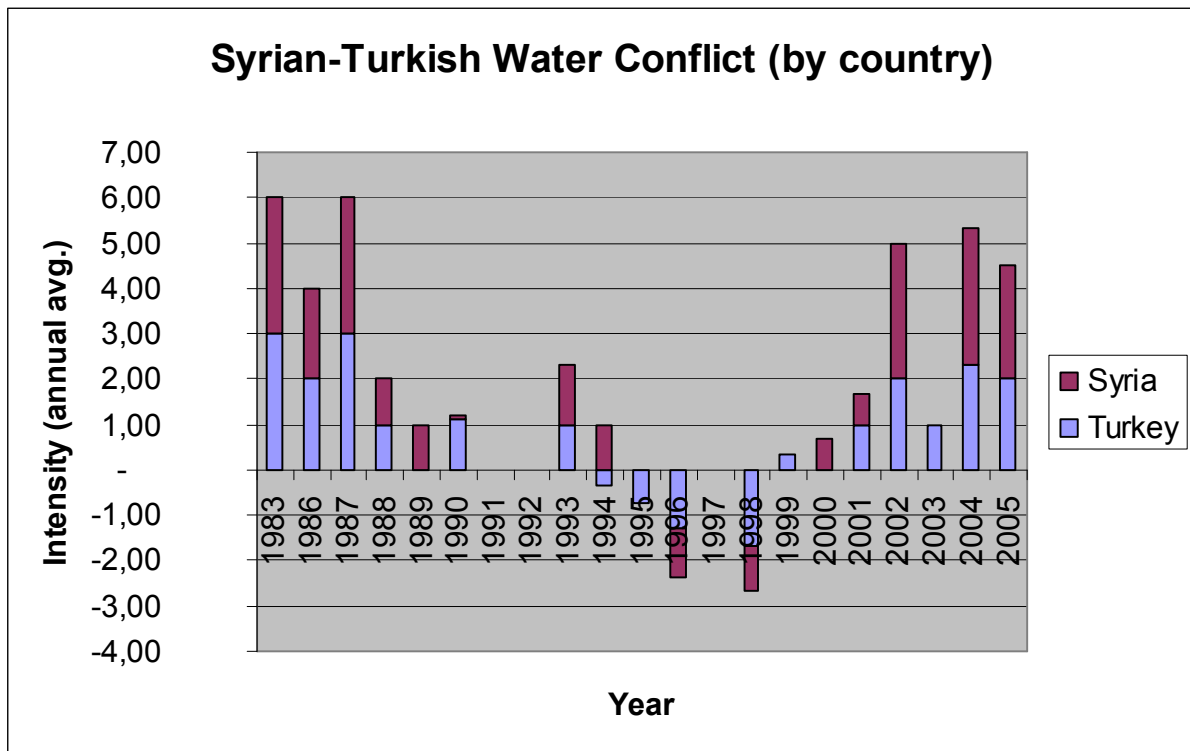


Figure 2 is demonstrating the intensity and direction of the incidents according to their sources, either Syrian or Turkish. From this graph, the relationship between the individual movements of the parties is gathered: Syria and Turkey have acted in the same direction and intensity either simultaneously or consecutively in almost all years. For instance, in 1983-86-87-88, 1993-96-98, and 2001-2-4-5, both the direction and average intensity of both parties' movements are similar, indicating a strong correlation. On the other hand, 1989 and 1999 were the years of the unilateral movements of parties, but still good predictors of their consecutive years for the direction and intensity of the other party's movements.

As displayed at Table 12, Syria and Turkey have not made any significant change in their positions in the rapprochement period. Syria has demanded a final resolution in order to avoid uncertainty in the long-run. The basis for an agreement has been suggested as fair and equitable division of water, for which 500 m³/sec is found satisfactory. In addition, Syria has asked Turkey to consult her before constructing new dams, which have environmental side-effects on the downstream countries. On the other hand, Syria has opposed Turkey's rational use approach, which will necessitate a joint assessment of each parties' water consumption and needs.

Table 12: Positions of Syria and Turkey on water

	<u>Syria</u>	<u>Turkey</u>
Pre-Adana Agreement Period (1983-1998)	Fair division of the Euphrates waters (Entry 15, 63)	Turkey obeys the 1987 Agreement (500 m ³ /sec water) (Entry 21)
	Water is not Turkey's, but ours (all riparians') (Entry 22)	"Waters in Turkey belong to Turkey" (Entry 29)
	Quota allocation of river's (Euphrates) waters (Entry 35)	Quota allocation of river's (Euphrates) waters (Entry 35)
	Permanent agreement to share the water is desired (Entry 41)	Turkey releases water voluntarily; does not owe water to anyone (Entries 25, 37).
	Aim is the rational use of water, not co-ownership (Entry 52)	Negotiation is not needed. Syria should trust Turkey (Entries 48, 53)
	Turkey should consult Syria and Iraq for her water projects (Entries 59, 73)	International organizations should not intervene (Entries 64, 67, 71)
	Just and equitable division of water (Entry 79)	No water problem (Entry 42). Syria gets as it needs (Entry 68)
		No use of water as a political tool (Entries 19, 78)
		Bilateral resolution is sought; international law cannot be applied (Entry 31)
		Technical cooperation is necessary to use the rivers economically (Entry 17)
Rapprochement Period (1999-2006...)		Settlement based on transboundary rivers is desired (Entry 82)
	Fair distribution of water (Entry 91)	Issue is not division, but allocation (Entry 87)
	500 m ³ /sec water is satisfactory, but a final agreement is desired for certainty (Entry 92)	Allocated water even exceeds Syria's needs (Entry 89)
	Turkey's rational use approach is not accepted (Entry 93)	No water bargain is desired (Entry 90)
	Rational use of rivers should be the basis of talks (Entries 93, 95)	

On the contrary, Turkey has objected a resolution under the international law, which would consider the Euphrates-Tigris as international rivers, rather than transboundary, and not displayed a strong will to resolve the conflict permanently and in a mutually acceptable way. It should be noted that, Turkey was even rejecting the presence of a water problem in the pre-Adana Agreement period (Entry 42).

Rejecting shared sovereignty or equal allocation with other riparian states, Turkey has suggested that the Euphrates-Tigris rivers be considered together as a single transboundary

basin, a common inventory of all regional water resources and arable lands taken, common water needs determined according to the relative crop cultivation, and the most rational management of rivers decided by the experts of three riparian states. This proposal (three-staged plan) was rejected by Syria and Iraq on the ground that it would harm their sovereignty on the national agriculture policies. Inefficiencies in irrigation might be another reason for their rejection, since Syria's loss of water in agriculture is 50% due to its backward techniques and leaking pipes (Kiran, 2005).

On the other hand, Iraq has advocated a hybrid version of the international rivers notion, by demanding shared sovereignty, 700 m³/sec water from the Euphrates river at the Syrian-Turkish border until a tripartite agreement is reached, avoidance of any Turkish threat on the flow of these rivers, separation of the Euphrates-Tigris rivers at the negotiations, and joint decision on the construction of waterworks. In addition, Iraq has demanded equitable allocation of water, based on the individual requests of each riparian, or a proportional division with respect to those declarations, in case of a mismatch of demand and supply, (Durmazucar, 2002).

Consideration of the Euphrates-Tigris as separate rivers has been an Iraqi argument, since Syria has only a short border with the Tigris, which is a vital source for Iraq. Iraq's policy was the avoidance of any Syrian influence on the fate of the Tigris river, and the current Iraqi government has not signaled a change in this approach. Turkey's waterworks on Tigris are not detrimental on Iraq, since they are mainly for electricity generation, not for irrigation, due to the unfavorable terrain in Turkey (Durmazucar, 2002). Besides, only half of the Tigris' water potential originates in Turkey, while the other half is coming from Iraq (Swain, 2004). In other words, Iraq is practically sharing the sovereignty over the Tigris river with Turkey.

Returning to Table 12, another difference between the Syrian and Turkish arguments is observed: the former party has emphasized the terms "division" and "distribution", whereas Turkey has used "allocation" of water. As recalled from the meanings of these words, Syria's approach is more egalitarian, suggesting the negotiation of equal parties, but Turkey is keen to emphasize her political and geographical superiority over her downstream neighbors.

In the below sections, the periods of 1983-1993, 1994-1998, and 1989-2005 are examined with their contexts, in order to clarify the dynamics behind.

4.3 Major periods in the conflict

4.3.1 The 1983-1993 period

The first entry in the Syrian-Turkish Water Events Database was about the initiation of the Joint Technical Committee in 1983 (Entry 1, Appendix 4). This committee marked one of the most cooperative developments in the history of the Syrian-Turkish water conflict and led to the 1987 Agreement between Syria and Turkey (Entry 3, Appendix 4). With this agreement, Turkey has guaranteed to release an average of 500 m³/sec of the Euphrates waters from the Turkish-Syrian border.

Turkey proposed some integrative –at least, from her perspective- plans during this period. Suggested in 1986, the peace pipeline would begin from the point where Turkey's Seyhan and Ceyhan rivers flow into the Mediterranean Sea. There would be two lines; the Western part was planned to be 2,700 km long, have 3.5 million m³ daily capacity, cost USD 8.5 billion, and pass from Syria, Jordan and Saudi Arabia. On the other hand, the Eastern part was planned to be 3,900 km long, have 2.5 million m³ daily capacity, cost USD 12.5 billion, and pass from Syria, Jordan, Kuwait, Saudi Arabia, Qatar and the United Arab Emirates. When finished, the project would supply water at 0,87-1,07 USD/m³, which would be more reasonable than the desalinated water, costing 4.5 USD/m³ at that time (Kiran, 2005).

The feasibility studies proved this project as workable in that period, but the distrust among the involved states became the major barrier against its initiation, since it needed about 10 years and USD 21 billion to be realized, meaning a serious and long term commitment, and dependency on Turkey for water (Kut, 1993). Nevertheless, the cutting-edge technology has reduced the cost of desalinated water to 1.05 USD/m³, making the project even less attractive now. Still, the desalinated water can not compete with freshwater in terms of quality, leaving aside the environmental side-effects of the desalination plants (Yildiz, 2006).

By 1989, the security problems (Syrian support for PKK) between Syria and Turkey strained their overall relations, having a direct negative effect on the cooperation over water (Entries 5-6, Appendix 4). 1990 was the second 'busy' year after 1996, having high frequency of incidents. The reason was that Turkey opened the Ataturk Dam and filled its reservoir in January and February (for 30 days) that year, by shutting off the flow of Euphrates river completely for the first time. Accordingly, Syria raised several accusations, and Turkey tried

to calm the situation by guaranteeing her commitment to their 1987 Agreement (Entry 8-13, Appendix 4).

In August 1990, Iraq invaded Kuwait and led to the 1990-91 Gulf War, changing the course of events in the Iraqi-Syrian-Turkish water conflict irreversibly. The most cooperative incident of that year was Turkish President Turgut Ozal's visit to Syria, coded as 3, in October (Entry 23, Appendix 4).

Years 1991 and 1992 passed with minor positive and negative incidents, revolving mostly around the sovereignty issue over the Euphrates and Tigris rivers (Entries 25, 29, Appendix 4). In 1992, Turkey stated that she favored bilateral solutions, and would not accept any resolution under the international law. Turkey's objective to keep third parties and international law out of this conflict has a direct implication on the current situation, signaling an obligation to adopt the terms of related UN Conventions in the mid-run, due to her membership status in the EU, as discussed below (Entry 31, Appendix 4).

1993 began with Turkish Prime Minister Suleyman Demirel's visit to Syria (Entry 34, Appendix 4). As a symbol of the highest level of interaction, these kinds of official visits are highly valued in the Water Event Intensity Scale (Appendix 2). The two countries expressed their will to resolve the allocation question, but no further agreement followed. This year ended with Turkey's denial of the existence of water conflict with Syria (Entry 37, Appendix 4).

4.3.2 The 1994-1998 period

Syria's opposition to the Birecik dam of Turkey, and support for the PKK had already strained their relations (Entry 36, Appendix 4). 1994 became a transitory year, and by 1995, Turkey left the water conflict out of her agenda and put her weight on the security problem (Entries 42-47, Appendix 4). The rationale behind this policy can be interpreted as Turkey's desire to separate the water issue from Syria's terrorism card, and solve the latter one primarily. For Turkey, Syria's support for the PKK was intolerable: since 1984, more than 35,000 people had died, millions of citizens of Kurdish origin had been displaced, and USD 6 billion had been spent annually in Turkey during the clash with the PKK (Gruen, 2004).

Another explanation for Turkey's increased negative tone might be her approaching general elections in December 1995, since the PKK terrorism had turned into Turkey's major

domestic problem. 1995 also witnessed the inclusion of the Orontes river (*Asi* in Turkish) by Turkey as an issue in her water conflict with Syria (Entry 48, Appendix 4).

Nevertheless, this negative atmosphere caused the escalation of the conflict in 1996. In this year, Syria tried to strengthen her position by forming coalitions with Iraq and the Arab League against Turkey, and carried the water issue to the international platforms (Entries 55,57, 59-60, 62, 65, Appendix 4). In contrast, Turkey opposed the involvement of any other party (Entry 64, Appendix 4).

In January 1996, Turkey gave a diplomatic note to Syria, reminding their 1987 protocol and the 1992 agreement to prevent terrorist attacks on each other from their territories. Turkey accused Syria of supporting terrorist organizations against herself, namely the PKK, DHKP-C [*Devrimci Halk Kurtulus Partisi ve Cephesi* in Turkish - Revolutionary People's Liberation Party and Front], Dev Sol [*Devrimci Sol* in Turkish - Revolutionary Left] and TIKKO [*Turkiye İşci Koylu Kurtulus Ordusu* in Turkish - Worker Peasant Liberation Army of Turkey]. Moreover, Turkey blamed Syria for encouraging PKK to launch more attacks in Hatay. Turkey demanded the PKK collaborators and their leader Abdullah Ocalan be turned over, otherwise would keep the right to take all necessary precautions given by the international law (Pehlivanoğlu, 2004).

Finally, Turkey decided to take an aggressive stance against Syria due her support for the PKK, and two countries came to the brink of war in October 1998. However, Syria did not take the risk of a war with Turkey, and they signed the Adana Agreement on October 20, 1998, which would be regarded as the end of Turkey's security problem with Syria and beginning of rapprochement in the their relations thereafter.

Ankara Paper 8 (2003) explained the timing of this escalation in 1998 with several factors: first of all, Syria's support for the PKK grew to an intolerable extent for Turkey. Secondly, Turkey had a military superiority over Syria, due to the experience of the Turkish armed forces in northern Iraq, modernized machinery, and the Israeli satellite support, provided through their military cooperation. Finally, the Turkish cabinet at the time was formed after a soft-military intervention of the Turkish army, causing a change in the government, so the influence of the Army on politics was more substantial in 1998 than before.

Sezgin's (2002) viewpoint was quite different than Ankara Paper's. In October 1998, Syria yielded against the threat of a Turkish military intervention, and accepted all of Turkish terms without receiving anything in return. Sezgin questioned the tone of the Turkish threat, whether it differed this time than before. According to him, the reason was not only the

change in the balance of power, despite the argument of the structural realist school. Had it been the case, then Turkey should have realized that superiority in the early 1990s, when the military, political and economic power gap widened after the collapse of Syria's ally Soviet Union, not as late as 1998.

In order to explain the factors behind the Syrian capitulation to Turkish demands in 1998, Sezgin (2002) has employed the prospect theory, which suggests that "people treat gains and losses differently: they overvalue losses to comparable gains". During the crisis, Sezgin argued, Turkish military threat and the PKK issue were at the secondary importance to Syrian President Hafiz al-Assad, whereas creating a favorable political and military environment for his 'crown prince' Bashar al-Assad, was the major concern of the old and sick President (p. 58). Domestic power struggle had always been the top concern of President Hafiz al-Assad (a member of the ethnic minority Alawites) against Sunnis, fractious groups in the army, and even his brother and vice-president Rifat Assad (van Dam, 2000).

Altunışık (2002) emphasized the central role of the Syrian Army in Syrian politics and future of the country. She has stated that "the support of the military for Bashar's (the new president) rule could not be taken for granted" (p. 91). Economic and democratic reforms are working slowly, whereas the US threat from the east, and loss of control in Lebanon have hardened to preserve the domestic balance of power. Recent arrests of democracy proponents might be perceived as a return from political reforms in Syria.⁵⁷

Salhani (2003) has explained the pacification of Syria by referring the US' Middle East Roadmap. The US aim was to strengthen their presence in Iraq through heavy political pressure on Syria. As Salhani stated, President Bashar al-Assad and the highest officials in Syria were suspicious of a US plan to attack them after Iraq. The potential accusations for such a US move would be Syria's possession of weapons of mass destruction and support for the Hezbollah.

At the other side of the equation, Turkey had her own concerns as well. Turkish policy-makers were thinking that they lost the EU membership candidacy in the 1997 Luxembourg Summit. Then, Turkey was engaged in a missile crisis with the Greek Cypriot administration in 1998. In the same year, the US-sponsored developments in northern Iraq opened the way to an autonomous, if not an independent, Kurdish state there. Finally, the general elections would be held in 1999, so the Turkish government needed an incident to unite the country behind (Sezgin, 2002).

⁵⁷ Kanal B (2006). *Dünya* (in Turkish – World). [online]. Available: <http://www.kanalb.com.tr/haber.php?id=5157>. (May 5, 2006).

In general, the escalation of the Syrian-Turkish water conflict in the 1994-98 period carried the aspects of both the Contender-Defender and Conflict Spiral models (Pruitt and Kim, 2004). Syria's aim of changing the structure by using heavier tactics (support for the PKK), and Turkey's defensive responses to protect the status quo fit in the first model. On the other hand, Figure 2 also indicates some features of a conflict spiral for this period, which resembles an increase in the contentious tactics by actions and reactions of both parties. The escalation stopped with the sign of the Adana Agreement, as Turkey overwhelmed her opponent, and Syria yielded to Turkish demands on security without getting anything in return.

4.3.3 The 1999-2006 period

The rapprochement period is the main area of interest of this study. This period has witnessed a substantial improvement in the Syrian-Turkish water relations according to Figure 1, and this improvement originated from the positive attitudes of both sides according to Figure 2.

This period has spotted several cooperative attempts and statements, which would be unthinkable in the pre-Adana Agreement period. For instance, President Bashar al-Assad of Syria and Prime Minister Recep Tayyip Erdogan of Turkey stated in Damascus that they were assessing a joint dam project on the disputed Orontes river (Entry 106,107, Appendix 4). This incident alone was revolutionary in the Syrian-Turkish water relations, considering Syria's historical stance for the status of the Turkish province of Hatay.

Gruen (2004) has linked the silence of water issue in the developing Syrian-Turkish relations to the satisfactory rainfall in recent years and Turkey's consequent ability to provide the promised 500 m³ per second water. However, Syria has continued to complain about the water quality, due to the pollution caused by fertilizers and other chemicals that mix with the Euphrates river during the irrigation of farmlands in southeastern Anatolia. Syrian maps no longer show Hatay within their territory but as part of Turkey, although there has not been any Syrian official declaration of a policy change.

Nevertheless, the structural problems of Syria and Turkey, such as the water conflict, are still unresolved, despite the rapprochement period. For instance, Syria did not sign the Turkish suggestion of the Declaration of Principles, comprising an official Syrian abdication

from Hatay, but expressed her will to deepen the good relations with Turkey first, an aim found reasonable by Turkey (Aydin and Aras, 2005).

4.4 Preconditions

4.4.1 Precondition 1: Stalemate after the Adana Agreement?

By the escalation phase and Adana Agreement in 1998, Syria has realized that she could not change the status quo in the water conflict at an acceptable cost, indicating her perceived stalemate. This policy change can be interpreted as the satisfaction of two factors, out of four, that might lead a party to perceive its stalemate: “failure of contentious tactics... and unacceptable costs or risks (*for further use of these tactics*).” The other two factors are “exhaustion of necessary resources” and “loss of social support” (Pruitt and Kim, 2004, p. 173).

Beginning from 1999, Syria has avoided a further escalation in the water conflict, although no resolution was achieved. Syrian President Bashar al-Assad stated this change explicitly in December 2005:

We have no problems with Turkey in terms of water. The Turks, in accord with the agreement, are providing us the necessary water from the Euphrates, that is, 500 cubic meters per second. They are even providing more. We ascribe great importance to this stance of Turkey. We have a joint dam project on the Asi river... (Entry 111, Appendix 4).

Syria’s weaker position, also threatened by Israel and her new eastern ‘neighbor’, the US, was probably the most important reason for her yielding to Turkey (Gorvett, 2004). In any case, Syria’s signature on the Adana Agreement, accepting all Turkish demands on security, has indicated that Syria’s use of the terrorism card against Turkey failed (Appendix 1).

According to Gruen (2004), Syria realized that the potential cost of harboring the PKK against Turkey further was much higher than its potential gains. Since Syria could not risk a war with Turkey, this act can also be regarded as her cost-benefit analysis that favors yielding. The below statement in June 2001, is an unavoidable evidence for this policy change:

Syrian sources affirmed to Al-Hayah that Ankara violated an official agreement it signed with Damascus back in 1987 by reducing the rate of the Euphrates River flow from 500 cubic feet per second to approximately 300. However, the Syrian sources added that Damascus does not seek a "political escalation" with Turkey (Entry 98, Appendix 4).

Since these expressions are supported by the overall trends in Figures 1 and 2, the Precondition 1,

P₁: The Syrian-Turkish water conflict has entered a stalemate for one or both parties after the 1998 Adana Agreement.

is considered to be satisfied. In other words, this study suggests that Syria has entered a stalemate in her water conflict with Turkey, satisfying the first condition for conflict resolution initiatives, according to Pruitt and Kim (2004). Nevertheless, Syria has not given up all of her demands, as she has continued to complain about the deterioration of the quality of the Euphrates waters (Gruen, 2004). Since Turkey achieved to impose her terms on Syria, and reached her objectives about security with the Adana Agreement, it is not possible to talk about a Turkish stalemate.

4.4.2 Precondition 2: Optimism for resolution?

Figure 1 and Figure 2 represent a significant increase in cooperation between Syria and Turkey over water after the Adana Agreement. However, the graphs derived from the events data are not sufficient to elaborate on Precondition 2. The following Syrian statements made in the rapprochement period might be regarded as the signals of optimism for reaching a mutually acceptable solution. The Syrian Foreign Minister Faruq al-Shara' said in March 2000:

We (Syria and Turkey) are embarking on a new era. I am very optimistic. The relations between Turkey and Syria will be excellent in all fields in the next few years... It can take time, but the beginning has been very good... A very good atmosphere will prevail in these relations. Our cooperation will increase... I do not want to go back and open old wounds, because I believe

that this will not benefit either country; on the contrary, it will harm them. Let us open a new page.⁵⁸

Later in December 2005, Syrian President Bashar al-Assad mentioned that, “There are no problems in our relationship. This relationship is developing in every area. Despite all the external interference and efforts to thwart it, I am very hopeful for the future of this relationship”.⁵⁹

However, Turkey’s persistence on her traditional position over water seems to prevent some cooperative initiatives:

Turkish Deputy Prime Minister Mesut Yilmaz: The Euphrates dam is important to the future of economic development in Turkey. I would like to call on Syria to accept the inevitability of this project and engage in negotiations on a rational use of water. For our part, we are willing to be fair and generous. Nevertheless, the water sharing may not be equal because the Euphrates, like any other Turkish river, must serve the Turkish people's interests in the first place (Entry 95, Appendix).

Syrian Irrigation Minister Taha al-Atrash: Two months ago, talks were held between Syria and Iraq on sharing the Tigris River waters in preparation for talks among Syria, Iraq, and Turkey. We have invited the brother Turks to meet, discuss, and reach a water sharing agreement. For a year now we have been noticing a positive response from Turkey. We are waiting to meet and reach this agreement. This will happen if we find support from the Arab states and a united Arab stand. I expect that the Arab Summit in Amman will issue a resolution supporting the stand of Syria and Iraq and urging Turkey to sign a final agreement (Entry 96, Appendix).

From the actions side, the 2001 Joint Communiqué (Appendix 3) and the 2002 implementation protocol⁶⁰ are regarded as significant mutual efforts of Syria and Turkey to improve cooperation on water resources socio-economic development in the region. Still, this

⁵⁸ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Interview by Mehmet Ali Birand in Damascus, Istanbul CNN TURK Television, 9 March 2000.

⁵⁹ Open Source Center (2006). Login. [online]. Available: <https://www.opensource.gov>. (March 1-June 10, 2006). The original source: Interview by Husnu Mahalli, Istanbul *Turkiye'de Aksam*, 26 December 2005.

⁶⁰ Kibaroglu, A. (date unidentified). Water for sustainable development in the Euphrates-tigris river basin. [online]. Available: <http://www.gap.metu.edu.tr/html/yayinlar/waterforsustainableAKibaroglu.pdf>. (June 14, 2006).

study does not regard these evidence as sufficient to conclude an optimism at both sides, since the Turkish officials have not made as positively strong comments as their Syrian counterparts. In other words, the positive actions and statements might be representing a micro-level cooperation for one or both parties, but without necessarily promising a final resolution of the Syrian-Turkish water conflict. For these reasons, the Precondition 2,

P₂: Syria and Turkey have optimism to resolve their water conflict in a mutually acceptable way.

is considered to be neither satisfied nor dissatisfied.

4.4.3 Precondition 3: Benefits of resolution outweighing the costs?

Turkey is the geographically and militarily powerful party at this conflict. Now Syria is abstained from her contentious tool (terrorism card), Turkey might be even less motivated to respond to Syria's grievances. As a matter of fact, this study encountered no policy expression or action from the Turkish side that signals her will to resolve the conflict in a mutually acceptable way, although Syrian Foreign Minister Faruq al-Shara's statement in March 9, 2000 was exceptionally encouraging for such an initiative:

We are satisfied with the current 500 cubic meters. There are blockages at times, but we understand the reasons. If we reach a final agreement now, we could preempt the consequences of any future political developments or environment changes. Water must be a bridge of friendship between the two countries. (Entry 92, Appendix 4)

The tendency of Turkish policy makers to preserve the status-quo in the water conflict might be interpreted as their not expecting a stalemate for Turkey in the upcoming decade. Kahneman and Tversky (1979) have suggested the prospect theory as an alternative model to the expected utility theory to explain decision-making under risk:

Choices among risky prospects exhibit several pervasive effects that are inconsistent with the basic tenets of utility theory. In particular, people underweight outcomes that are merely probable in comparison with outcomes that are obtained with certainty. This tendency, called the certainty effect,

contributes to risk aversion in choices involving sure gains and to risk seeking in choices involving sure losses (p. 263).

Otherwise, Turkey would probably develop an integrative option to resolve the Syrian-Turkish water conflict within their rapprochement context. Pruitt (1995) has underlined the central importance of the notion “Perceived common ground” (PCG), a party’s consideration of the possibility of reaching an integrative option, in the problem solving strategy. However, the conditions listed by Pruitt (1995) that enhance PCG, namely, “faith in own problem solving ability”, “momentum (prior success at reaching agreement in the current negotiation)”, “availability of a mediator” and “trust” are either not present or evident for the Syrian-Turkish water conflict (p. 36).

As Freeman (2001) argued, the inequality of water resources, geographic location, power (in terms of military and economy), and regional development (GAP) have worked in favor of Turkey throughout the history of this conflict, making a change in the status-quo unlikely in the short-term. Freeman stressed the necessity for Iraq and Syria to find incentives for Turkey to convince her for a final settlement. Lowi (2001) has made a parallel comment and stated that Turkey would not sacrifice her maneuver ability, which was increased further by Iraq’s isolation after the 1990-91 Gulf War, in favor of a cooperative water management regime, whereas the unfavorable political context has prevented Iraq and Syria to counterbalance Turkey’s aims.

In consequence, the Precondition 3,

H₃: The cost-benefit analyses of both parties favor the resolution of the water conflict.

is considered to be dissatisfied. Therefore, this study concludes that the necessary preconditions for a problem-solving initiative in the Syrian-Turkish water conflict are not satisfied simultaneously in the rapprochement period.

4.5 An alternative cost-benefit analysis for Turkey

As discussed above, Turkey has achieved to continue GAP, and prevent Syria and Iraq from imposing their terms on herself, by simply preserving the status-quo. Since Syria and Iraq are now weaker than before, due the Adana Agreement and the 2003 US-led operation,

Turkey might be feeling even less pressure to find a mutually acceptable solution to the water conflict. But is this relief going to last forever?

Kibaroglu et al. (2006) mentioned that Turkey has to take the EU's Water Framework Directive 2000/60/EC into consideration during the accession and twinning process, while developing policies about her transboundary rivers. The Directive 2000/60/EC has suggested an integrative management of river basins with all riparian states, and development of institutional mechanisms to promote regional cooperation:

Within a river basin where use of water may have transboundary effects, the requirements for the achievement of the environmental objectives established under this Directive, and in particular all programmes of measures, should be coordinated for the whole of the river basin district. For river basins extending beyond the boundaries of the Community, Member States should endeavor to ensure the appropriate coordination with the relevant non-member States. This Directive is to contribute to the implementation of Community obligations under international conventions on water protection and management, notably the United Nations Convention on the protection and use of transboundary water courses and international lakes, approved by Council Decision 95/308/EC (1)⁶¹ and any succeeding agreements on its application (Article 35).⁶²

The referred UN Convention is the 1992 UNECE (United Nations Economic Commission for Europe) Convention on the Protection and Use of Transboundary Watercourses and International Lakes or the Helsinki Agreement, promoting reasonable and equitable allocation of transboundary water resources. The UNECE, a regional commission of the UN, comprises Europe, Central Asia, North America and Israel⁶³:

The Riparian Parties shall on the basis of equality and reciprocity enter into bilateral or multilateral agreements or other arrangements, where these do not yet exist, or adapt existing ones, where necessary to eliminate the contradictions with

⁶¹ EU (1995). Eur-lex. [online]. Available: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995D0308:EN:HTML>. (May 26, 2006).

⁶² EU (2000). Official Journal of the European Communities. [online]. Available: http://europa.eu/eur-lex/pri/en/oj/dat/2000/l_327/l_32720001222en00010072.pdf. (May 26, 2006).

⁶³ United Nations Economic Commission for Europe (2004). The 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes. [online]. Available: http://www.unece.org/env/water/documents/brochure_water_convention.pdf. (May 24, 2006).

the basic principles of this Convention, in order to define their mutual relations and conduct regarding the prevention, control and reduction of transboundary impact. The Riparian Parties shall specify the catchment area, or part(s) thereof, subject to cooperation. These agreements or arrangements shall embrace relevant issues covered by this Convention, as well as any other issues on which the Riparian Parties may deem it necessary to cooperate (Article 9).⁶⁴

Like the 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses, the Helsinki Agreement, adopted by 24 European countries and the European Union, has brought a dispute resolution mechanism that begins with negotiations and ends with an arbitration mechanism leading to the International Court of Justice.⁶⁵ The officials of the DSI, Akkaya et al. (2006) argued that, Turkey would probably be obliged to adopt the Helsinki Agreement, in case of her full membership in the EU, so she should develop water policies accordingly and as early as possible. The 2004 Regular Report on Turkey's progress towards accession of the EU was another example for the EU's growing interest in the issue:

As regards water quality, further efforts are needed to transpose and implement the *acquis*, including a new framework law on the management of water resources in line with the water framework Directive. Cross-border cooperation needs to be stepped up with the neighbouring countries in this regard.⁶⁶

Referring to the EU Commission's October 2004 report on Turkey,⁶⁷ Aytemiz and Kodaman (2006), and Yalcinkaya (2006) concluded that during the accession negotiations, the EU would likely to define the Euphrates and Tigris rivers as separate basins, and demand

⁶⁴ UN (2001). Helsinki agreement. [online]. Available: <http://www.thewaterpage.com/helsinki.htm>. (May 29, 2006).

⁶⁵ Wouters, P. (2001). The legal response to international water scarcity and water conflicts: The un watercourses convention and beyond. [online]. Available: http://www.thewaterpage.com/pat_wouters1.htm#_ftnref56. (May 29, 2006).

⁶⁶ Commission of the European Communities (2004). 2004 regular report on turkey's progress toward accession. [online]. Available: http://www.turkses.com/rr_tr_2004_en.pdf. (May 20, 2006).

⁶⁷ Ministry of Foreign Affairs, Turkey (2004). Türkiye'nin üyeliği perspektifinden kaynaklanan hususlar (in Turkish – Issues arising from turkey's full membership perspective. [online]. Available: http://www.mfa.gov.tr/NR/rdonlyres/BC69BCD0-42C9-44FD-8E8E-3238A8E30C07/0/etki_degerlendirme.pdf. (June 4, 2006).

a resolution in accordance with the above conventions, which are against Turkey's traditional policies on her transboundary rivers:

A key issue in the region is access to water for development and irrigation. Water in the Middle East will increasingly become a strategic issue in the years to come, and Turkey's accession one could expect international management of water resources and infrastructures (dams and irrigation schemes in the Euphrates and Tigris river basins, crossborder water cooperation between Israel and its neighboring countries) to become a major issue for the EU (*from the EU's October 2004 report, Issues Arising From Turkey's Membership Perspective, in Yalcinkaya, 2006*).

It should also be noted that the absolute sovereignty principle, on which Turkey has based her policy, is no longer employed even by the country (US) that suggested it at the first place in 1895 (Zehir, 2003). China remains the only significant power sharing Turkey's arguments in the international arena, but China's permanent membership in the UN Security Council, and Turkey's bid for the EU membership, are the significant factors that affect their bargaining power at the negotiation table.

Complicating the situation further, northern Iraq has practically turned into an autonomous Kurdish entity, with her own flag, parliament and army, after the 1990-91 Gulf War (Elhance, 1999). Iraqi Kurds have become politically stronger after the 2003 US-led operation, now having the leader of the Patriotic Union of Kurdistan (PUK), Jalal Talabani, as the President of Iraq. Currently, the Kurdish administration in northern Iraq is trying to formalize its status in a federation formula, but becoming independent remains as a long-term goal, as President Talabani stated in an interview with the Times in February 2005:

Ask Kurds: Do you want independence? Of course everyone will say yes. But is it possible to have independence now? There are two things: wishful thinking and reality. Most Kurds voted for a legislature to be part of a united democratic federative Iraq... a federation within the framework of Iraq... The Kurdish struggle will continue until it achieves self-determination. Right now, though, in Iraq the Kurdish struggle will continue for the prosperity of our people, for economic development.⁶⁸

Massud Barzani, the President of the regional Kurdish administration in northern Iraq and the leader of the Iraqi Kurdistan Democratic Party (KDP), which is one of two founding

⁶⁸ Washington Kurdish Institute (2005). *Newsletters*. [online]. Available: <http://www.kurd.org/newsletters/20050226140059.html#13>. (February 16, 2006)

parties (with PUK) of the Kurdish administration, has been more direct in expressing these aspirations. President Barzani said in January 2005:

Neither Turkey nor any other country has any right to say anything about Kirkuk or about any other Iraqi city. What they say is of no concern to us. Such words do not bind us. These things will not be resolved with threats. An independent Kurdish state is indeed going to be established, but I do not know when it will be established. The preference of the people of Kirkuk will become clear following the election. A referendum will be conducted in accord with the desires of the people.⁶⁹

These desires have been expressed several other times, one of which came on July 19, 2006: President Barzani stated that, “an independent Kurdish state is a natural right, but it can only be established at the appropriate moment.”⁷⁰

At the other side of the border, Turkish policy-makers have regarded a Kurdish state in northern Iraq as one of the most undesired developments, due to the significant Kurdish population (7-10 million) living in the adjoining southeastern Anatolia (Aral and Köni, 2002). In case of such a scenario, the new Kurdish state will probably be another source of instability in the Turkish southeast, which has been suffering from the terrorist attacks of the predominantly Kurdish PKK for more than two decades.⁷¹ The PKK, a terrorist organization claiming southeastern Anatolia as part of ‘Kurdistan’, is enjoying the indifferent administration in the northern Iraq, and using this region as its base to launch attacks on the Turkish side.

Turkey has made strong statements against such a Kurdish entity at its southern border and the tension has risen to an extent that, the KDP threatened Turkey in 2002 to turn

⁶⁹ Kurdish Media (2005). *Barzani: Independent Kurdish State will be established*. [online]. Available: <http://www.kurdmedia.com/articles.asp?id=6170>. (July 19, 2006).

⁷⁰ NTVMSNBC (2006). *Barzani: Kürt Devleti Hakkımız* (in Turkish – Barzani: Kurdish state is our right). [online]. Available: <http://www.ntvmsnbc.com.tr/news/380072.asp>. (July 19, 2006).

⁷¹ Kurdish Media (2004). *Turkey opposed to autonomy for kurds in northern iraq: Turkish pm*. [online]. Available: <http://www.kurdmedia.com/articles.asp?id=5125>. (May 22, 2006).

northern Iraq into a graveyard for Turks, in case of a Turkish military intervention.⁷² Aral and Köni (2002) have presented the figures on Kurdish population in the Middle East as 7-10 million in Turkey, 5-6 million in Iraq, 3-4 million in Iran and 2-3 million in Syria, which make up about 20 million. Gunther (2004) has defined the basis of Kurdish question as their desire for statehood or cultural autonomy within the regions they predominantly live, in Iran, Iraq, Syria and Turkey.

The protection of the rights of Turkmens, the Turkish-speaking ethnic group living in northern Iraq, has been another motivation for Turkey to avoid Kurdish political dominance in northern Iraq.⁷³

If the Kurdish administration's objective to be independent is achieved, the number of the involved parties in the water conflict will increase from three to four, making a general resolution even less likely. In this case, this study estimates a risk for Turkey to encounter undesired arguments from a Kurdish state at water negotiations, since GAP and the Turkish part of the Euphrates and Tigris rivers are located in the regions that are historically claimed as part of 'Kurdistan', and inhabited heavily by Kurdish people.

Surely, such a Kurdish state would be militarily weaker to claim territory from Turkey, but if recognized by the US and the United Kingdom (UK), and controlled the rich oil fields of Mosul and Kirkuk, she would get stronger politically, and take side by the coalition against Turkey at their water conflict. In fact, there is a general belief in Turkey that an independent Kurdish state, controlling the oil fields in northern Iraq, has been the underlying US and UK plan, although the Bush administration have formally supported the territorial integrity of Iraq (Gruen, 2004).

The Kurdish question had been a weapon at the hands of Syria, but after the 2003 US-led operation in Iraq, Syria began to regard the formation of the autonomous Kurdish administration in northern Iraq as a threat to her internal security as well, since she has a significant Kurdish population at the Iraqi border. Now, Syria and Turkey are seeing an interest in acting together against such a Kurdish entity (Gorvett, 2004). As Gruen (2004)

⁷² Turkish Daily News (2003). 2002 in perspective. [online]. Available: <http://www.turkishdailynews.com.tr/archives.php?id=30693>. (February 23, 2006) Name of the spokesman was not stated.

⁷³ Turkish Daily News (2003). 2002 in perspective. [online]. Available: <http://www.turkishdailynews.com.tr/archives.php?id=30693>. (February 23, 2006)

argued, Turkish officials see Syria (and Iran) as an ally that are needed to tackle with Kurdish aspirations in northern Iraq.

Therefore, Turkish policy-makers should consider the upcoming EU political pressure to change her transboundary river policies, which may deteriorate her bargaining power at the negotiation table significantly. On the other hand, the situation in northern Iraq has already turned negatively for Turkey, and even in a federative system, a Kurdish state will probably increase the issues and objectives in the water conflict through the central government of Iraq.

In the dawn of these potential costs, the resolution of the Syrian-Turkish water conflict, based on the leverage provided by the rapprochement context, may strengthen Turkey's position in the water conflict, before a political pressure is imposed by the EU. Druckman (1993) mentioned that the bargaining process is a complex process, "affected by time pressure, perceived relative defensibility of positions, and perceived similarity between bargaining opponents" (p. 30). Thus, it may be reasonable for Turkey to negotiate a resolution with Syria, while her bargaining power is still at a maximum. Besides, the Syrian-Turkish cooperation over water promises several economic, environmental and social benefits for both sides, which would contribute to the mutual trust and regional stability (Altınbilek, 1997).

CONCLUSION

The Syrian-Turkish water conflict has produced different consequences for the parties in its decades long history. Syria, which gave enormous support to the terrorist organizations against Turkey, has achieved literally nothing. In fact, this party was forced to deport the PKK and its leader Abdullah Ocalan, and marginalized in the region after the 2003 US-led operation in Iraq.

Turkey, on the other hand, has failed to win other parties' consent for GAP, which cost her heavily in terms of finance. For instance, the largest dam of the GAP, the Ataturk Dam, had to be financed solely by Turkey until 1997, because of the World Bank's policies, requiring the consent of all riparian states for funding of the large waterworks. This outcome contributed to the budget deficit of Turkey significantly, which is held responsible for the high inflation in Turkey in the last two decades by many experts.

Secondly, the PKK terrorism is estimated to cause 30,000 deaths, and cost USD 50 billion to Turkey (Gruen, 2000). Although the PKK terrorism can not be reduced to a component of the Syrian-Turkish water conflict, Turkish containment of the problem could have been more successful, had the PKK not been supported and hosted by Syria. In fact, the persistent terrorism during the 1980-1990s became another obstacle to provide international funding for GAP, and to motivate Turkish industrialists to invest in southeastern Anatolia. Turkey's failure at this aspect becomes more obvious, when one of the aims of GAP - reduction of economic and social disparity in the predominantly Kurdish populated southeastern Anatolia- is remembered.

Thirdly, Turkey has lost the international legitimacy for her cause, after the 1992 and 1997 UN [Conventions](#) were adopted. Although not binding for Turkey for the time being, these Conventions may affect her bargaining power negatively in the future, because of Turkey's accession talks with the EU, which adopted the UN terms as its internal water directives.

The protracted Syrian-Turkish water conflict clearly indicates that the resource-based conflicts can be as complicated as other types of conflicts, especially when the claims over resources are braided with political and psychological concerns. Whether Turkey accepts, her control on the Euphrates and Tigris rivers will continue to be a psychological pressure on the lower riparian states, as long as their underlying fears and distrust are not addressed. An integrative solution is definitely needed in this over-populated and underdeveloped part of the world. Otherwise, an efficient and effective use of the scarce water resources, leaving aside the issues of regional stability or environmental damage, can never be addressed properly.

This study intended to find out whether the three preconditions –stalemate, optimism, and cost-benefit analysis favoring the resolution- for a problem-solving initiative existed for the Syrian-Turkish water conflict in the rapprochement period. This analysis is regarded as essential, due to the improvement in the parties' overall relations, and the perceived potential of resolution within this context.

For this purpose, a Syrian-Turkish Water Events Database was created, and actions and policy statements of both parties were analyzed through qualitative case study. The outcome of this research indicates that, the lack of optimism, and unwillingness of Turkey to resolve the water conflict in a mutually acceptable way are standing as the major barriers against a problem-solving initiative, although Syria has entered a stalemate after the 1998 Adana Agreement.

The geographically superior riparian on the Euphrates and Tigris rivers, Turkey has preferred the status-quo in the water conflict, while constructing new dams and hydroelectric terminals within GAP. This study attributes Turkey's persistence on this preference to her cost-benefit analysis that not favor a change in her traditional policies. However, the appropriateness of this cost-benefit analysis is questionable not only for the past two decades, considering the huge financial and human loss caused by the confrontation of Iraq and Syria, and the disappointments with GAP, but also for the upcoming decades.

Against Turkey's persistent position with the status-quo, this study suggests that her accession talks with the EU and the formation of a Kurdish state in northern Iraq, either federative or independent, are developments that may alter the picture drastically. In these circumstances, Turkish policy-makers need to consider a problem-solving initiative with Syria, while Turkey's bargaining power is still at a maximum. Turkey might be having a historical opportunity to stabilize her relations with Syria permanently, while strengthening her position in the protracted conflict over the Euphrates and Tigris rivers.

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Appendix 1: The 1998 Adana Agreement

MINUTES

(Unofficial Translation)⁷⁴

In light of the messages conveyed on behalf of Syria by the President of the Arab Republic of Egypt, H.E. Mr. Husni Mubarak and by the Iranian Foreign Minister H.E. Mr. Remal Harrazi on behalf of the Iranian President H. E. Mr. Seyid Mohammed Khatemi and by the Foreign Minister of the Arab Republic of Egypt, H.E. Mr. Amr Moussa, the Turkish. and Syrian delegations whose names of which are listed in the attached list (Annex 1) have met in Adana on 19 and 20 October 1998 to discuss the issue of cooperation in fighting terrorism.

In the meeting, the Turkish side repeated the Turkish demands presented to the Egyptian President (Annex 2) to eliminate the current the current tension in their relations. Furthermore, the Turkish side brought to the attention of the Syrian the reply that was received from Syria through the Arab Republic of Egypt which entails the following commitments:

1. As of now, Ocalan is not in Syria and he will definitely not be permitted to enter Syria.
2. PKK elements abroad will not be permitted to enter Syria.
3. As of now PKK camps are not operational and definitely will not be permitted to become active.

⁷⁴ Transboundary Freshwater Dispute Database (1994-2004). Minutes (signed between Syria and Turkey in Adana, on October 20, 1998). [online]. Available: <http://ocid.nacse.org/qml/research/tfdd/toTFDDdocs/381ENG.htm>. (February 8, 2006).

4. Many PKK members have been arrested and have been taken to court. The lists are available, and Syria has delivered these lists to the Turkish side.

The Syrian side has confirmed the above mentioned points. Furthermore, the parties have also agreed on the following points:

1. Syria, on the basis of the principle of reciprocity, will not permit any activity which emanates from its territory aimed at jeopardizing the security and stability of Turkey. Syria will not allow the supply of weapons, logistic material, financial support to, and propaganda activities of, the PKK on its territory.

2. Syria has recognized that the PKK is a terrorist organization. Syria has, alongside other terrorist organizations, banned all activities of the PKK and its affiliated organizations on its territories.

3. Syria will not allow the PKK to establish camps and other facilities for training and shelter, or to have commercial activities on its territory.

4. Syria will not allow PKK members to use Syria for transit to third countries.

5. Syria will take all necessary measures to prevent the head of the PKK terrorist organization from entering into Syrian territory and will instruct its authorities at border points to that effect.

Both sides have agreed to establish certain mechanism for the effective and transparent implementation of the measures mentioned above.

In this context:

a) A direct phone link will immediately be established and operated between the high-level security authorities of the two countries.

b) The Sides will appoint two special representatives each to their diplomatic missions and these officials will be presented to the authorities of the host country by the heads of mission.

c) The Turkish side, within the context of combating terrorism, has proposed to the Syrian side to establish a system that will enable the monitoring of security enhancing and their effectiveness. The Syrian side has stated that it will present this proposal to the authorities for approval and will inform Turkey on the result as soon as possible.

d) The Turkish and Syrian sides, contingent upon obtaining Lebanon's consent, have agreed to take up the issue of the combat against PKK terrorism in a tripartite framework.

e) The Syrian side has commits itself to take the necessary measures for the implementation of the points mentioned in this "Minutes" and for the achievement of concrete results.

Adana, October 20, 1998

For the Turkish Delegation

Ambassador Ugur Ziyal

Foreign Ministry

Deputy Under-Secretary

For the Syrian Delegation

Major General Adnan

Badr Al Hassan

Head of Political Security

Annex 2 of the Syrian-Turkish Agreement

22.10.96

Annex 2

Turkey's Specific Demands from Syria

In order to normalize our relations, we expect Syria to comply with the basic norms and principles of international relations. In this regard, the following specific demands should be met:

Given the fact that Turkish-Syrian relations were seriously damaged by Syrian support for terrorism, we want Syria to accept formally its obligations and renounce its previous stand on this matter. These obligations should include a formal commitment not to give terrorists support, sanctuary, and financial assistance. Syria should also prosecute PKK perpetrators and extradite to Turkey the chief of the PKK, Abdullah Ocalan and his collaborators.

Within this framework, Syria should not:

- * Permit camps for terrorist training to operate in territories under its control,
- * Provide weapons, logistic materials to the PKK,
- * Provide fraud identification documents to PKK members,
- * Help terrorists in obtaining legal passage and infiltration into Turkey,
- * Permit the propaganda activities of the terrorist organization,

- * Allow the PKK to operate in accommodations in its territory,
- * Facilitate the passages of terrorists from third countries (Europe, Greece, Southern Cyprus, Iran, Libya, Armenia) to northern Iraq and Turkey.

Syria should provide:

- * Cooperation in all activities aimed at fighting terrorism.
- * Abstention from inciting other countries which are members of the Arab League against Turkey.

In light of the above, unless Syria refrains from these acts immediately, with all the consequences, Turkey reserves the right to exercise her inherent right of self-defense, and under all circumstances to demand just compensation for the loss of life and property. Indeed, these views were transmitted to Syria through diplomatic channels on 23 January 1996. However, our warnings have fallen on deaf ears.

Appendix 2: The Water Event Intensity Scale

Water Event Intensity Scale	
BAR SCALE	EVENT DESCRIPTION
-7	Formal Declaration of War
-6	Extensive War Acts causing deaths, dislocation or high strategic cost: Use of nuclear weapons; full scale air, naval, or land battles; invasion of territory; occupation of territory; massive bombing of civilian areas; capturing of soldiers in battle; large scale bombing of military installations; chemical or biological warfare.
-5	Small scale military acts: Limited air, sea, or border skirmishes; border police acts; annexing territory already occupied; seizing material of target country; imposing blockades; assassinating leaders of target country; material support of subversive activities against target country.
-4	Political-military hostile actions: Inciting riots or rebellions (training or financial aid for rebellions); encouraging guerilla activities against target country; limited and sporadic terrorist actions; kidnapping or torturing foreign citizens or prisoners of war; giving sanctuary to terrorists; breaking diplomatic relations; attacking diplomats or embassies; expelling military advisors; executing alleged spies; nationalizing companies without compensation.
-3	Diplomatic-economic hostile actions: Increasing troop mobilization; boycotts; imposing economic sanctions; hindering movement on land, waterways, or in the air; embargoing goods; refusing mutual trade rights; closing borders and blocking free communication; manipulating trade or currency to cause economic problems; halting aid; granting sanctuary to opposition leaders; mobilizing hostile demonstrations against target country; refusing to support foreign military allies; recalling ambassador for emergency consultations regarding target country; refusing visas to other nationals or restricting movement in country; expelling or arresting nationals or press; spying on foreign government officials; terminating major agreements. <i>Unilateral construction of water projects against another country's protests; reducing flow of water to another country, abrogation of a water agreement.</i>
-2	Strong verbal expressions displaying hostility in interaction: Warning retaliation for acts; making threatening demands and accusations; condemning strongly specific actions or policies; denouncing leaders, system, or ideology; postponing heads of state visits; refusing participation in meetings or summits; leveling strong propaganda attacks; denying support; blocking or vetoing policy or proposals in the UN or other international bodies. <i>Official interactions only.</i>
-1	Mild verbal expressions displaying discord in interaction: Low key objection to policies or behavior; communicating dissatisfaction through third party; failing to reach an agreement; refusing protest note; denying accusations; objecting to explanation of goals, position, etc.; requesting change in policy. <i>Both unofficial and official, including diplomatic notes of protest.</i>

0	Neutral or non-significant acts for the inter-nation situation: Rhetorical policy statements; non-consequential news items; non-governmental visitors; indifference statements; compensating for nationalized enterprises or private property; no comment statements.
1	Minor official exchanges, talks or policy expressions--mild verbal support: Meeting of high officials; conferring on problems of mutual interest; visit by lower officials for talks; issuing joint communiqués; appointing ambassadors; announcing cease-fires; non-governmental exchanges; proposing talks; public non-governmental support of regime; exchanging prisoners of war; requesting support for policy; stating or explaining policy.
2	Official verbal support of goals, values, or regime: Official support of policy; raising legation to embassy; reaffirming friendship; asking for help against third party; apologizing for unfavorable actions or statements; allowing entry of press correspondents; thanking or asking for aid; resuming broken diplomatic or other relations.
3	Cultural or scientific agreement or support (non-strategic): Starting diplomatic relations; establishing technological or scientific communication; proposing or offering economic or military aid; recognizing government; visit by head of state; opening borders; conducting or enacting friendship agreements; conducting cultural or academic agreements or exchanges. <i>Agreements to set up cooperative working groups.</i>
4	Non-military economic, technological or industrial agreement: Making economic loans, grants; agreeing to economic pacts; giving industrial, cultural, or educational assistance; conducting trade agreements or granting most favored nation status; establishing common transportation or communication networks; selling industrial-technological surplus supplies; providing technical expertise; ceasing economic restrictions; repaying debts; selling non-military goods; giving disaster relief. <i>Legal, cooperative actions between nations that are not treaties; cooperative projects for watershed management, irrigation, poverty-alleviation.</i>
5	Military economic or strategic support: Selling nuclear power plants or materials; providing air, naval, or land facilities for bases; giving technical or advisory military assistance; granting military aid; sharing highly advanced technology; intervening with military support at request of government; concluding military agreements; training military personnel; joint programs and plans to initiate and pursue disarmament.
6	International Freshwater Treaty; Major strategic alliance (regional or international): Fighting a war jointly; establishing a joint military command or alliance; conducting joint military maneuvers; establishing economic common market; joining or organizing international alliances; establishing joint program to raise the global quality of life.
7	Voluntary unification into one nation: Merging voluntarily into one nation (state); forming one nation with one legally binding government.

Appendix 3: The 2001 Joint Communique

JOINT COMMUNIQUE

Between

Republic of Turkey

Prime Ministry

Southeastern Anatolia Project Regional Development Administration

(GAP)

and

Arab Republic of Syria

Ministry of Irrigation

General Organization for Land Development

(GOLD)

23 August 2001

Ankara-TURKEY

Based on the invitation by H.E. Mustafa Yilmaz, Minister of State of Republic of Turkey; H.E. Taha al-Atrash, Minister of Irrigation of Arab Republic of Syria, accompanied by a technical delegation paid a visit to Turkey during the period of August 21-26, 2001.

Several meetings were held between the two ministers and their respective delegations. The following points are agreed upon to be realized between GAP Administration and GOLD:

A. Training Programs

Three groups of training courses will be considered under this program.

- International training courses of GAP will be made available for the attendance of the Syrian experts.
- GAP will organize custom-made courses to be attended by Syrian experts.
- The two parties will organize joint courses.

The Basic principles regarding the training programs are as follows:

- Training courses can be conducted in English, Turkish, and/or Arabic, as appropriate.
- Custom-made and joint courses can be gradually extended, upon mutual agreement, to the participants from other Arabic speaking countries. These courses can be organized/implemented in both countries.

Both parties have agreed to realize the first custom-made course in 2001, and the first joint course in early 2002.

B. Joint Projects

GAP and GOLD will identify, plan and implement joint projects. Scope and basic components (location, content and finance etc.) of these projects will be determined jointly by

both organizations and relevant agencies. One of the first projects could be the development of twin protection areas-one from each country to be studied, planned and implemented as a Twin Development Project. Such projects will be carried out, when applicable, with the participation of other organizations from the two countries.

C. Exchange Programs/Partnership

- Exchange of visits of top executives, preferably on an annual basis,
- Exchange of experts and staff,
- Cooperation between the GAP Agricultural Research Station in Koroklu in Turkey, and the Martyr Basel Al-Assad Research Center in Syria.

The General Directorate of Rural Services (KHGM) of Turkey can take part, under the coordination of GAP, in the above-mentioned programs, projects, and partnerships and can offer its standard courses and the services of its Agricultural Hydrologic Research and Training facilities within the framework of this agreement.

Other parties, institutions, agencies etc., can be included in the above-mentioned programs, projects and partnerships upon mutual consent of GAP and GOLD.

GAP and GOLD will appoint, within one month following the signing of this document, their respective contact persons who will carry out the tasks for the implementation of this agreement.

New topics, programs or activities that are not included in this document can be added in the future, based on mutual agreement.

Dr. I. H Olcay UNVER

Eng. Kays al-ASSAD

President

Director General

GAP

GOLD

Appendix 4: Syrian-Turkish Water Events Database

Entry No	Event Summary	Bar Scale	Turkey	Syria	Date	Principal Issue Type	Source	Country List
1	A Protocol of the Joint Economic Committee was established between Turkey and Iraq in 1980, which allowed for Joint Technical Committee meetings relating to water resources. Syria began participating in 1983, although meetings have been intermittent at best.	3	3	3	January 1, 1983	Water Quantity	Wolf-Euphrates Case Study	Iraq-Syria-Turkey
2	The Syrian prime minister calls Turkish prime minister to request more water in the Euphrates River. Turkey responds favorably. This event is significant because the two countries have not held much dialog in the past.	2	2	2	August 21, 1986	Water Quantity	Istanbul Cumhuriyet	Syria-Turkey
3	A 1987 visit to Damascus by Turkish Prime Minister Turgut Ozal reportedly resulted in a signed agreement for the Turks to guarantee a minimum flow of 500 m ³ /s across the border with Syria.	3	3	3	January 1, 1987	Water Quantity	Wolf-Euphrates Case Study	Syria-Turkey
4	Turkey, Iraq and Syria ended talks on sharing waters from the Tigris and Euphrates rivers on Nov 22, the Turkish Foreign Ministry said on Nov 23. They will resume talks in April 1989, the Foreign Ministry said.	1	1	1	November 22, 1988	Water Quantity	(empty in the original source)	Syria-Turkey
5	Turkey's Prime Minister, Turgut Ozal warned that water supplies may be cut off if Kurdish activities are not curbed by Syria, on October 2. Iraq, through which the river also flows, would be affected if Turkey reduced the present flow of 500 cubic meters of water per second to Syria under an agreement reached in 1987.	-2	-2		October 2, 1989	Water Quantity	(empty in the original source)	Syria-Turkey-Kurds

6	Turkey's Deputy Foreign Minister, Tugay Ozceri and Syria's Deputy Foreign Minister, Youssef Shakkour began talks on bilateral relations on November 20. Syrian-Turkish relations have been strained in the past five years by anti-Turkish Kurdish guerrilla bases in Syrian-held areas in Lebanon and Turkish dam-building on the Euphrates river, Syria's northern lifeline.	1	1	1	November 20, 1989	Water Quantity	(empty in the original source)	Syria-Turkey-Kurds
7	Turkey doubled the flow of Euphrates river water ahead of a one-month diversion to fill a major dam to Syria on December 21. The sources said the diversion would be the first of several to fill the dam, centerpiece of an 11-billion-dollar program to help boost living standards in southeastern Turkey.	1	1		December 21, 1989	Water Quantity	(empty in the original source)	Syria-Turkey
8	Syria complained to Turkey that its diversion of the Euphrates river to fill a dam was against international law. Syria stated that diversion of the river would seriously affect Syria's drinking water supplies and electricity generation. Turkey diverted the Euphrates river to fill its new Ataturk dam.	-1		-1	January 15, 1990	Water Quantity	(empty in the original source)	Syria-Turkey
9	Syria blamed Turkey for electricity cuts and water shortages across the country, saying they were the result of Ankara's decision to cut the flow of the Euphrates River. This is a reaction to Turkey's decision in January to change the course of the river to fill a giant dam. A Syrian official said "The cut had a psychological effect on the Syrian people who depend in their daily lives on the river's waters. The cut might lead to a state of enmity on the popular level, something which both the Syrian and Turkish governments exerted big efforts in recent years to remove.	-2		-2	January 30, 1990	Water Quantity	(empty in the original source)	Syria-Turkey

10	Turkish foreign ministry spokesman says that solutions to transnational water problems (with Syria and Iraq) can be found through negotiations.	0	0		May 30, 1990	Water Quantity	Ankara Domestic Service	Iraq-Syria-Turkey
11	Turkey invited Iraq and Syria to hold talks on sharing the waters of the Euphrates and Tigris rivers. The Euphrates has been a thorny issue for the three neighbors. The Foreign Ministry said that neither had so far replied to the invitation to a ministerial-level meeting in Turkey on June 26-27, 1990. A tripartite June meeting was agreed during Turkish Prime Minister Yildirim Akbulut's official visit to Iraq in April but the date was left open. Iraq and Syria objected to Turkey's diversion of the Euphrates for one month in January to fill a new dam.	1	1		May 30, 1990	Water Quantity	(empty in the original source)	Syria-Turkey
12	Turkey announced that Syrian Foreign Minister Farouq al-Shara' would visit to discuss the strained ties between the countries. The announcement was made in Turkey that talks are likely to include a dispute on sharing the Euphrates river. Ties between Ankara and Damascus have been strained since Turkey diverted the Euphrates for a month in January to fill its Ataturk dam, centerpiece of an 11-billion-dollar power and irrigation scheme. Ankara has invited ministers from Iraq and Syria to meet later this month to discuss the dispute.	1	1	1	June 11, 1990	Infrastructure/Development	(empty in the original source)	Syria-Turkey

13	A Syrian foreign ministry spokesman ignored objections by Turkey regarding the agenda of top talks. He said a dispute over sharing vital Euphrates river water would top the agenda in talks with Turkey starting on Jun 14. "The main topic of discussion will be the Euphrates river waters and speeding up the sharing of these waters among Turkey, Syria and Iraq," a foreign ministry spokesman told . Turkey, smarting over a deadly raid by Kurdish rebels, said on Jun 13 border security would be the main topic during the three-day visit by Foreign Minister Farouq al-Shara'.	-1		-1	June 14, 1990	Water Quantity	(empty in the original source)	Syria-Turkey
14	Syrian Foreign Minister Farouq al-Shara' held a meeting with Turkey's President Turgut Ozal in Istanbul which might have focused on border security and water issues. No official announcement was made following the meeting, before which Ozal and Shara refused to comment to journalists on the content of their talks. Official sources said the two ministers exchanged views on border security and the sharing of the waters of Euphrates among Turkey and downstreaming Syria and Iraq.	1	1	1	June 15, 1990	Water Quantity	(empty in the original source)	Syria-Turkey
15	Syrian Foreign Minister Farouq al-Shara' ended a visit to Turkey. He was holding talks in Turkey on border security and the waters of the Euphrates River. The official Syrian news agency SANA said Shara "stressed the need for reaching an agreement as soon as possible to guarantee a fair sharing of the Euphrates waters among Syria, Turkey and Iraq."	1		1	June 16, 1990	Water Quantity	(empty in the original source)	Syria-Turkey

16	The Turkish Foreign Ministry said Turkey, Syria and Iraq will attend a ministerial meeting on sharing Turkey's southeastern river waters. The June 26-27 meeting called by Turkey to thrash out the issue would have been postponed possibly to August if Syria had not agreed, he said. Iraq and Syria complained of serious damage to their agriculture and irrigation when Turkey diverted the vital waters of the Euphrates river for a month in January to fill a huge man-made lake behind its newly built Ataturk dam.	1	1	1	June 20, 1990	Water Quantity	(empty in the original source)	Syria-Turkey
17	Syria, Turkey, and Iraq said they will attend a meeting on sharing Turkey's southeastern river waters. Iraq and Syria complained of serious damage to their agriculture and irrigation when Turkey diverted the vital waters of the Euphrates river to fill a huge man-made lake behind its newly built Ataturk dam. Turkish officials say all three countries must technically cooperate in using the waters of the Euphrates and Tigris rivers economically by adopting long-term measures to improve wasteful methods of irrigation.	1	1		June 22, 1990	Irrigation	(empty in the original source)	Syria-Turkey
18	Turkish officials said Turkey will start talks with Iraq and Syria on how to share the Euphrates river. The Euphrates River has been a bone of contention since January when Turkey cut the flow of its vital waters. Officials said the two-day talks in Turkey would take place on a technical level. "Turkey has not used the waters as political leverage over the other countries and will not in the future," a source at the Ministry of Public Works told Reuters.	1	1		June 25, 1990	Water Quantity	(empty in the original source)	Syria-Turkey

19	Meetings of the Iraq, Syria & Turkey tripartite ministerial committee to discuss their common waters concluded last night. The agricultural & irrigation minister & chair of Iraqi side to committee, Mahmud, said in a press statement that no agreements were reached as a result of the meetings, even though the Iraqi delegation had made many suggestions, including increasing the amount of water flowing from the Ataturk Dam. He said that the Iraqi delegation also submitted fair measures & bases & set-up a time frame for dividing the Euphrates River's waters.	0	0	0	June 27, 1990	Water Quantity	Baghdad Voice of the Masses	Iraq-Syria-Turkey
20	Syrian Foreign Minister al-Shara' has emphasized that there is no problem between Syria & Iraq over Euphrates waters. He said that the problem concerns sharing the Euphrates waters coming from Turkey & has still not been resolved between Syria & Iraq on one hand & Turkey on the other, indicating that there is a desire in Syria to resolve the issue through dialogue. He added that the water issue is serious with regard to the future, & we must find common ground.	0		0	August 2, 1990	Water Quantity	Jeddah 'Udaz	Iraq-Syria-Turkey
21	Turkey's President rushed to promise his counterparts in Iraq & Syria that Turkey will leave flow of some 500 cubic meters per second in Euphrates. Syria's President al-Assad & Iraq's Husayn replied: do not promise us anything, for the water is not yours to give. It is ours.	2	2		August 20, 1990	Water Quantity	Jerusalem Domestic Service	Iraq-Syria-Turkey
22	Turkey's President rushed to promise his counterparts in Iraq & Syria that Turkey will leave flow of some 500 cubic meters per second in Euphrates. Syria's President al-Assad & Iraq's	-2		-2	August 20, 1990	Water Quantity	Jerusalem Domestic Service	Iraq-Syria-Turkey

	Husayn replied: do not promise us anything, for the water is not yours to give. It is ours.							
23	Turkish President Turgut Ozal ended a visit` to Syria. He had talks with Syrian President Hafez al-Assad on the Gulf crisis and bilateral relations, officials said. There was no details of the talks between Ozal and Assad but diplomats said they were likely to have discussed the sharing of the waters of the Euphrates.	3	3	3	October 18, 1990	Water Quantity	(empty in the original source)	Syria-Turkey
24	Turkey will launch a peace initiative after the Gulf War. Part of this idea is a Peace Water Project. The project involves transferring water to the Arabian Peninsula and is to be paid for by all the countries that will benefit. Turkey claims it will use sprinkler irrigation in a second project, saving water and solving water quality and quantity issues with Iraq and Syria.	1	1		February 13, 1991	Water Quantity	Istanbul Tercuman	Iraq-Syria-Turkey
25	Leader of the True Path party in Turkey says Turkey does not owe water to anyone, just as Turkey does not claim anyone else's water.	-1	-1		February 28, 1991	Water Quantity	Ankara TRT TV News	Iraq-Syria-Turkey
26	The Turkish foreign minister says that the draw down of Euphrates was for technical reasons. Any shortfalls for downstream countries will be made up later.	-1	-1		March 8, 1991	Water Quantity	London, AL ALAW ADITH	Iraq-Syria-Turkey

27	<p>Turkish state minister Kamran Inan said there would be an undiminished water flow to Syria and Iraq. "We are taking care over the amount of water we are releasing to our neighbors. This is a reason why not enough water is accumulated," he said on Mar 12. "We are releasing 500 cubic meters of water per second (to Syria and Iraq) while trying to store water for the dam." Syria and Iraq use the river for vital irrigation and power production. Their relations with Turkey worsened last year when Ankara diverted the Euphrates for 30 days in January to fill part of the dam reservoir.</p>	1	1		March 12, 1991	Water Quantity	(empty in the original source)	Syria-Turkey
28	<p>Turkish Foreign Minister Hikmet Cetin announced plans to visit Syria to discuss border security, water and economic ties with his counterpart Farouq al-Shara'. The announcement from Istanbul stated no exact date had been set, but his trip would probably take place toward the end of July. Syrian-Turkish relations have been soured in the past by tacit Syrian support for the outlawed Kurdish Workers Party (PKK), fighting for an independent state in southeast Turkey. "What is important is that Syria does care about security and stability in Turkey," Shara told reporters.</p>	1	1		June 18, 1992	Water Quantity	(empty in the original source)	Syria-Turkey
29	<p>Turkey points out that waters in Turkey belong to Turkey. When Turkey is finished with them, the waters will flow downstream, so there isn't anything to be concerned with.</p>	-1	-1		July 26, 1992	Water Quantity	Ankara Turkish Radio Network	Iraq-Syria-Turkey

30	Syria and Turkey continued to struggle with problems over water control and guerrilla activities during meetings in Syria. For the second consecutive day, Syrian Foreign Minister Farouq al-Shara' and Turkish counterpart Hikmet Cetin discussed cooperation in various fields during three hours of talks but focused mainly on water. The first day of talks was soured by a public wrangle over water. Syria criticized remarks by Turkish Prime Minister Suleyman Demirel in which he reportedly said Syria and Iraq could not lay claim to the waters of the Euphrates and Tigris rivers.	-1		-1	August 2, 1992	Water Quantity	(empty in the original source)	Syria-Turkey
31	Turkey points out that waters in Turkey belong to Turkey and says that any agreement should be bilateral only. Also, the waters aren't international so they shouldn't be addressed by international law.	-1	-1		August 17, 1992	Water Quantity	Ankara Show TV	Iraq-Syria-Turkey
32	In their first meeting after the Gulf War, Turkish, Syrian, and Iraqi water officials convened in Damascus in September 1992, but broke up after Turkey rejected an Iraqi request that flows crossing the Turkish border be increased from 500 cubic meters per second to 700 m ³ /sec.	0	0	0	September 1, 1992	Water Quantity	Wolf-Euphrates Case Study	Iraq-Syria-Turkey
33	Syrian, Iraqi and Turkish experts opened talks in Damascus on sharing of regional water resources, officials and diplomats said. Euphrates and Tigris rivers rise in Turkey and flow to Syria and Iraq. Syria and Iraq were angered when Turkish Prime Minister Suleyman Demirel said on the eve of the opening of the giant Ataturk dam on the Euphrates in July that Iraq and Syria had no right to question what Turkey did with its rivers.	1	1	1	September 28, 1992	Water Quantity	(empty in the original source)	Syria-Turkey

34	In bilateral talks in January 1993, Turkish Prime Minister Demirel and Syrian President Assad discussed a range of issues intended to improve relations between the two countries. Regarding the water conflict, the two agreed to resolve the issue of allocations by the end of 1993.	2	2	2	January 1, 1993	Water Quantity	Wolf-Euphrates Case Study	Syria-Turkey
35	Official Syria-Turkey talks led by Prime Minister al-Zu'bi & Turkey Prime Minister Demirel concluded today. On the question of Euphrates water, the two sides agreed to work out a final solution by the end of 1993, whereby quotas of river's waters are allocated to all sides. This is pursuant to a protocol signed between Syria & Turkey governments in 1987. Syria & Turkey Foreign Ministers have been asked to follow this matter.	3	3	3	January 20, 1993	Water Quantity	Damascus Syrian Arab Television Network	Syria-Turkey
36	Akbel denied that Syria was unformed on construction of Birecik Dam, saying that all information was provided since 1983. Various Middle Eastern countries have asked Turkey for information over the water issue. Turkey's neighbors have voiced objections to dam before. The Iraq Embassy in Ankara gave a note to Foreign Minister, & Syria issued demarche to Turkey Embassy in Damascus in 1993. The Birecik dam regulates the water flow from the Ataturjk dam. Syria has dams downstream. Turkey claims that Birecik will provide a more regular supply of water to downstream countries.	-1	-1	-1	March 1, 1993	Infrastructure/Development	Ankara Turkish Daily News	Iraq-Syria-Turkey
37	Turkey says there is no water problem with Syria and that Turkey voluntarily releases what it should.	0	0		August 12, 1993	Water Quantity	Ankara Anatolia	Syria-Turkey

38	Turkey says it will sell water to whomever it pleases.	-1	-1		January 28, 1994	Water Quantity	Tel Aviv YED'OT AHARONOT	Iraq-Syria-Turkey
39	Turkey says it is abiding by a 1987 agreement on water for Syria. It says the problem with Syria is that Syria is not tough enough on terrorists. Despite this, Turkey will continue to work on relations.	0	0		January 31, 1994	Water Quantity	Cairo AL-'ARABI	Syria-Turkey
40	Turkey discusses proposed dam projects and says they won't harm other countries.	0	0		May 6, 1994	Infrastructure/Development	Cairo MENA	Iraq-Syria-Turkey
41	Syrian President Hafez al-Assad had talks with Turkish Foreign Minister Mumtaz Soysal. Syria wants Turkey to sign a permanent agreement on sharing the waters of the Euphrates to replace a provisional deal under which Turkey is allowing 500 cubic meters per second to flow to Syria. Turkey, meanwhile, wants Damascus to curb activities of the Kurdistan Workers Party (PKK) which is fighting to set up an independent state in southern Turkey.	1		1	August 21, 1994	Water Quantity	(empty in the original source)	Syria-Turkey
42	Turkey denied that water and terrorism negotiations with Syria will be linked. Turkey says there is no water problem. Turkey says it is releasing as much water as has been traditionally agreed.	-1	-1		January 17, 1995	Water Quantity	Ankara Turkish Daily News	Syria-Turkey
43	Turkey says it is willing to talk to Syria about all issues including water. Article notes that relations with Syria are improving.	1	1		February 16, 1995	Water Quantity	Ankara Turkish Daily News	Syria-Turkey
44	Turkey concerned with Kurdish issue related to Syria. Article reports that Turkey will not negotiate over water, since the water is not international.	-1	-1		April 12, 1995	Water Quantity	Istanbul Turkiye	Syria-Turkey
45	Turkey ambassador criticizes Syria for trying to link water issues with terrorism issues.	-1	-1		July 2, 1995	Water Quantity	Istanbul Milliyet	Syria-Turkey

46	Turkey President says you can't link water with terrorism, and Syria should not support terrorists.	-1	-1		November 18, 1995	Water Quantity	Ankara TRT TV News	Syria-Turkey
47	Turkey states there is nothing to be gained through negotiations over water. Syria should trust Turkey and shouldn't support terrorism.	-1	-1		December 30, 1995	Water Quantity	Ankara TRT TV News	Syria-Turkey
48	Turkey chides Syria for not letting sufficient water into Turkey from the Asi and says Syria should be as neighborly as Turkey is with cross-border water.	-1	-1		December 31, 1995	Water Quantity	Ankara TRT TV News	Syria-Turkey
49	Turkey conducted a study which showed that Syria would lose in a war. Turkey says the problem is related to Syria linking water with terrorism and unjustified disputes regarding Turkish water. Reference was made in this article to an earlier "exchange of ultimatums."	-2	-2		January 2, 1996	Water Quantity	Istanbul Milliyet	Syria-Turkey
50	Turkey issues protest note to Syria and tells foreign diplomats that Turkey is justified with its position on water.	-2	-2		January 4, 1996	Water Quantity	Ankara Anatolia	Syria-Turkey
51	Ankara warned Arab countries against forming Iraq-Syrian front (recommended by the Arab League) against it in a water dispute, Turkey diplomatic sources said on Thursday.	-1	-1		January 11, 1996	Water Quantity	Paris AFP	Arab League-Iraq-Syria-Turkey
52	Syria has demanded that Turkey sign a formal agreement for sharing Euphrates waters, saying it is ready to discuss with Turkey & Iraq the "rational use of waters" of the Euphrates, but rejects claims of co-ownership of the river with the 2 countries.	-1		-1	January 14, 1996	Water Quantity	Paris AFP	Arab League-Iraq-Syria-Turkey
53	Turkish Prime Minister says Syria doesn't need to worry about the water issue. Turkey is fair with water and doesn't even use the water anyway. He also says that Syria should stop supporting terrorists.	-1	-1		January 20, 1996	Water Quantity	Ankara TRT TV News	Syria-Turkey

54	Turkey discusses water issues with the Arab League Secretary and other (namely Iraq & Syria) involved diplomats. Turkey wants to reach an agreement over water, and denies haven threatened Syria using water.	-1	-1		January 31, 1996	Water Quantity	Cairo MENA	Syria-Turkey
55	Syria asks the Arab League to officially take up the issue of Euphrates and Tigris water and Turkey. Syria says Turkey is polluting the waters and taking too much. The article also mentions that Iraq, Syria, Turkey, Lebanon and Jordan meet over the sharing of electricity.	-1		-1	February 4, 1996	Water Quantity	Cairo MENA	Syria-Turkey
56	Turkey is trying to get support for a "technical approach" to the water problem. Article discusses various positions on overall water problem between the three countries, and accuses states other than Turkey of being unreasonable. Article also includes background events and presents roles of outside states in the issue.	-1	-1		February 6, 1996	Water Quantity	Ankara Turkish Daily News	Iraq-Syria-Turkey-others
57	Informed sources here today confirmed the report of a meeting by experts from Syria & Iraq in Damascus on 2/10 to discuss the water issue involving Turkey, since those countries' share Euphrates water.	0		0	February 10, 1996	Water Quantity	Cairo MENA	Arab League-Iraq-Syria-Turkey
58	Turkey says they hope Arabs won't form anti-Turkish block on water issues. As background information, the Arab League has received complaints from Iraq and Syria over Turkey use of water.	-1	-1		February 12, 1996	Water Quantity	Cairo MENA; Ankara ANATOLIA	Arab League-Iraq-Syria-Turkey

59	Al-Rifa'i, director of the legal department at the Syrian Foreign Ministry & head of Syria delegation to talks between Syria & Iraq said: We have put international & regional organizations into picture, as well as UN Security Council permanent members & countries which agreed to assist Turkey in the form of loans to complete its projects on the Euphrates & Tigris. We told all parties that this will harm our rights, & Turkey has no right to establish projects on the Euphrates & Tigris without 1st consulting Syria & Iraq, as this will greatly harm both countries.	-1		-1	February 14, 1996	Water Quantity	Amman Al-Dustur	Iraq-Syria-Turkey
60	Syria and Iraq agree on measures to take against Turkey for Turkey building more dams on the Euphrates.	-2		-2	February 15, 1996	Water Quantity	Paris Radio Monte Carlo	Iraq-Syria-Turkey
61	Turkey warns that Iraq and Syria should not make threats on the water issue. Iraq and Syria don't want Turkey to build additional dams. Article links issue to terrorism.	-2	-2		February 15, 1996	Water Quantity	Ankara Turkish Daily News	Iraq-Syria-Turkey
62	Syria says it could resort to international forums to settle differences with Turkey over water.	-1		-1	February 15, 1996	Water Quantity	Cairo MENA	Syria-Turkey
63	Syria has stressed that sharing Euphrates River waters is the only solution to all problems with Turkey. Dr. al-Rifa'i of Foreign Ministry told MENA today that Syria wouldn't hesitate to resort to all international forums in order to settle any differences with Turkey, with the view of strengthening relations which Syria is keen on developing for the better.	-1		-1	February 15, 1996	Water Quantity	Cairo MENA	Syria-Turkey
64	Turkey says that any talks on water should be as tripartite negotiations, not via the Arab League.	-1	-1		March 6, 1996	Water Quantity	Ankara Turkish Daily News	Arab League-Iraq-Syria-Turkey

65	Syria calls on Turkey to work out the water issue in accordance with international law, and denies Syria asked for Arab League to denounce Turkey.	-1		-1	March 15, 1996	Water Quantity	Cairo MENA	Arab League-Syria-Turkey
66	Turkey says it takes other countries' needs into account over water, and countries should cooperate. Turkey criticizes other countries interference over Turkey water policy.	-1	-1		March 16, 1996	Water Quantity	Istanbul Nokta	Iraq-Syria-Turkey
67	Turkey says others are confusing its rivers with being international, and says calls by other states for Turkey to stop development are wrong. Turkey reminds Syria that it is not being fair with the Asi.	-1	-1		March 17, 1996	Water Quantity	Ankara TRT TV NEWS	Iraq-Syria-Turkey
68	Turkey hopes to resolve all problems over water with Syria through dialogue. Turkey has no water problems with Syria, because Syria gets enough as it is.	-1	-1		March 17, 1996	Water Quantity	Cairo MENA	Syria-Turkey
69	Turkey doesn't like Syria's attitude over water and terrorism.	-1	-1		March 23, 1996	Water Quantity	Istanbul Hurriyet	Syria-Turkey
70	Vague report on Syria allowing Israel to have Golan waters if Turkey releases more water from the Euphrates. Syria complains of water pollution by Turkey and of dam construction. Turkey is unwilling to hold talks, so they brought the issue to the Arab League.	-1		-1	April 15, 1996	Water Quantity	Istanbul Zaman	Syria-Turkey-Israel
71	Turkey says Syria is linking water and terrorism, and that Turkey's position on water is fair. Also, water issue should not be internationalized or Arabized.	-1	-1		April 30, 1996	Water Quantity	London AL-HAYAH	Iraq-Syria-Turkey
72	Turkey says it deals fairly with others over water. Arab states don't share oil, why should Turkey share water? It's not Turks fault if Syria is wasteful with water. Also, Turkey says it will sell Manavgat waters to Israel or anyone else.	-1	-1		May 12, 1996	Water Quantity	London AL-WASAT	Syria-Turkey-Israel

73	Syria has submitted an official memorandum to the Arab League asking for inclusion of the issue of Euphrates River water & measures being taken by Turkey on the agenda of next ordinary session of the Arab League of Foreign Ministers on 3/13. Syria warns in the memo of the danger of Turkish measures on the Euphrates, as a result of the signing of a contract to build a dam on Lake Kap & the problem of polluted water being dumped into the Euphrates & Tigris Rivers without consulting other countries that share the rivers' waters.	-1		-1	March 13, 1996	Water Quantity	Cairo MENA	Arab League-Iraq-Syria-Turkey
74	Syria has increased pressure on Turkmens & still continues to detain Turkmens, whose relatives mostly live in Turkey. Turkey says Damascus harbors Kurdish Workers' Party (PKK) in order to counterbalance what it feels is Turkey's "water weapon" against it. The SE Anatolian Project, involving a network of dams on Euphrates, has led to deep concerns in Damascus, where fear is that Turkey is preparing to cut off vitally important waters of the river.	-2	-2	-2	June 12, 1996	Infrastructure/Development	Ankara Turkish Daily News	Syria-Turkey
75	Syrian delegate says Turkey should look at water issues in the framework of good-neighborly relations.	-1		-1	June 23, 1996	Water Quantity	Damascus SANA	Syria-Turkey
76	Meetings between Jordan King Husayn & Syria President al-Assad at Arab Summit were held in Cairo early this week. During the meetings, Jordan stressed that it does not interfere in internal affairs of the Arab states & accordingly does not accept intervention in its own affair. Syria claims that Turkey has taken a large share of its water from the Euphrates. In turn, Jordan accused Syria of taking a	-2		-2	June 23, 1996	Water Quantity	Amman The Star	Jordan-Syria-Turkey

	large quantity of Jordan water.							
77	Likewise with Turkey, Syria had advocated that the summit (the Arab Summit concluded in Cairo yesterday) take steps to support Damascus in a dispute with Ankara over the Euphrates River & the military pact that Turkey has signed with Israel. But due to Jordan & other Arab states' insistence that Conference ended up adopting a diplomatically-worded resolution that hoped traditional relations & joint Arab-Turkey interests will continue.	0		0	June 23, 1996	Water Quantity	Cairo MENA	Syria-Turkey
78	Turkey says it is being reasonable with water policy and that Syria/Iraq proposals are not suitable. Turkey denies it will exploit water as weapon.	-2	-2		July 26, 1996	Water Quantity	Cairo AL-MUSAWWAR	Iraq-Syria-Turkey
79	In an exclusive interview with MENA in Damascus, Syria People's Assembly speaker Qaddurah stressed the need to implement international laws that govern the distribution of water among states in a just & equitable way (in response to a question on the water issue between Syria & Turkey).	0		0	July 4, 1997	Water Quantity	Cairo MENA	Syria-Turkey
80	At the beginning of the year, Syria proposed resumption of activities of joint Turkey-Syria-Iraq water committee, which has not met for 6 years.	1		1	January 15, 1998	Joint Management	Ankara Anatolia	Iraq-Syria-Turkey
81	A joint press conference between Jordan Deputy Prime Minister & Foreign Minister al-'Anani & Turkey Foreign Minister Cem. Cem said that Jordan didn't suggest any mediation between Syria & Turkey but explained its position regarding the 2 countries' water shortage. Syria & Iraq accused Ankara of reducing their share of Euphrates water.	-1		-1	March 1, 1998	Water Quantity	Amman Jordan Times (www)	Iraq-Jordan-Syria-Turkey

82	After a meeting Thursday with the Arab League Secretary General Meguid, Turkey Ambassador to Egypt Yacic paid tribute to "good" relations between Turkey & Arab countries, especially Egypt, in all fields. On long standing water-sharing problem with both Syria & Iraq, the Turkey ambassador again called for a negotiated settlement. He added that the reason why Ankara didn't sign international agreement on waterways was because accord failed to differentiate between international & cross-border rivers.	-1	-1		March 5, 1998	Water Quantity	Cairo MENA	Iraq-Syria-Turkey
83	Syria Foreign Minister Shara said in order to resume negotiation with Israel, these should re-start from where they left off. In an interview with Lebanon tv network Sunday on the water problem with Turkey, Shara said the main problem lies in the fact that Turkey is turning down Syrian request that Ankara signs agreement dividing water of Euphrates so that Damascus exactly realizes its share in water of this transboundary river.	-1		-1	August 16, 1998	Water Quantity	Amman Jordan Times (www)	Syria-Turkey
84	General Ates, Ground Forces commander, said there is no extraordinary aspect to current state of relations between Turkey & Syria, & added "we cannot say, however, that there are no problems between Turkey & Syria. For years, Syria has been supporting terrorism, nurturing Abdullah Ocalan, & cutting off waters of the Asi River. These problems belong to all of us. They are Turkey's problems."	-1		-1	October 2, 1998	Water Quantity	Ankara Anatolia	Syria-Turkey

85	Negotiations reached a deadlock because major points of disagreement - including Kurdistan Workers' Party, sharing Euphrates & Tigris water, & Turkey-Israel military alliance - remained without answers by either side. While Syria believes that Kurdistan Workers' Party issue is domestic Turkey affair, Ankara refuses to discuss sharing of Euphrates & Tigris waters with Syria & Iraq or to discuss its alliance with Israel.	-3	-3	-3	October 4, 1998	Water Quantity	Amman Al-Dustur	Iraq-Syria-Turkey
86	Syria Embassy in Ankara has said that escalation of tension between Turkey & Syria is caused by Turkey-Israel military cooperation, which it claims is a military pact, & by Turkey's boycott of negotiation committee on water & other issues. Syria Embassy statement says that Turkey ignored a call to resume activities of the committee's work on bilateral security issues & other issues. The statement adds: Turkey has continued to boycott these committees & to suspend their activities.	-1		-1	October 6, 1998	Joint Management	Ankara Anatolia	Syria-Turkey
87	Turkey President Demirel expressed hope that Turkey will emerge stable from 4/18 elections. Replying to reporters' questions in Qatar on whether talks will be held with Syria on water issue, Demirel said Turkey is always open to negotiations. Pointing out that Turkey is always ready to discuss issue with Iraq & Syria, Demirel said that Turkey wants to discuss issue of who owns how much land & how much water is needed for that land. Demirel said issue isn't to divide water but to allocate it.	1	1		April 3, 1999	Water Quantity	Ankara Anatolia	Syria-Turkey

88	Turkey Foreign Minister Cem was careful to reassure Arab states that relations between Turkey & Israel will not be at their expense. On Turkey-Syria relations, Cem noted that these relations have witnessed tangible improvements despite existence of some problems. On Turkey-Syria water dispute, Cem said that amount of water allocated for Syria exceeds its needs, adding that Turkey is studying neighbors' needs for water & possibilities of supplying them with water.	1	1		July 17, 1999	Water Quantity	Jerusalem al-Quds (www)	Syria-Turkey
89	Qaddur, Syria Minister of State for Foreign Affairs, has said (on the issue of the rights of Syria & Iraq to Euphrates water) that currently Syria & Iraq receive 500 cubic meters per second. He added that based on visits made by senior Turkey officials, including President Demirel in 1993 when he was Prime Minister, it was agreed to determine Iraq & Syria's share of water by the end of that year, but that still hasn't happened.	0		0	November 18, 1999	Water Quantity	London Al-Sharq al-Awsat	Iraq-Syria-Turkey
90	Foreign Ministry said on Wednesday that there is no reason for Turkey to be uneasy about Syria-Israel peace talks. Turkey Foreign Ministry Deputy spokesman Atacanli pointed out that there is not a water bargain we will carry out with any country, in response to a question asking whether or not "bargaining for water" will occur between Turkey & Syria.	-1	-1		December 29, 1999	Water Quantity	Ankara Anatolia	Syria-Turkey

91	<p>Official sources said yesterday that Syrian Foreign Minister Faruq al-Shara' received Ugur Ziyal, the Turkish Assistant Foreign Minister, yesterday and discussed with him the development of relations between Damascus and Ankara in all fields.</p> <p>Damascus demanded the inclusion of the water issue on the agenda and invited Ankara to start "serious negotiations" to reach a "fair distribution" of the waters of the Euphrates and the Tigris rivers, bearing in mind that the technical [water] committee has not met for eight years.</p>	1		1	March 8, 2000	Joint Management	London Al-Hayah	Syria-Turkey
92	<p>Syrian Foreign Minister Faruq al-Shara': We are satisfied with the current 500 cubic meters. There are blockages at times, but we understand the reasons. If we reach a final agreement now, we could preempt the consequences of any future political developments or environment changes. Water must be a bridge of friendship between the two countries.</p>	2		2	March 9, 2000	Water Quantity	CNN TURK TV	Syria-Turkey
93	<p>Asked to comment on Damascus' reaction to Turkey's decision to hold tripartite talks with Syria and Iraq on the rational use of the waters of River Euphrates and River Tigris, Syria's Amb. to Turkey Muhammad Sa'id al-Bunni hinted that his country does not want to solve the water problem through such an approach. He said: "Turkey made similar proposals to solve the problem in the past. That was when a will did not exist between the two countries to have their problems solved. Considering the cooperation that exists between them now, the water problem we can be solved through other means. The politicians can instruct their experts to solve it.</p>	-1		-1	October 19, 2000	Joint Management	Istanbul Yeni Binyil (Ankara edition)	Syria-Turkey

	But the sides must first have the political will to have the problem solved."							
94	The Ministry of Agriculture in both Iraq and Syria has invited Turkey for a tripartite meeting to discuss and endorse a joint project on sharing the water of the Tigris and Euphrates Rivers. In a press statement after signing a joint cooperation protocol at the Ministry of Agriculture yesterday, the two sides stressed the importance of exchanging expertise and cooperating in the field of water and irrigation. They also prepared a short-term plan to bilaterally share the Tigris River waters, pending a tripartite agreement on sharing the Tigris River waters in accordance with the international law, particularly the law governing the use of international waterways for non-navigational purposes as well as the agreements, protocols, and treaties signed among states.	1		1	January 31, 2001	Joint Management	Baghdad Radio Ma	Iraq-Syria-Turkey
95	Turkish Deputy Prime Minister Mesut Yilmaz: The Euphrates dam is important to the future of economic development in Turkey. I would like to call on Syria to accept the inevitability of this project and engage in negotiations on a rational use of water. For our part, we are willing to be fair and generous. Nevertheless, the water sharing may not be equal because the Euphrates, like any other Turkish river, must serve the Turkish people's interests in the first place.	-1	-1		February 12, 2001	Water Quantity	London Al-Sharq al-Awsat	Syria-Turkey

96	Syrian Irrigation Minister Taha al-Atrash: Two months ago, talks were held between Syria and Iraq on sharing the Tigris River waters in preparation for talks among Syria, Iraq, and Turkey. We have invited the brother Turks to meet, discuss, and reach a water sharing agreement. For a year now we have been noticing a positive response from Turkey. We are waiting to meet and reach this agreement. This will happen if we find support from the Arab states and a united Arab stand. I expect that the Arab Summit in Amman will issue a resolution supporting the stand of Syria and Iraq and urging Turkey to sign a final agreement.	-1		-1	March 28, 2001	Joint Management	London Al-Hayah	Iraq-Syria-Turkey
97	Turkish Ambassador in Damascus Ahmet Ogur Celikkol has told Al-Hayah that there is not a "border dispute" between Syria and Turkey over the Iskenderun province. He also stressed that his country does not wish to use the water issue as a "political tool" against Syria.	1	1		May 2, 2001	Water Quantity	London Al-Hayah	Syria-Turkey
98	Syrian sources affirmed to Al-Hayah that Ankara violated an official agreement it signed with Damascus back in 1987 by reducing the rate of the Euphrates River flow from 500 cubic feet per second to approximately 300. However, the Syrian sources added that Damascus does not seek a "political escalation" with Turkey.	-1		-1	June 1, 2001	Water Quantity	London Al-Hayah	Syria-Turkey

99	Abdülaziz el Masri, Director of Water Department, Water Ministry of Syria: We got positive responses from Iraq and Turkey for an agreement to share water resources in a fair manner. The agreement is concerned with coordination of water management at dams by the three riparian countries. In general, we are not opposed to the Ataturk Dam; our problem is not knowing how much water Turks will release. In March, we received 200-300 m ³ /sec; it is approximately 500 m ³ from the beginning of June.	1		1	July 20, 2001	Water Quantity	Salzburger Nachrichten	Iraq-Syria-Turkey
100	Syria and Turkey signed a Joint Communique, involving joint training programs, projects, and partnership, to be carried out by the Syrian Ministry of Irrigation and the Turkish GAP Administration.	3	3	3	August 23, 2001	Joint Management	TFDD (Oregon State University)	Syria-Turkey
101	Minister of Irrigation Engineer Taha al-Atrash, returned to Damascus today following a several-day official visit to Turkey. In a statement to SANA, Al-Atrash described the visit as a good beginning for revisiting talks between the two friendly states on relations between the Ministry of Irrigation on the one hand and the Ministries of Energy and Water on the other regarding the water shared by Syria, Turkey, and Iraq and dividing that water -- especially the water of the Tigris and the Euphrates -- in a fair manner in order to ensure sustainable development for these states.	1		1	August 27, 2001	Water Quantity	Damascus Syrian Arab Republic Radio	Syria-Turkey

102	TBMM [Turkish Grand National Assembly] Deputy Speaker Murat Sokmenoglu: Regarding the water problem between the two countries, I noted that Turkey had complied with the agreement, which was signed by the two countries and provides for allowing 500 cubic meters of water flow to Syria per second, but the amount of water actually received by Syria remained under that level as a result of climatic conditions. I frankly emphasized that farmers in both countries were adversely affected by those conditions and that using water as a political tool was out of the question. I expressed my conviction that the Water Investigation Committee, set up by the TBMM, would contribute to efforts aimed at solving the water problem.	1	1		April 18, 2002	Water Quantity	Istanbul Ortadogu (Ankara edition)	Syria-Turkey
103	Syria and Turkey signed an implementation protocol, subsequent of the 2001 Joint Communiqué. This protocol created a coordination mechanism to manage the common water resources effectively, in order to enhance socio-economic development in the region.	3	3	3	June 2002	Joint Management	Article by Aysegul Kibaroglu, METU	Syria-Turkey
104	Turkish Ambassador in Damascus Ahmet Oguz Celikol stressed that the water issue "is a scope for cooperation and there is no reason to prevent its consolidation." It is recalled that diplomatic sources had told Al-Hayah that Ankara does not object in principle to a meeting of the tripartite Syrian-Turkish-Iraqi committee on water", which has not met since the end of 1992, though "the present problem concerns Iraq's representation in the committee".	1	1		December 5, 2003	Joint Management	London Al-Hayah	Syria-Turkey

105	In his visit to Turkey, Syrian President Bashar al-Assad stated: Chief among the definitive factors in the water problem are international law and humanitarian relations. If we ask a Turk living on the banks of the Euphrates whether he wants his Syrian brother to go without water he will reply, "Absolutely not." This is why I attach importance to the humanitarian aspect of the problem. In my opinion neither the Syrian State nor its people have any problem with Turkey over water.	3		3	January 5, 2004	Water Quantity	Istanbul Milliyet	Syria-Turkey
106	Ministry of Foreign Affairs Department of Regional and Cross Border Waters Chairman Mithat Rende: About Turkey-Syria relations, several positive developments had happened, adding, "environment of mutual confidence should be formed and compromise should be reached on basic principles for solution of water issue.	1	1		January 16, 2004	Water Quantity	Ankara Anatolia	Syria-Turkey
107	During their talks in Damascus, Syrian President Bashar al-Assad and Turkish Prime Minister Recep Tayyip Erdogan agreed to enter into an economic partnership and get over the historical water problem. Erdogan stressed Turkey's readiness to offer technical assistance necessary to pump the Euphrates river water to Syria to irrigate 150,000 hectares of farmland.	3	3	3	December 23, 2004	Water Quantity	Cairo MENA	Syria-Turkey
108	Syrian President Bashar al-Assad and Turkish Prime Minister Recep Tayyip Erdogan: While a decision was made to start talks with regard to the dam that will be built over the Asi River, which goes through Hatay, the possibility of undertaking new investments pertaining to electricity production lines in Syria was also noted.	3	3	3	December 23, 2004	Infrastructure/ Development	Istanbul NTV Online	Syria-Turkey

109	Syrian Ambassador in Ankara Khalid Ra'ad: There is an effort to carry out development projects on both sides of the border between the two countries. In the first stage, it is a question of two joint project efforts. One of them is the construction of a dam on the Asi River at the border, both in order to prevent flooding and to facilitate development of the region... The second is the removal of the mines laid along the border... The areas thus reclaimed could be utilized for agriculture and investment purposes in particular.	2		2	June 27, 2005	Infrastructure/ Development	Istanbul Cumhuriyet	Syria-Turkey
110	A Syrian delegation led by deputy Prime Minister Abdullah Dardari met with Energy Minister Hilmi Guler. Guler said after the meeting that Turkey had drafted a memorandum of understanding (MOU) for joint exploration of oil and natural gas in Syria by Turkish Petroleum Inc. (TPAO) and Syrian partner company. Guler said they also discussed the project for a dam to be built on the Asi River in Turkey, as well as other irrigation projects.	2	2		October 7, 2005	Infrastructure/ Development	Public Affairs Office of US Embassy Ankara	Syria-Turkey
111	Syrian President Bashar al-Assad: We have no problems with Turkey in terms of water. The Turks, in accord with the agreement, are providing us the necessary water from the Euphrates, that is, 500 cubic meters per second. They are even providing more. We ascribe great importance to this stance of Turkey. We have a joint dam project on the Asi river. As for the Tigris, as you know, that involves Iraq as well.	3		3	December 26, 2005	Water Quantity	Istanbul Aksam	Syria-Turkey