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CANADIAN FORCES COLLEGE  
CSC 29  
MDS THESIS

**History, Kurds and Water:  
The Southeast Anatolia Project  
and Regional Instability**

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## **Abstract**

Turkey's Southeast Anatolia Project is an ambitious venture to harness the Euphrates River in generating hydroelectric power, creating millions of acres of irrigable cropland, and stimulating the economic growth of an evolving regional power. But the Euphrates River is also the lifeblood of Syria and Iraq through which it also flows. Turkey's diversion of the river for its national interest is of considerable concern to its southern neighbors as they strive for self-sufficiency and security in the parched and volatile Middle East. Through an examination of history and current events, this paper reveals the Southeast Anatolia Project as a perceived instrument of political power wielded by Turkey, and a destabilizing influence over Syria and Iraq as they strain to maintain a balance of power in the Middle East. The paper concludes with some recommendations for policy change and future study of conflict arising from transboundary rivers.

# **History, Kurds and Water: The Southeast Anatolia Project and Regional Instability**

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*I am making a way in the desert, and streams in the  
wasteland...to give drink to my people...*

Isaiah 43: 19-20

## **Introduction**

With remarkable population growth rates, global warming, increasing resource and industrial development, and decreasing fresh water supplies at national and regional levels, water is quickly replacing oil as the world's most precious and contentious resource. In the Middle East, where access to water has been a central life and death struggle since the dawn of history, geographic, religious and political differences between countries promote water as a key element of national security and regional instability.

Turkey is strategically located at the crossroads between modern Europe, the fractured and suffering former Soviet Union, and the volatile Middle East. National unity, industrial diversification and economic independence are seen as the key enablers to a closer relationship with the West and recognition as a true regional power. Although not endowed with revenue-generating quantities of oil with which to achieve its goals, Turkey has turned to the next best commodity – water.

In its harnessing of the mighty Euphrates River, Turkey's ambitious Southeast Anatolia Project is deemed its political and economic panacea. The planned system of dams and hydroelectric power generating stations along the river will not only stimulate agricultural and industrial expansion, but also enhance the quality of life of the Kurdish population in the region. As with any major endeavor that will change the physical and human landscape, the Southeast Anatolia project is, nonetheless, many things to many people. As the upper riparian, Turkey's intent to exploit the river in its own interest

threatens to upset the balance of power in the Middle East and expose delicate issues of security and instability.

The role of water in threatening stability is as complex as the politics of the Middle East. The region is already inherently unstable given the range in ideologies and foreign policies among the states. For Turkey, the issue of Kurdish insurgency threatens to break the country along ethnic and cultural lines, while a traditional reliance on hydrocarbon energy has the potential to stall the country's aspirations for industrial and economic growth. Water threatens stability in the Middle East in that it can be directed specifically to one country and not to others. This is of specific concern to the Syrians vis a vis Turkey's relations with Israel. As with the unlikelihood that Turkey would ever completely stop the flow of the Euphrates beyond its borders, the symbolic significance of its ability to provide water to Israel, and deny it to Syria is a de-stabilizing concept. Without question, the issue water and security in the Middle East supports the claim of respected scholars Thomas Homer-Dixon and Peter Gleick, that the renewable resource most likely to contribute to interstate conflict is river water, particularly in instances where there are disparities in prosperity and reliance on that water by the riparians.<sup>1</sup>

### **Hypothesis**

This paper will explore the range of hydropolitics in the Euphrates River basin. It will assert that, in a region of the world where water is a highly charged political issue, Turkey's Southeast Anatolia project is an instrument of political instability.

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<sup>1</sup> Thomas F. Homer-Dixon, "Environmental Scarcity and Violent Conflict: Evidence From Cases," *International Security*, XIX (Summer, 1994), p 19.

## The Euphrates River Basin

The Euphrates River is the longest river (2700 km) in southwest Asia west of the Indus River, and one of the most important and historic rivers in the world. Together with the adjacent Tigris River, it forms a lush, fertile basin long referred to as the cradle of civilization in ancient Mesopotamia, and revered in folklore as the location of the biblical Garden of Eden. The Euphrates is first acknowledged in Scripture as one of the four rivers of Eden in Genesis 2:14, and within the description of the covenant made with Abraham in Genesis 15:18. Deuteronomy 11:24 and Joshua 1:4 refer to the river as the boundary of the Promised Land to the northeast during the reigns of Kings David and Solomon.<sup>2</sup>

Known as the *Al Furat* in Arabic and the *Furat* in Turkish, the mouth of the Euphrates was the site of the ancient city of Ur, birthplace of Abraham. The city of Babylon, near present-day Baghdad, rose from its banks as the cultural, economic and political centre of ancient Babylonia. The army of Necho was crushed along its shores by Nebuchadnezzar; Alexander the Great crossed it numerous times in his quest to conquer the Persian Empire and died in Babylon, and, the Egyptians, upon seeing it for the first time, wrote that it flows backwards, to the south, while the Nile flows north. For centuries the Euphrates River formed the easternmost boundary of the Roman Empire, and several cities and centres of the arts and literature prospered on its banks.<sup>3</sup>

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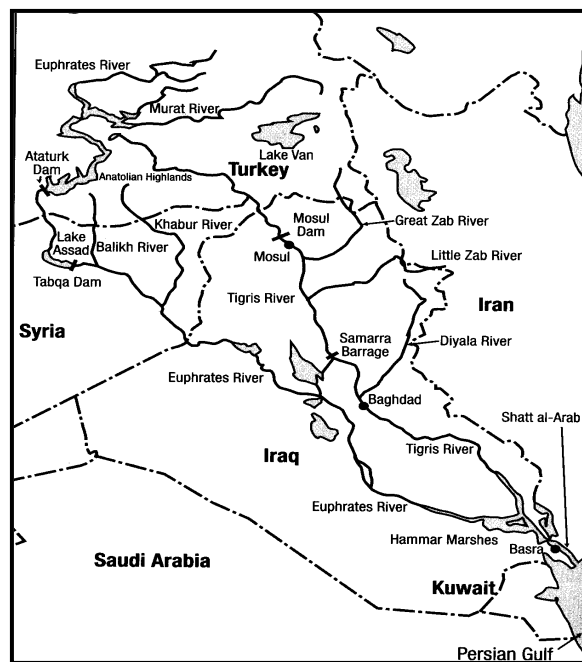
<sup>2</sup> John F. Kolars and William A. Mitchell, *The Euphrates River and the Southeast Anatolia Development Project* (Carbondale, IL: Southern Illinois University Press, 1991), p 6.

<sup>3</sup> Rodney R. Baird. "Euphrates." In "Rivers of the World."  
<http://ancientroute.com/water/Euphrat.html>. 2000

Records from the fourth millennium B.C. attest to the role the Euphrates played in the daily lives of its riparians. Centuries before Archimedes, rudimentary irrigation systems brought the waters of the Euphrates to the arid regions of Mesopotamia, Sumer and Babylonia in the creation of a vibrant, if short-lived, agricultural landscape. The waters of the Euphrates have, therefore, always been coveted as a giver of life and a source of religious, cultural, commercial, and agricultural sustainment.<sup>4</sup>

Known as an ‘exotic’ river because its headwaters are outside the region through which it flows, the Euphrates River rises from the confluence of the Kara and Murad Rivers in the Armenian Mountains of Eastern Anatolia, in what is now east central Turkey. Known historically as Kurdistan and more recently as the Anti-Taurus, Eastern

*Figure 1: The Tigris and Euphrates Basin*



Source: Michael T. Klare, *Resource Wars* (New York: Henry Holt and Co., 2001), p 174.

<sup>4</sup> Frederick M. Lorenz and Edward J. Erickson, *The Euphrates Triangle: Security Implications of the Southeast Anatolia Project* (Washington, DC: National Defense University Press, 1999), pp 3-4.



Anatolia is subject to the Mediterranean-mountainous climate of the region that generates up to 1000 mm of rain and snow annually to the discharge of the river, amounting to highs of 98 percent and reasonable estimates of 88 percent of its total volume. Rain in Syria in the order of 300 mm annually constitutes the remaining contribution, with Iraq contributing nothing to its flow regime.<sup>5</sup>

From its source, the Euphrates flows some 455 kilometers within Turkey to the border with Syria at Jerablus. Over its course of more than 675 kilometers through Syria, three main tributaries join it: the Saju, Belikh and Khabur Rivers. In Iraq, the river continues for the bulk of its journey to the Persian Gulf, joining with the Tigris River at Qurna and re-named the Shatt al Arab for the final 179 kilometers of its journey<sup>6</sup> (Figure 1).

### **International Claims**

While the issue of trans-boundary surface water rights has been a contentious issue for hundreds of years, more recently their allocation and entitlement have been considered in international law, and in principles of water rights based on the riparians' historic rights of use, national discharge, and access to other domestic sources of water. In general, the interests of the upstream and downstream riparians have generally been encompassed in the two opposing doctrines of absolute territorial integrity and absolute territorial sovereignty.<sup>7</sup> The concept of absolute territorial sovereignty is known as the Harmon Doctrine, first employed by the United States in 1895, in a dispute with Mexico

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<sup>5</sup> Greg Shapland, *Rivers of Discord: International Water Disputes in the Middle East* (New York: St Martin's Press, 1997), p 103.

<sup>6</sup> Arnon Soffer, *Rivers of Fire: The Conflict Over Water in the Middle East*, trans by Murray Rosovsky and Nina Copaken (Lanham, MD: Rowman and Littlefield, 1999), pp 79-80.

<sup>7</sup> Yonatan Lupu, "International Law and the Waters of the Euphrates and Tigris," *Georgetown International Environmental Law Review*, XIV (Winter, 2002), p 355.

over the use and diversion of the waters of the Rio Grande.<sup>8</sup> This is an extreme position promoted by upstream riparians that permits their total exploitation of shared water resources without regard for the effects on downstream water use and quality. As a legal doctrine, this position has very little support from the legal community given its dated inception, its isolationist perspective and its inability to resolve water disputes.<sup>9</sup> The principle of absolute territorial integrity, claimed by downstream riparians, is the converse of the Harmon Doctrine in that it guarantees the natural, interrupted flow of river waters from the upstream riparian state.<sup>10</sup> It, too, has received scant support from the international legal community due to the inordinate burden placed on the upstream riparian to curb its water-based development and ensure the unrestricted flow of water downstream, with no duty or responsibility placed on the downstream riparian.<sup>11</sup>

Given the inability of these doctrines to resolve international water disputes, the International Law Association developed an international law based on the principle of reasonable and equitable use of the water from international waterways. The result was the creation of the Helsinki Rules on the Uses of the Waters of International Rivers. This legal framework established a set of rules to determine what is reasonable and equitable in the context of sharing international water resources and resolving water disputes.<sup>12</sup>

Under Resolution 2669, the United Nations General Assembly followed with a tasking to

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<sup>8</sup> Bulent Topkaya, "Water Resources in the Middle East: Forthcoming Problems and Solutions for Sustainable Development of the Region." <http://www.akdeniz.edu.tr/muhfak/publications/gap.html>. p 11.

<sup>9</sup> *Ibid*, p 11.

<sup>10</sup> Ibrahim Kaya, *The Euphrates-Tigris Basin: An Overview and Opportunities for Cooperation Under International Law*, Aridlands Newsletter, No. 44 (Tucson: University of Arizona, 1998), p 4.

<sup>11</sup> Topkaya, *Water Resources in the Middle East: ....*, p 12.

<sup>12</sup> International Law Association, *The Helsinki Rules on the Uses of Waters of International Rivers* (Helsinki: Committee on the Uses of the Waters of International Rivers, 1966).

the International Law Association for the codification and development of a more robust law for the non-navigational use of international watercourses.<sup>13</sup> The resulting United Nations Convention on the Law of the Non-navigational Uses of International Watercourses is more binding than the Helsinki Rules developed by the non-authoritative International Law Association, but only to ratifying countries.<sup>14</sup> Given the longevity of the dispute over the Euphrates River, it seems apparent that Turkey regards any international law not interpreted in its favour as a non-binding, non-enforceable framework intended only as a basis for negotiation between riparians. Within the literature, Turkey also seems to purposely classify the Euphrates as a transboundary vice an international river- purportedly to distance itself from the binding customary law aspect of the United Nations convention.

In terms of possessive rights to the river based on contributions by each state to its volume, Turkey and Syria would have major access rights, and Iraq no right whatsoever, as noted above. It is each country's assertion of water rights based on its respective history and association with the river, as well as its current and forecast requirements, that is the major contention among the riparians and the primary basis for dispute.

For Syria, right of access to the Euphrates River for irrigation and power generation is based on its contribution to the river's flow regime. Until World War II, the region surrounding the Euphrates, called Al-Jazira, was barren and unpopulated. In the 1950s, small-scale cotton plantations were established with irrigation water lifted by

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<sup>13</sup> Kaya, *The Euphrates-Tigris Basin: ...*, p 4.

<sup>14</sup> Attila Tanzi and Maurizio Arcani, *United Nations Convention on the Law of International Watercourses*, The International and National Water Law and Policy Series (The Hague: The UN Convention On the Law of International Watercourses – A Framework for Sharing, 2001).

crude, motorized pumps.<sup>15</sup> Thereafter, the colonial French developed aggressive plans for the construction of a single major dam on the river in order to fully exploit the cotton-growing potential of northern Syria. Upon gaining independence from France, Syria first established large-scale river control on the Orontes River, with the materialization of the first dam on the Euphrates in the late 1950s. The resulting Tabqa dam - a joint Syria-Russian effort, was constructed with a view to meeting Syria's forecast irrigation requirements of 640,000 hectares.<sup>16</sup> Follow-on studies indicated that regional Euphrates basin soils are, in large part "gypsiferous, crusty, prone to erosion, and suitable only for careful applications of water."<sup>17</sup> Because of significant water loss due to seepage, irrigation estimates fell significantly short, to approximately 240,000 hectares. As acknowledged experts on the development of the Euphrates basin, Kolars and Mitchell reported the abandonment of the project in 1983 in favour of other prospects, and added reasons of bureaucratic and engineering incompetence for its failure.<sup>18</sup>

Today, the Euphrates represents 86 percent of the water available to Syria; a startling figure in light of the fact that its 250 millimeter annual rainfall barely sustains rain-irrigated agriculture.<sup>19</sup> The Al-Jazira region currently boasts approximately one-fifth of the Syrian population with employment opportunities in mechanized dry farming, oil exploration, and cash crop farming of rice, cotton and wheat. This growing economy has been stimulated by the construction of several new dams on the Euphrates but water

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<sup>15</sup> Shapland, *Rivers of Discord*..., p 109.

<sup>16</sup> Tevfik Emin Kor, "Tigris-Euphrates Dispute." In "ICE Case Studies – Trade and Environment database." <http://gurukulucc.american.edu/ted/ice/tigris.html>. p 5

<sup>17</sup> Kolars and Mitchell, *The Euphrates River and the Southeast Anatolia*..., p 151.

<sup>18</sup> *Ibid*, p 155.

<sup>19</sup> Leigh Josey, "Population Growth and Water Resources in the Middle East." *The Defense Monitor, Center for Defence Information*. [http://www.thirdworldtraveller.com/Middle\\_East/PopGrowth\\_Water.html](http://www.thirdworldtraveller.com/Middle_East/PopGrowth_Water.html). July, 2001.

shortages resulting from upstream damming projects in Turkey are a significant concern in light of sustained population growth expectations of 2.8 percent per year.<sup>20</sup> Turkey's unwillingness to formalize a promise made to Syria to continuously provide sufficient flow of the Euphrates while meeting the needs of the GAP is one of several key issues that have strained both its economy and its industrial base. Severe drought, the rising costs of military parity with its northern and Arab neighbors, dwindling foreign exchange earnings, political corruption, and decreases in foreign aid have all indicated the requirement for an exhaustive overhaul of the economy.<sup>21</sup> With water a limiting factor in the daily lives of its citizens, and given its central role in the industrial and economic growth of the country, Syria's very existence and survival are inextricably linked to the Euphrates.

As the third riparian of the Euphrates River, Iraq's claim to a significant volume of its water is based on historic use going back more than 5000 years in ancient Mesopotamia.<sup>22</sup> Canals were built to divert water to crops and fields in the sustainment of one of the earliest civilizations on earth. After the tenth century BC, agriculture in Mesopotamia declined as the result of the government's failure to control irrigation, the consequent filling of the water table with salt water, and the salination of croplands. The complete ruin of Mesopotamian agriculture followed the Mongol invasions of the twelfth and thirteen centuries and the complete abandonment of the fields and irrigation canals.

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<sup>20</sup> Arun P. Elhance, *Hydro-politics in the 3<sup>rd</sup> World: Conflict and Cooperation in International River Basins* (Washington: United States Institute of Peace Press, 1999), p 131.

<sup>21</sup> *Ibid*, p 132.

<sup>22</sup> Soffer, *Rivers of Fire*...., p 82.

Some historians have criticized this total loss of the Mesopotamian system of agriculture as “the most destructive blow known in human history.”<sup>23</sup>

With the aggressive use of oil in generating electricity in the twentieth century, Iraq’s efforts to reclaim and re-develop the land began in earnest. Iraq, under Ottoman rule, constructed its first dam, the Hindiya Barrage, between 1911 and 1914.<sup>24</sup> As the downstream riparian, Iraq has had to contend with and endure the water control projects of its upstream neighbors. Syria’s filling of the reservoir behind its new Ath-Thawrah Dam in 1974 reduced the flow of the Euphrates from 920 cubic meters per second (CMS) to just 197 CMS and nearly ruined the crops of millions of farmers in Iraq. Iraq’s reprisal resulted in the cessation of commercial airline flights between the two countries and the mobilization of military forces along their shared border before a mediated settlement was negotiated by the Soviet Union and Saudi Arabia.<sup>25</sup> This link between water scarcity brought about by the actions of an upstream riparian, and regional instability, underscores both the consequences of reduced water flows in the Middle East and the existence of water as a flashpoint in international relations.

Iraq’s attempts to strengthen its regional political influence, diversify its industrial and economic base, and decrease its reliance on Euphrates water and agriculture, have further strained its relationship with Syria. Specifically, its 1973 arrangement with Turkey for the construction of an oil pipeline from Iraqi oil fields to ports on the Mediterranean Sea left Syria marginalized with available oil exports of its own. Also, in 1975, Iraq’s signing of the Algiers Agreement with Iran signaled a move toward political

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<sup>23</sup> *Ibid*, p 83.

<sup>24</sup> *Ibid*, p 83.

<sup>25</sup> Elhance, *Hydropolitics in the Third World*...., p 143.

and economic stability for Iraq that Syria deemed threatening.<sup>26</sup> Syria's predictable response in reducing the flow of the Euphrates to Iraq has continued to unsettle Iraq's attempts to bring prosperity to its people. The most recent example was its frequent failure in the 1990s to follow through with a commitment to ensure the flow of 290 CMS of Euphrates water to Iraq – in itself, significantly below Iraq's stated minimum requirement of 570 CMS.<sup>27</sup> This substantial hardship for the Iraqi people was compounded by President Saddam Hussein's confrontations with the Western world and his neighbors, and the devastating effects of UN-imposed sanctions.

Although Turkey is the source of up to 98 percent of the Euphrates' total runoff of 186 billion cubic meters, it is not classified as a water-rich country. As of 1996, the criterion for classification as a water-rich state was to have 8,000 to 10,000 cubic meter of water per capita per year. With a population of 60 million, Turkey was able to provide only 1833 cubic meters per person per year, or approximately one-fifth of that of a water-rich nation. Despite a population demand for water that could be satisfied by the Euphrates River, the system of dams and pipelines necessary for capturing and delivering the required 84.1 billion cubic meters was not available.<sup>28</sup> But Turkey has more pressing reasons for additional fresh water than meeting its domestic per capita requirements. Its history has been mired in political, economic and social issues that have conspired to divide the country on the basis of economic strength and quality of life, stifle its

industrial base and hamper its economic growth.

the GAP, the exploitation of water, as Turkey's greatest natural resource, has become its social, political, and economic panacea.

Of the seven geographical regions in Turkey, the area of Southeast Anatolia is, by far, the most underdeveloped. While the other provinces in the country have prospered significantly from state-sponsored industrial and agricultural initiatives, Southeast Anatolia, with its arid climate and barren landscape, was devoid of non-renewable resources and potential. However, as Southeast Anatolia is the location of the headwaters of the Euphrates River, it has a great abundance of water.

The development of its water potential was first fully appreciated by Turkey in the early 1920s, soon after the dissolution of the Ottoman Empire. Hydrologic studies of flow rates conducted in the 1930s and 1940s, resulted in the creation of conceptual plans for the construction of five dams on the Tigris River and three dams on the Euphrates River by 1963.<sup>29</sup> With the completion of the Keban dam on the Euphrates in 1974, Turkey had embarked on one of the most aggressive engineering projects the modern world has known.

### **The Southeast Anatolia Project**

The Southeast Anatolia Project or *Guneydogu Anadolu Projesi* (Great Anatolia Project- GAP) was originally conceived to develop the hydroelectric power capacity of the Tigris and Euphrates river basins in southeast Turkey with a number of major dams and power stations. It was Mustafa Kamal Ataturk, the founder of the Republic of Turkey in 1923, who first envisioned water from the Tigris and Euphrates rivers as the foundation of his country's aggressive growth as a developing nation.<sup>30</sup> Electric energy

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<sup>29</sup> Lorenz and Erickson, *The Euphrates Triangle: Security Implications*...., p 4.

<sup>30</sup> *Ibid*, p5.



would drive the economy and stimulate the creation of a new cultural identity for the Turks following the dissolution and fracture of the Ottoman Empire. In 1936, the Electric Works Studies Agency was charged with the responsibility to produce electrical energy from the many rivers in Turkey. From 1950 to 1960, drilling and feasibility studies were conducted along both the Tigris and Euphrates. In 1954, the State Hydraulic Works was created, and in 1977 the government of Turkey merged both organizations to fully exploit the Tigris and Euphrates watersheds under the ‘Southeast Anatolia Project.’<sup>31</sup>

As the idea gained acceptance and construction costs were defined, it was determined that hydroelectric power alone would not be able to realize Ataturk’s vision. In time, the irrigation potential of the dams was included as a method to develop vast areas for cash crops – the export revenue from which would contribute to the funding of construction and draw down crippling debts incurred by mainstay imports of oil, electricity, and coal, and the financing of lignite thermal plants, pipelines and hydroelectric power distribution infrastructure.<sup>32</sup> Eventually, only the evolution of the original plan into a massive, multi-sector development project was considered sufficient to rescue an impoverished region and contribute to the economic growth and independence of Turkey.<sup>33</sup> With investment and stimulated growth in urban and rural infrastructure, agriculture, transportation, industry, education, health, housing, forestry,

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<sup>31</sup> Swiss Federal Institute of Technology, *Case Study: Southeastern Anatolia Project in Turkey – GAP*, Zurich: Center for International Studies, 2001), p 3.

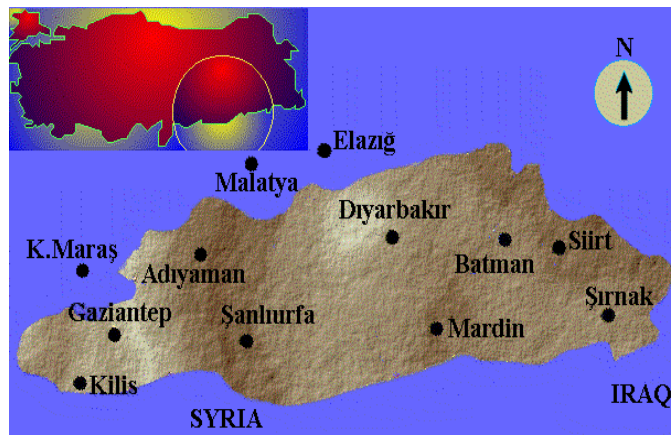
<sup>32</sup> John Kolars, “The Hydro-imperative of Turkey’s Search for Energy,” *The Middle East Journal*, XL (Winter, 1986), p 63.

<sup>33</sup> John Kolars, “Problems of International River Management: The Case of the Euphrates,” in *International Waters of the Middle East: From Euphrates-Tigris to Nile*, ed by Asit K. Biswas (Oxford: Oxford University Press, 1994), p 66.

tourism, and mining, so long as the undertaking remains funded, the GAP will very likely exceed Ataturk's expectations.<sup>34</sup>

Southeast Anatolia comprises nine provinces and 9.5 percent of the area and population of Turkey<sup>35</sup> (Figure 2). Its six million citizens are among the poorest in the

Figure 2: The Southeast Anatolia Region of Turkey



Source: Republic of Turkey, Ministry of Foreign Affairs,  
"Turkish Foreign Policy: A Synopsis," in "Foreign Policy."  
<http://www.mfa.gov.tr/grupa/default.htm>

country, with average per capita incomes elsewhere more than twice that of Southeast Anatolia. In addition, several social service indicators also underscore the general instability of the region. These include the lowest per capita rate of energy consumption, the lowest number of hospital beds per 10,000 people and the lowest contribution to manufacturing share of the gross national product (GNP).<sup>36</sup> The GAP region is also

<sup>34</sup> Zeynep Ergil, "The Experience of Southeastern Anatolia Project (GAP) as a Sustainable Regional Development Project." Conference on Interdependency Between Agriculture and Urbanization: Conflicts on Sustainable Use of Soil and Water. Tunis, 24-26 Apr. 2000.  
<http://www.iamb.it/incosusw/ergil-a.htm>

<sup>35</sup> Elhance, *Hydropolitics in the Third World*...., p 149.

<sup>36</sup> Mehmet Tomanbay, *Turkey's Water Potential and the Southeast Anatolia Project*, Chap 6 of *Water Balances in the Eastern Mediterranean*, ed by David B. Brooks and Ozay Mehmet (Ottawa: International Development Research Centre, 2000), p 7.

home to Turkey's ethnic minority Kurdish population. The Kurds have long sought political independence for all Kurds in the Middle East in their Turkish ancestral homeland, a rebellion that has been ongoing for nearly 30 years, and claimed more than 30,000 lives since 1984.<sup>37</sup>

With the tremendous socio-economic potential of the GAP, the Turkish government turned to a Japanese firm to delineate the scope and purpose of the project and recommend a course of action that would have as far reaching impact as possible. The resulting Master Plan included the following primary objectives of the GAP:

- to raise the income levels in the GAP region by improving the economic structure in order to narrow the income disparity between the Region and other regions;
- to increase the productivity and employment opportunities in rural areas;
- to enhance the assimilative capacity of larger cities in the Region; and,
- to contribute to the national objective of sustained economic growth, export promotion, and social stability by efficient utilization of the Region's resources.<sup>38</sup>

In order to meet these specific objectives, the Master Plan also outlined comprehensive development strategies that reflect the multi-sector range of influence inherent in the venture. These strategies include:

- the development and management of water and related land resources for irrigation, urban, and industrial uses;
- the improvement of land use by managing cropping patterns and establishing better agricultural practices and farm management;

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<sup>37</sup> Paul Kubicek, "Turkish-European Relations: At a New Crossroads?" *Middle East Policy*, VI (June, 1999), p 164.

<sup>38</sup> Republic of Turkey, *GAP Master Plan Study* (Ankara: Prime Ministry, 1989), pp 2-3.

- the stimulation and promotion of an agriculture related manufacturing industry, with an emphasis on indigenous resources; and,
- the provision of better social services to meet the requirements of local people and to attract technical and administrative staff to stay in the region.<sup>39</sup>

The primary objective of the effort is centred on significantly raising agricultural production, economic diversity, and the standard of living in the poor southeast region of the country. By specifically targeting the Kurdish population for social and economic integration, the Turkish government hopes to undermine the existing appeal of revolutionary separatism. This national security dimension of the GAP is clearly the most contentious issue for Turkey, both within and outside its borders. Despite its best efforts to bind and solidify the country with the wide-ranging benefits of the project, Turkey must contend with ensuring the project's security from the very sector of its population the project can help the most, and from Turkey's Middle East neighbors who see the GAP as a Turkish instrument of political power.

Above all, the common thread in all elements of the project is a focus on sustainable human development with an end-state that promotes and supports the growth and development of future generations. The government of Turkey has also been very astute in ensuring compliance with accepted norms for projects that significantly alter the physical and human landscapes. Accordingly, the fundamental strategies of the effort include fairness in development, participation, environmental protection, employment generation, spatial planning and infrastructure development. Lorenz and Erickson perhaps best capture the pride and optimism that the GAP vision represents to the Turkish people:

The development of the GAP has universal political appeal within Turkey and represents a source of great national pride – it is financed without the benefit of international financial organizations or the World Bank. This self-sufficiency has led to a heightened sense of national pride, a focus for the industrialization of the nation, significant influence in the region, and a great degree of independence of action and control over the project. The GAP is intended to bring industrialization and growth to a poor region of the country. It sends electricity to population centers and adds to the agricultural export base of Turkey. Not the least in importance, it provides hope for the large Kurdish minority in that area. There is something in this vision for almost every citizen of Turkey.<sup>40</sup>

Upon completion beyond 2010, the \$32 billion-plus project will comprise 22 dams and 19 hydroelectric power generating stations. From an energy perspective, the completed power stations will have the capacity to produce 7,476 megawatts (MW) of energy, or an additional one-third of Turkey's 1999 installed hydroelectric power generating capacity, and will provide an annual 27 billion kilowatt hours (kWh) to Turkey's total energy requirements.<sup>41</sup>

The completed Ataturk and Karakaya power plants have been a significant source of pride and optimism for the future of the project in the eyes of the Turkish government and its citizens. Their combined total output capacity of 4,200 MW is already 80 percent of the 5,304 MW to be generated on the Euphrates River, with the recently completed Birecik and pending Karkamis dams, also on the Euphrates, designed to generate an additional 852 MW.<sup>42</sup> As an indication of the immediate impact of the project, the Ataturk and Karakaya dams had, in 1998, produced 145.6 billion kWh of electricity. This energy had a 1998 value of 8.7 billion US dollars and represented the equivalent

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<sup>39</sup> *Ibid*, pp 2-3.

<sup>40</sup> Lorenz and Erickson, *The Euphrates Triangle: Security Implications...*, p 6.

<sup>41</sup> Republic of Turkey, Ministry of Foreign Affairs, *Southeast Anatolia Project – Bridging the GAP*, 2000 (Ankara: Etki Yayincilik, 2000), p 9.

<sup>42</sup> *Ibid*, p 9.

energy of 36.4 million tonnes of imported fuel oil, or 28.1 billion cubic meter of imported natural gas. This 1998 GAP power production of 20 billion kWh also represented 47.4 percent of Turkey's hydroelectric power generated at the time and 18% of its entire electrical power capacity. Upon completion of the project a further seven billion kWh will be added to Turkey's power grid.<sup>43</sup>

In furthering Turkey's agricultural economy, GAP's thirteen irrigation projects will irrigate an additional 1.7 million hectares (ha) of land – an area roughly one-half the size of Belgium. 1,091,203 hectares will be irrigated with water from seven projects on the Euphrates River, while the remaining 601,824 hectares will receive water from six projects on the Tigris River.<sup>44</sup> The first 201,080 hectares of new irrigated land were created with water from the Ataturk and Karakaya dams, and the results have been remarkable. The Sanliurfa-Harran irrigation tunnel project area on the lower Euphrates using water from the Ataturk dam has realized 90,000 hectares of new cropland and experienced a revolution in crop production. While in the past, insufficient rainfall permitted only one crop per year, GAP-produced irrigation now permits from two crops per year to as much as five crops in two years. Further, crop yields of such staples as cotton, lentils, wheat, barley and other grains have been found to triple and farmers' confidence in the future has inspired diversification in crop varieties to include soybeans, groundnuts, corn, beans, sunflowers, oil seeds fodder crops and fruits.<sup>45</sup> These latter crop varieties represent high yield products that that could spawn new business in developing

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<sup>43</sup> *Ibid*, p 10.

<sup>44</sup> *Ibid*, p 7.

<sup>45</sup> *Ibid*, p 7.

the region as an export centre in terms of agricultural and agriculture-based industrial goods.<sup>46</sup>

### **The Middle East Water Crisis**

The decline of the world's water supply is arguably the most critical global issue of the day. Staggering population increases, burgeoning resource and industrial development, urbanization, and land reclamation through irrigation are but a few of the factors that contribute to the decline of our most precious renewable resource. According to UNESCO, the earth's six billion inhabitants exploit 54 percent of all available fresh water derived from lakes, rivers, and sub-surface aquifers – an estimate that is expected to increase to 70 percent by 2025.<sup>47</sup> Furthermore, one-half of the world's rivers have experienced serious flow reductions or are polluted, one-third of the world's population is reliant upon these affected rivers for fresh water, and, by 2032, more than one-half of the world's inhabitants will face some form of water shortage.<sup>48</sup>

In the Middle East, water availability has always determined where and how people have lived, and so contemporary water shortage issues are considerably more acute than in the rest of the world. In fact, from a foreign policy perspective, water has, over the years, quite likely surpassed oil as the most contentious political issue in the Middle East. At the time of his signing of peace accords with Israel in 1979, Egyptian President Anwar Sadat stated his country would never again enter a war unless to protect

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<sup>46</sup> *Ibid*, p 8.

<sup>47</sup> UNESCO World Water Assessment Program – People and the Planet. “2003 International Year of Fresh Water – Facts and Figures.” <http://www.wateryear2003.htm>, February 2003.

<sup>48</sup> Alex Vass, “Over Half the World Will Face Water Shortages by 2032,” *British Medical Journal*, CCXXIV (June, 2002), p 1293.

is water resources. The late King Hussein of Jordan once similarly stated he would never do battle with Israel again except in the interest of water, and, Boutros Boutros-Ghali, then Secretary General of the United Nations was once quoted as saying that the next war in the Middle East would be fought over water.<sup>49</sup>

While Middle East water supplies are pressured by the above-noted issues, they are also adversely affected by issues of impoverished countries – notably inefficient agricultural practices and weak institutional frameworks for water management, as well as geographic climactic factors including salination, variable precipitation, flow variations in time and space, and the impacts of global warming.<sup>50</sup> Flow variations, whether natural or man-induced, not only hinder downstream use on the short term, but also interrupt and undermine downstream water control projects including power production and irrigation. In the case of the Euphrates River, normal water flows can be 28 times more than the low flows resulting from seasonal climactic factors.<sup>51</sup>

Although individual countries that experience similar water shortage issues in other parts of the world, including other parts of the Middle East, have been able to negotiate equitable solutions, lingering historic disputes over water between the riparians of the Euphrates River have prevented cooperation on water access and continue to emphasize its strategic importance.

The modern history of Iraq and Syria's dispute with Turkey can be traced to the oppressive rule of the Ottoman Empire during World War I. Specifically, Jamal Pasha,

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<sup>49</sup> Adel Darwish. "Water Wars: The Next Conflict in the Middle East." Geneva Conference on Environment and Quality of Life. Geneva, CH. June 1994.

<sup>50</sup> Aaron T. Wolf, "A Hydropolitical History of the Nile, Jordan and Euphrates River Basins," in *International Waters of the Middle East: From Euphrates-Tigris to Nile*, ed by Asit K. Biswas (Oxford: Oxford University Press, 1994), p 6.

<sup>51</sup> Elhance, *Hydropolitics in the Third World*...., p 127.



known as Jamal the Butcher, the ruthless Turkish leader of the Ottoman Army in Syria, hanged dozens of Arab leaders in Syria and Lebanon, as well as several of his own political opponents in Baghdad on 6 May, 1916. He also regulated Ottoman Syria's food distribution program to the extent of causing the starvation of 90% of the country's cattle and the death of countless Syrians. To this day, Arabs celebrate 6 May as Martyr's Day in commemoration of the slaughter, while the rule of the Ottoman Turks is still claimed responsible for Syria's relative underdevelopment.<sup>52</sup> Relations were further strained in 1939, when France, as the imperial power over Syria, passed the Syrian province of Alexandretta to Turkey (re-named Hatay) in exchange for Turkey's neutrality in the pending war with Germany.<sup>53</sup> To this day, Syria still claims sovereignty over 'Alexandretta' with current representation on Syrian maps. Uncooperative, if not hostile, relations continued during the Cold War with Turkey choosing the West (and a NATO member since 1952), and both Syria and Iraq linked politically and militarily to the Soviet Union.<sup>54</sup>

After 1986, Iraq and Syria became adamantly opposed to Turkey's new close relationship with Israel, with Turkey poised to sell Israel 1.75 billion cubic feet of water annually in exchange for Turkish access to Israeli military weapons and avionics technology.<sup>55</sup> Not only does this align Turkey with a despised Arab enemy, but also the

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<sup>52</sup> Jack V. Kalpakian, "History, Identity and Water Disputes: The Case of the Tigris-Euphrates." International Studies Association. *Proceedings of the 40<sup>th</sup> Annual Convention* (Washington, DC, 1999), p 6.

<sup>53</sup> Alan Makovsky. "Defusing the Turkish-Syrian Crisis: Whose Triumph?" *Middle East Insight*, (January-February, 1999), p 17. <http://www.washingtoninstitute.org/media/amakovsky/makovsky.htm>.

<sup>54</sup> *Ibid*, p 1.

availability of surplus water for sale from Turkey- albeit not from rivers within the GAP, would suggest to the Arabs that Turkey's stated intentions and need for the project are disingenuous, and that the Southeast Anatolia Project exists only as an instrument of political power.

As divisive as these issues have been in relations between Turkey and its closest neighbors, its actions and foreign policy during the first Gulf War in 1990-1991 broke several Middle East taboos that have likely caused irreparable damage. At the outset of the conflict, it decisively chose sides in a Middle Eastern confrontation. It mobilized for war on a neighbor's border (Iraq) for the first time in more than 30 years following a dispute with Syria in 1957. Simultaneously, Ankara permitted the staging, from its Incirlik Air Base, of a non-NATO, 'out-of-area' military operation. As well, it participated in the implementation of a trade embargo against Iraq, a trading partner, by closing the oil pipeline between Iraq and Mediterranean ports in Turkey. But more damaging than these, by far, was Turkey's service to the United States as a conduit for American foreign policy in the Middle East.<sup>56</sup>

Turkey's shift in foreign policy at the time of the Gulf War can also be seen in a new direction in foreign trade at about the same time. In 1982, business with Islamic countries represented 47.9 percent of Turkey's export trade. This total was reduced to just 20.1 percent by 1991. Similarly, with import trade, in 1982 Turkish imports from the

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<sup>55</sup> "Israel and Turkey Strike 20-Year Water Deal." *U.S. Water News Online*. 7 Mar. 2003. Aug. 2002 <http://www.uswaternews.com/archives/arcglobal/2isrand8.html>

<sup>56</sup> Alan Makovsky, "The New Activism in Turkish Foreign Policy," *SAIS Review*, XIX (Winter-Spring, 1999), p 93.

Middle East and North Africa represented 43 percent of its import business economy. But in 1991, import business with the same sector dropped to 15.1 percent.<sup>57</sup>

Clearly, as both a binding and a divisive influence, water is of critical importance in Turkey and the Middle East. It represents not only the key to human, industrial and economic prosperity, but also the linchpin in international relations. For Turkey, Syria, and Iraq, the Euphrates River remains a catalyst for confrontation, a primary issue of foreign policy and a central issue of national security and domestic stability. But just as important, one can see the potential for water disputes to be magnified in importance and exacerbated by existing acrimonious international relationships and shifts in regional foreign policy. With tenuous political relationships in the region; the degree of water scarcity and the general absence of alternate sources of fresh water, the extent to which the Euphrates is relied upon by its riparians, and their relative military power, the Euphrates River and the controlling GAP project meet the accepted criteria as a source of strategic rivalry put forth by Peter Gleick, a noted water scholar.<sup>58</sup>

For Turkey itself, as an evolving country, the ambitious GAP project has been, for the most part, a veritable success. But beneath the scale and scope of the effort, and notwithstanding its regional and national benefits, there lie a number of regional and broader geo-strategic political implications of the project that are of concern to the downstream riparian states and the international community.

Beyond the GAP, Turkey is a country in transition. Centrally located between Europe, Central Asia and the Middle East, it has long been regarded as a bridge between

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<sup>57</sup> Ziya Onis, "Turkey in the Post-Cold War Era: In Search of Identity," *Middle East Journal* XLIX (Winter, 1995), p 61.

<sup>58</sup> Peter H. Gleick, *Water and Conflict*, Environmental Change and Acute Conflict, No 1 (Toronto: University College, University of Toronto, 1992), p 6.

East and West. While Turkey's pro-Western political philosophy, allegiance to the West during the Cold War, geostrategic significance, and NATO membership in 1952 speak to its global strategic outlook, Turkey's desperate aspirations for membership in the European Union (EU) have been thwarted out of concern for its economic stability and commitment to fundamental democratic principals, as well as its official intolerance of minority rights and its record of human rights violations.<sup>59</sup> Unofficially however, it may be more an issue of the EU acting out of caution and concern for its open borders given Turkey's size, its predominant Muslim population, and its shared borders with Iran, Iraq and Syria.

Being politically shut out from Europe, and marginalized by the Arab and Muslim countries of the Middle East for its Western ambitions and relationship with Israel, Turkey has few supporters of its Herculean project on the Euphrates. More important, the GAP could have far-reaching implications for Turkey's future relations with the West, its role as a regional power, and its internal stability.

Perhaps at its most basic level, the GAP simply represents uncertainty to the downstream riparians of the Euphrates River. Uncertain of the adequate flow of the river, and uncertain of a future so closely tied to it. The Euphrates River represents a classic dispute regime on a river with an upper, middle, and lower riparian. The basic cause of conflict becomes predictable, with measures taken by upstream countries (i.e., Turkey) to manipulate and exploit the river's flow undermining the development prospects of downstream countries (i.e., Syria and Iraq). Upstream measures and activities can have either permanent or seasonal effects on downstream flows, with resulting decreases in

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<sup>59</sup> Katherine A. Wilkens, *Turkey Today: Troubled Ally's Search for Identity*, Headline Series, No. 317 (New York: Foreign Policy Association Inc., 1998), pp 19-20.

water levels having both direct and indirect consequences on agricultural and industrial activities. Water control measures taken by upstream riparians may also affect water quality vis-à-vis changes in water temperature or contamination. With direct consequences for aquatic plant and animal life, water supply and public health, issues of water quality can be the most contentious between riparian countries.<sup>60</sup>

Syria and Iraq have experienced, and continue to fear unacceptable levels of water quality resulting from the GAP project.

First, the actual construction phase of the project is a huge industrial process. Vast tracts of forest are removed, communities abandoned, and industry relocated. The physical and chemical detritus left behind, as well as the runoff from erosion, is removed by the Euphrates and integrated into the water projects and utilities of the downstream riparians.<sup>61</sup> This polluted water from industrial wastes represents a significant hazard to the downstream environment.

Second, Syria, in particular, fears that the delivery of Euphrates water will be diminished to the extent that farmers will be forced to irrigate crops with untreated sewage water and lead to another public health crisis. For the Syrians, the 1989 outbreak of cholera in the city of Aleppo attributed to contaminated parsley, serves as a reminder of the public health hazard attributable to water shortage and water quality, and the need to routinely soak their vegetables in chlorine.<sup>62</sup> As the Syrian population densities in rural agricultural areas approach those of Palestinians living on the West Bank and in the Gaza Strip of Israel, the crisis of water-borne infectious diseases becomes even more

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<sup>60</sup> Patrick Seale, "Turkey and Syria: The War Over Water," *Middle East International*, (June, 1999), p 21.

<sup>61</sup> Amikam Nachmani, "Water Jitters in the Middle East," *Studies in Conflict and Terrorism*, XX (January-March, 1997), p 74.

<sup>62</sup> Priit J. Vesilind, "The Middle East's Water: Critical Resource," *National Geographic*, May, 1993, p 51.

apparent. In 1994, waterborne viral, bacterial, fungal, and parasitic diseases crippled entire communities. Shigellosis, amoebic dysentery, brucellosis, ringworm, E-coli, brought about by contaminated food and drinking water, ineffective personal sanitary hygiene practices, and the absence of clean water with which to bathe, were reported to afflict 61 percent of the population and account for 74 percent of all childhood deaths.<sup>63</sup>

Finally, the GAP will also present downstream water quality problems as the result of agricultural practices in Turkey. Fertilizers and pesticides applied on millions of acres of agricultural farmland in Turkey will eventually find their way into the Euphrates. Downstream, the water will be used again to irrigate agricultural lands, but at pollution levels that will likely be compounded by the addition of more fertilizers and pesticides. In addition, ineffective water treatment plants will permit the entry of agri-chemicals into domestic water supplies, thus compounding other water quality and public health issues.<sup>64</sup>

Contaminated water will also infiltrate the Iraqi water system, and the fragile ecosystems from Turkey to the Persian Gulf. Wildlife habitat destroyed by fluctuating water levels will upset migratory patterns and contaminated river water will undoubtedly affect reproduction and mortality rates, especially among the more susceptible young animals. Given the power of the international lobby for the protection of wildlife and habitat, Syrian and Iraqi may quickly gain the attention and influence of multinational environmental organizations.<sup>65</sup> There may be no more consequential impact on the

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<sup>63</sup> Anna Bellisari, "Public Health and the Water Crisis in the Occupied Palestinian Territories," *Journal of Palestine Studies*, XXIII (Winter, 1994), p 59.

<sup>64</sup> Nachmani, "Water Jitters in the Middle East," *Studies in Conflict*...., p 74.

<sup>65</sup> Elhance, *Hydropolitics in the Third World*...., p 129.

completion of the GAP than a call for project restraint by the United Nations Environment Program or the United States Environmental Protection Agency.

As emotional as it is, the issue of water quality is one for which the affected countries have no recourse. Their military strength is significantly less than that of Turkey, and the dams at the source of the problem represent illegal military targets under the Law of Armed Conflict, and unlikely targets given the strong likelihood of downstream flooding with their destruction.<sup>66</sup> Of primary necessity is the need for effective water treatment and storage facilities, and an investment in personal sanitary hygiene education. To the Syrians and Iraqis, interim water shortage is a fact of life in the arid climate of the Middle East, which is further complicated by the development of the GAP. Interestingly, water shortages downstream become more of a regional destabilizing factor in the absence of sound water management practices. This would suggest that the mitigation of the political effects of water shortages in Syria and Iraq is, in part, within the influence of these countries.

Both Syria and Iraq contend that the GAP is an instrument of political power in the Middle East, with its strength coming from the disruption of both their water consumption patterns and their future social and economic development plans. However, as the middle riparian, and recalling its tenuous relationship with Turkey, Syria has clearly been the most outspoken opponent of the Southeast Anatolia Project.

Syria's concerns are many. They began in the 1960s as Turkey was exploring the potential of the Tigris and Euphrates rivers, and the feasibility and scope of the then-

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<sup>66</sup> Under Additional Protocol I, Article 56, paras 1 and 2, and Additional Protocol II, Article 15, of the Geneva Convention, dams shall not be made the object of attack, even where they are military objectives, if such an attack may cause the release of dangerous forces and consequent severe losses among the civilian population.

conceptual Southeast Anatolia Project. In 1987, as a gesture of goodwill in response to Syria's (and Iraq's) concern for the future security of its water supply from the Euphrates, Turkey agreed to a protocol whereby it would guarantee the flow of the Euphrates into Syria at the rate of 500 CMS, or 15.7 billion cubic meters per year. The only caveat was that Syria would increase its border security and cease all support to the Kurdish Workers Party (PKK), which has been conducting an armed rebellion against Turkey for the cause of Kurdish separation.<sup>67</sup> When it was subsequently determined by Turkey in 1988 that Syria was not complying with the agreement to stop supporting the Kurds, Turkish President Turgut Ozal unwisely threatened to cut the flow of the Euphrates to Turkey (and by extension, to Iraq), unless Syria complied. Although Ozal later retracted the threat, it was not lost on the Arabs that Turkey had the ability to follow through on the threat in the event of future hostilities.<sup>68</sup>

As the GAP materialized and the sheer magnitude of the venture was quantified, Syria and Iraq became alarmed at the toll the GAP would take on their own development. With worst case estimates indicating the flow of the Euphrates to Syria would be cut by as much as 40 percent, and to Iraq by up to 90 percent, there was reason for concern, particularly for Baghdad. After Syria has extracted the necessary 3.5 trillion gallons it needs for its water control projects, and with the 1974 Ath-Thawrah Dam incident with Turkey yet a corporate memory, Iraq could see that the continuance of its 6000-year-old Euphrates irrigation system is in jeopardy.<sup>69</sup>

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<sup>67</sup> Michael T. Klare, *Resource Wars: The New Landscape of Global Conflict* (New York: Henry Holt and Co., 2001), p 178.

<sup>68</sup> *Ibid*, p 179.

<sup>69</sup> John Bulloch and Adel Darwish, *Water Wars: Coming Conflicts in the Middle East* (London: Victor Gollancz, 1993), p 59.



The Arab fears materialized in 1990 with Turkey's filling of the reservoir behind the Ataturk Dam, the central component of the GAP project. Although Syria and Iraq contest the point, Turkey maintained that the filling of the reservoir was an essential, predictable requirement for the dam, and that it had given its southern neighbors due notice of its intentions. With the completion of the scheduled filling with a month, Turkey was able to demonstrate that it had increased the downstream flow of the river both prior to and after the filling of the dam, therefore keeping its promise of an 'average' of 500 CMS of throughput.<sup>70</sup>

Nonetheless, Iraq and Syria exploited the opportunity to publicly criticize the GAP as both a water thief and an instrument of political power in the Middle East. Threatening to cease oil exports to Turkey as a way of protest, the Revolutionary Command Council of Iraq dispatched its oil minister to Ankara to request that the impounding of the dam be conducted within two weeks.<sup>71</sup> Syria's response was to complain that the stoppage was a breach of international law.<sup>72</sup> Despite Turkey's assertion that the necessary filling of the dam represented nothing other than providing headwaters for hydroelectric power generation, the Arabs' rhetoric continued in earnest. However, before hostilities could develop, the impounding of the reservoir was completed and relations returned to normal.

It seems, however, that Turkey could not leave well enough alone. In what Syria and Iraq could only deem to be provocation, then- Prime Minister Suleyman Demirel re-

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<sup>70</sup> Marq de Villiers, *Water* (Toronto: Stoddart Publishing, 1999), p 255.

<sup>71</sup> Gun Kut, *Burning Waters: The Hydropolitics of the Euphrates and Tigris*, New Perspectives on Turkey, IX (Istanbul: Economic and Social History Foundation of Turkey, 1993), p 3.

<sup>72</sup> *Ibid*, p 3.

ignited the hornets' nest of controversy with two damning speeches following the Ataturk crisis.

The first speech came in the days following the Syrian and Iraqi threats of war over the impounding of the Ataturk reservoir. Rather than continuing to placate and reassure the Arabs in finally diffusing the situation, Demirel's response only served to galvanize his neighbors. No doubt referring to NATO Article 5 protection and its weapons deals with Israel, Demirel said "I do not believe in worrying about threats of war resulting from development projects in Turkey...if there is a threat we will repel it. Turkey has deterrence [and] we will have more deterrence in the coming period."<sup>73</sup>

The second speech occurred on 25 July 1992, at the official opening of the Ataturk Dam. With no regard for the opportunity the occasion would present in reassuring its neighbors of their continued share of the Euphrates, and of the important role of the dam in regulating river flow to the benefit of all riparians, Demirel instead chose to validate their worst fears.

Neither Syria nor Iraq can lay claim to Turkey's rivers any more than Ankara could claim their oil. This is a matter of sovereignty. We have a right to do anything we like. The water resources are Turkey's, the oil resources are theirs. We don't say we share their oil resources, and they cannot say they share our water resources.<sup>74</sup>

Incredibly, Turkey again cut the flow of the Euphrates to Syria and Iraq in 1993. This time, the action was definitely unannounced and conducted with flagrant disregard for the Muslim Feast of the Sacrifice in June. Coming at a time of serious drought, Turkey's intention was to replenish the reservoirs of several of its dams. While fully cognizant of the Muslim holiday, Turkey felt that all farming and industry would be

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<sup>73</sup> Klare, *Resource Wars: The New Landscape*..., p 179.

<sup>74</sup> Bulloch and Darwish, *Water Wars: Coming Conflicts*..., pp 74-75.

shutdown in its observance, and that Syria would not miss its daily allotment.<sup>75</sup> Turkey could not have been more wrong in its assessment, and the reaction from Syria was immediate and predictable. Although having dispatched another official delegation to Damascus to mollify its government, Turkey found itself in the familiar predicament of pleading innocent to charges of exercising its regional power.

But while Turkey's frequent peace delegations continued to emphasize peaceful co-existence and sufficient Euphrates water flow for all, its actions and political dialogue were frequently out of step. It would seem, that in a country comprised primarily of Muslims, Turkey would fully comprehend the significance of the Muslim Feast of the Sacrifice, and of Syria, and Iraq's continued requirement for their daily allotment of the Euphrates. One can't help but ponder Turkey's superior position at the time given its membership in NATO, its arsenal of modern NATO weapons, its weapons-based association with Israel, and its ultimate control over the flow of the Euphrates River. From the perspective of Syria and Iraq post-Cold War, only the threat of weapons of mass destruction (WMD) and their influence over the Kurdish uprising in Turkey could provide a measure of balance to the conflict.

In all likelihood, Turkey's willingness and ability to provide 500 CMS of Euphrates flow at its border with Syria will serve as the key component of its existence as a regional power in the Middle East. It remains that way because of the linkage of the 500 CMS protocol only to the filling of the Ataturk Dam, and the inability of the riparians to agree on a methodology for determining individual water rights. The protocol has been recorded as follows:

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<sup>75</sup> de Villiers, *Water*...., pp 255-256.

During the filling of the Ataturk Dam reservoir and until the final allocation of the water of the Euphrates among the three riparian countries, the Turkish side undertakes to release a yearly average of more than 500 CMS at the Turkish – Syrian border, and in cases where the monthly flow falls below the level of 500 CMS, the Turkish side agrees to make up the difference during the following month.<sup>76</sup>

Given the ambiguity of the termination trigger within the agreement, Syria and Iraq felt it ceased upon the filling of the dam, and that water flows should be released to them based on historically acquired rights first, and then sharing the remainder based on each country's *individual* calculation of need, *before* the influence of the GAP.<sup>77</sup> The Turks, on the basis that it would undermine the fulfillment of Turkey's GAP vision- undoubtedly the Arabs' intention, immediately discounted this proposal. Specifically, Turkey was concerned with Syria and Iraq's overestimating the area of arable land within their countries, as well as the inefficiency of their agricultural practices and water distribution systems. Turkey also sought refuge in the interpretation of Stephen McCaffrey as a respected water jurist and member of the International Law Commission, which centred on the following:

a downstream State that was first to develop its water resources could not foreclose later development by an upstream State by demonstrating that the later development would cause it harm; under the doctrine of equitable utilization, the fact that a downstream State was "first to develop" (and thus had made prior uses that would be adversely affected by new upstream uses) would be merely one of a number of factors to be taken into consideration in arriving at an equitable allocation of the uses and benefits of the watercourse.<sup>78</sup>

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<sup>76</sup> Republic of Turkey, Ministry of Foreign Affairs, *The Official Gazette of Turkey*, 1987 (Ankara, Prime Ministry, 1987), p 6. <http://www.mfa.gov.tr/grupa/default.htm>

<sup>77</sup> Kut, *Burning Waters: The Hydropolitics of the Euphrates and Tigris*...., p 11.

<sup>78</sup> Stephen C. McCaffrey, "The Law of International Watercourses: Some Recent Developments and Unanswered Questions," *Denver Journal of International Law and Policy*, (Spring, 1991), p 509.

Inspired by McCaffrey's assertion that water rights are based on factors other than historical usage and sharing, Turkey disqualified the most untenable of its neighbor's claims to water in favour of one that would focus on 'optimal and rational utilization.' It worked to develop a solution that would satisfy the certified water requirements of the three riparians while ensuring sufficient water from the Euphrates for the future of the GAP.

The result was the Three-Stage Plan for Optimum, Equitable and Reasonable Utilization of the Transboundary Watercourses of the Tigris-Euphrates Basin, first introduced to the Syrians and Iraqis in 1990, and, after revision, again in 1993.<sup>79</sup> Stage one encompasses a comprehensive inventory and study of the water resources in the river basins within each country. Individual studies of evaporation, temperature and precipitation at selected gauging stations, and of natural flows and losses, are to be exchanged for verification by the other countries.<sup>80</sup>

The second stage is directed toward inventory studies of land resources, starting with the analysis and exchange of soil classification and drainage assessment methods employed in each country. Soil and water conditions for projects that are in operation, under construction or planned are also checked. This stage also looks at crop patterns for agricultural projects that are both in-operation and planned, from the viewpoints of soil classification and drainage conditions, leaching patterns and irrigation requirements.<sup>81</sup>

The third stage is an evaluation of land and water resources. The primary objective of this stage is to analyze planned projects to ensure water is used in the most

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<sup>79</sup> Turkish Ministry of Foreign Affairs, Department of Regional and Transboundary Waters. "Water Issues Between Turkey...., p 12.

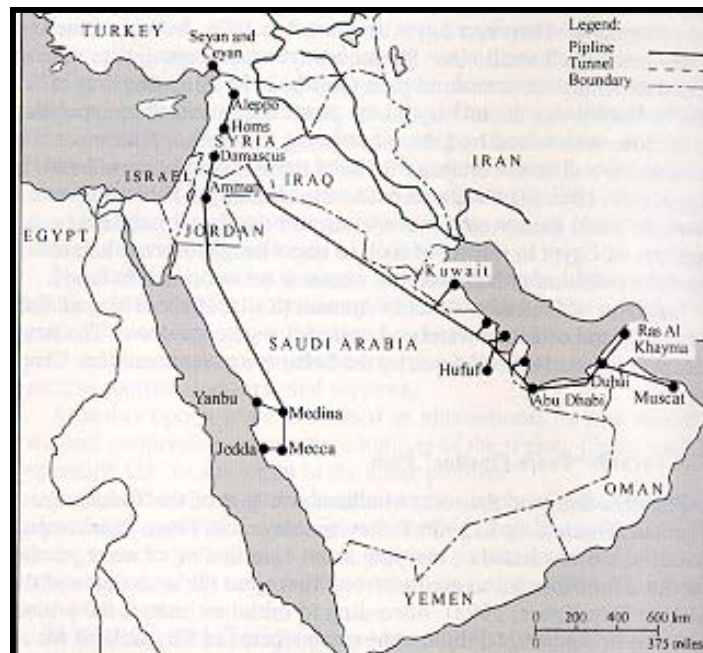
<sup>80</sup> *Ibid*, p 13.

<sup>81</sup> *Ibid*, p 14.

economic ways, and to examine projects already in operation to determine if they can be modernized or rehabilitated in the interest of making them more water efficient.<sup>82</sup>

That the plan was poorly received by the Iraqis and the Syrians was of little surprise to the Turks. Its call for the exchange and verification of soil and water conditions and use, as well as agriculture feasibility, was considered a challenge to their sovereignty. Turkey had long suspected the Iraqis and Syrians were overestimating their agricultural land, and that their agricultural practices were both wasteful and uneconomical. While the Arabs dismissed the plan as only a method to deny them more water and make them food dependent upon Turkey, the Turks read the response to be confirmation of their suspicions.<sup>83</sup>

Figure 3: The Ozal Peace Pipeline



Source: Arnon Soffer, *Rivers of Fire: The Conflict Over Water in the Middle East*, trans by Murray Rosovsky and Nina Copaken (Lanham, MD: Rowman and Littlefield, 1999), p 238.

<sup>82</sup> *Ibid*, p 14.

<sup>83</sup> Kut, *Burning Waters: The Hydropolitics of the Euphrates and Tigris*...., p 13.

The Three-Stage Plan was Turkey's second such proposal for water distribution and regional cooperation in a decade. From 1986 to 1991, President Turgut Ozal proposed a project to deliver six million cubic meters of fresh water per day from the Seyhan and Ceyhan rivers in south central Turkey to customers in arid countries in the Middle East (Figure 3).<sup>84</sup> Its purpose was to generate revenue for the financing of the GAP from the sale of water at rates below the cost of de-salinization, reduce the requirement for water from the Euphrates on the part of Syria and Iraq, and promote cooperation among the three riparians.<sup>85</sup>

Comprised of a separate pipeline carrying water from each river, the Peace Pipeline was to be a most ambitious project. It was designed to stretch almost 4100 miles, involve the pumping of water to significant elevations (nearly 3000 feet), and necessitate the construction of a number of tunnels.<sup>86</sup> The plan called for water pipelines to bracket the Arabian Peninsula, with western terminal points in Syria, Jordan, Israel and western Saudi Arabia, and eastern deliveries to eastern Saudi Arabia, Bahrain, Qatar, the United Arab Emirates, and Oman.

This proposal nonetheless failed, and for many of the same reasons that other Middle East initiatives fail- distrust, independence, and insecurity. None of the intended recipients wanted to pay, and come to rely on Turkey for water.<sup>87</sup> It was felt that by purchasing water, a country's right to control the water within its boundaries, or retain acquired rights to the Euphrates, might be diminished. Kuwait would not want to rely

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<sup>84</sup> Cem Duna, "Turkey's Peace Pipeline," in *The Politics of Scarcity: Water in the Middle East*, ed by Joyce R. Starr and Daniel C. Stoll (Boulder: Westview Press, 1988), pp 119-120.

<sup>85</sup> Natasha Beschoner, *Water and Instability in the Middle East*, The Adelphi Papers of the International Institute for Strategic Studies, No. 273 (London: Brassey's Ltd., 1992), p 44.

<sup>86</sup> Soffer, *Rivers of Fire: The Conflict Over Water in the Middle East...*, p 240.

<sup>87</sup> *Ibid*, pp 241-242.

upon water that had to transit through Iraq, just as Jordan would not want to rely on the Syrians, or any Arab country rely on the Israelis. In the constant struggle for independence and security in the Middle East, de-salinated water from the Tigris and Euphrates, at five-times the rate of water from the Peace Pipeline, was still regarded as a bargain.

Critics of the motives behind the Peace Pipeline, maintain that Turkey's only interest is revenue for its GAP project and a stronger grip on the geopolitics of the region.<sup>88</sup> But in consideration of rightful ownership of every other natural resource, including those that transcend international boundaries, none are expected to be shared outside them. Quite simply, Turkey is blessed to have the origins of the Euphrates River within its borders. As a country in transition, struggling to achieve or maintain political and economic power like every other country, one could argue that Turkey is entitled to fully exploit its natural resources to that end. Further, in light of Turkey's perception of the Euphrates as a transboundary river, it is understandable that initiatives such as the Three Stage Plan and the Ozal Pipeline have the best interests of the controlling nation at the forefront given the benefits to, and despite the elements of risk for, the 'consumer'?

Perhaps the failed Three-Stage Plan and Ozal Pipeline proposals best capture the essence of the hydro-politics of the Middle East. It is not about water at all. The Three Stage Plan failed because Syria and Iraq did not want the true extent of their agricultural land, and the inefficiency of both their agricultural and irrigation practices verified against their legitimate water requirements. The Three Stage Plan would also verify that the water currently available from the Euphrates, and that volume likely to be available upon completion and full operation of the GAP, is sufficient to meet their needs. But in



complaining about Euphrates water availability to both Turkey and the international community, Syria and Iraq understand they are undermining Turkey's aspirations for political power, EU entry and closer association with the West.

### **The Kurdish Problem**

Among the many criticisms and challenges to Turkey's bid for acknowledgement as a progressive Western society, and a dynamic regional power, none could be as potentially harmful as the political aspirations of the Kurds.

Figure 4. Kurdistan



Source: The Washington Post Company. "Who Are the Kurds." *Washington Post on the Web*. 1999. 11 Apr, 2003  
<http://www.washingtonpost.com/wp-srv/inatl/daily/feb99/kurdprofile.htm>

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<sup>88</sup> *Ibid*, p 240.

This powerful minority has the potential not only to disrupt Turkey's domestic and foreign policy, but also to undermine Ankara's control over the headwaters of the Euphrates River in its homeland of Southeast Anatolia. Further, as 2003's coalition Operation Iraqi Freedom threatens to facilitate the establishment of an independent Kurdish state within oil-rich northern Iraq, the prospects for Turkey's GAP project, on both the Tigris and Euphrates rivers are greatly diminished. Clearly, Kurdish autonomy represents the most troublesome political issue of the day. As one would expect from an ethnic group struggling for political recognition and independence, the Kurds proclaim there was no 'beginning' to their history. Their culture has evolved from thousands of years of evolution, assimilation, and influence in Kurdistan, an area covering parts of modern-day Turkey, Syria, Iraq, Iran, and Armenia (Figure 4). Archaeology credits Kurdistan as the site of some of the earliest achievements for humankind, with evidence of animal husbandry and agriculture, record keeping, weaving, pottery, metallurgy, and urbanization, originating between 12,000 and 8,000 years ago.<sup>89</sup> Prior to World War I, the Kurds practiced a nomadic lifestyle herding mostly sheep and goats between mountain and valley in accordance with the annual cycle of rain and drought. Today, the approximately 30 million Kurds living mainly in Turkey, Iraq, Iran, and Syria likely represent the largest ethnic group in the world without a nation. In Turkey, the Kurds represent approximately 20 percent of the population, or approximately 15 million people, and are fully integrated into every profession, vocation, and institution in the country.<sup>90</sup>

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<sup>89</sup> The Kurdish Library, "Kurds and Kurdistan: Facts and Figures," *The International Journal of Kurdish Studies*, V (Spring-Fall, 1992), p 13.

<sup>90</sup> Wilkens, *Turkey Today: Troubled Ally's Search for Identity*...., p 10.

During World War I, Kurdistan was under the control of the Ottoman Empire, and the Ottoman Turks were aligned with Germany, Austria-Hungary, and Bulgaria.<sup>91</sup> The Kurds' struggle for political autonomy originated with the Central Powers' loss of the war and the dividing of both the Ottoman Empire and Kurdistan by the victors. The 1920 Treaty of Sevres created the modern states of Syria, Iraq and Kuwait, while leaving Turkey and its government intact but under control of Greece, Italy and France. Under the influence of President Woodrow Wilson, this treaty also provided for the recognition of a semi-autonomous Kurdish state in Eastern Anatolia.<sup>92</sup> Thus, the Kurdish quest for political autonomy that continues today has its roots in the final days of the Ottoman Empire.

However, before the Treaty of Sevres could be ratified, Mustafa Kemal Ataturk led the Turks in a series of successful wars against the occupying Armenians and Greeks. As President of the new Grand National Assembly (GNA), Ataturk drafted the Republic of Turkey's first constitution, including the National Pact, which asserted complete Turkish sovereignty over its territory, and focused on a concept of nation building based on centralization, secularization and westernization. With the negotiation with Britain of the Treaty of Lausanne in 1923 as a replacement for the Treaty of Sevres, the Republic of Turkey's struggle for independence had succeeded, while that of the Kurds had only begun in earnest.<sup>93</sup>

An insurgency by Kurds seeking an independent state officially began shortly after the Treaty of Lausanne with armed insurrections in Kurdistan. Temporary

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<sup>91</sup> Simon V. Mayall, *Turkey: Thwarted Ambition*, McNair Papers of the Institute for National Defense Studies, No 56 (Washington: National Defense University, 1997), p 14.

<sup>92</sup> *Ibid*, p 15.

successes included the establishment of the Kingdom of Kurdistan from 1922-1924, and the Mahabad Republic in 1946.<sup>94</sup> The threat to Turkey and to the GAP began in 1974 with the establishment of the Kurdistan Workers' Party (PKK) with the objective to establish an independent Kurdish state in southeast Turkey. Fighting and terrorism were most pronounced after 1984, with the group increasingly targeting security forces and civilians of ethnic origin who the PKK had accused of assisting the Republic in the conflict.<sup>95</sup> In all, between 1984 and 1987, 26,532 PKK members, and almost 10,400 security force members and civilians had died in the fighting.<sup>96</sup> In response, the Turkish government had, from time to time, declared a state of emergency in its southeast region. This involved the evacuation and destruction of more than 3,000 villages and the transfer of approximately 500,000 Kurds to other parts of the country, undoubtedly, in an attempt to dilute both the uprising and the concentration of Kurds in the region.<sup>97</sup>

The Kurds' brightest hope for achieving their objectives came in 1991 at the conclusion of the Gulf War when the war coalition supported the Iraqi Kurds in an insurrection against Saddam Hussein. Although the Kurdish effort failed, the international publicity generated by the subsequent fleeing of the Iraqi Kurds to the Turkish portion of historic Kurdistan, generated even more international endorsement for an independent state for the Kurds in northern Iraq.<sup>98</sup> Although political independence and autonomy in southeast Turkey remains its fundamental goal, the PKK and the other

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<sup>93</sup> *Ibid*, p 16.

<sup>94</sup> The Washington Post Company. "Who Are the Kurds." Washington Post on the Web. 1999.

11 Apr, 2003 <http://www.washingtonpost.com/wp-srv/inatl/daily/feb99/kurdprofile.htm>.

<sup>95</sup> John Pike. "Kurdistan Workers' Party (PKK)." Federation of American Scientists. 21 May 2002. 27 Mar. 2003 <http://www.fas.org/irp/world/para/pkk.htm>.

<sup>96</sup> *Ibid*

<sup>97</sup> Wilkens, *Turkey Today: Troubled Ally's...*, p 11.

<sup>98</sup> Robert Olson, "Turkey-Syria Relations Since the Gulf War: Kurds and Water," *Middle East Policy*, V (May, 1997), p 169.

main Kurdish political organizations would likely be more than pleased if it was to follow the designation of a Kurdish political state in the portion of Kurdistan located in northern Iraq. As discussed, Southeast Anatolia is the most undeveloped and economically depressed region of Turkey. Northern Iraq however, is oil and mineral rich. Its control by the Kurds would likely attract sympathizers from the Middle East and Europe, and serve as a catalyst and source of funding for an intensified rebellion inside Turkey.

As one can see, the issue of Kurdish independence, whether in Iraq or Turkey, represents a serious challenge to the Southeast Anatolia Project. If it can be assumed that Kurdish federalism has already been established in Iraq, given the Kurdish formation of a regional government, the pending regime change with the success of Operation Iraqi Freedom will likely formalize and accredit the Kurdish state with its association with a new Iraqi central government.<sup>99</sup> This challenge to Turkey's political stability is not lost on Syria in its dispute with Turkey over the waters of the Euphrates. With the GAP intended, in part, to revitalize the region and therefore divert the support of the regional Kurdish population away from the PKK, it would be expected that Turkey would do what was necessary to protect its investment, and undermine efforts to tarnish the project. Thus the constant struggle between Turkey and Syria for the support of the Kurds and the creditability of the GAP project has the potential to upset Turkey's quest to become a regional power, but also its economic outlook and its place within the EU.

Syria's primary strategy against Turkey and the GAP was its support of the PKK since the arrival there in 1979 of its exiled leader, Abdullah Ocalan. It assisted with recruiting new members, consulted on strategy and tactics, provided infrastructure and

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<sup>99</sup> Sardar Akrei. "Democracy, Federalism and Iraq." Kurdistan Observer on the Web. 13 Apr. 2003. 18 Jul. 2002 [wysiwyg://156/http://home.cogeco.ca/~k...02-opinion-sardar-demo-federalism.html](http://home.cogeco.ca/~k...02-opinion-sardar-demo-federalism.html).

training camps, and tendered financial, military, and logistics support. Syria also actively supported PKK factions in Iraq, contributing up to 80 percent of their operational requirements.<sup>100</sup> The PKK responded by successfully terrorizing the GAP region to the extent of threatening social and further economic breakdown. Potential investors in the project chose a safer investment environment, and the general breakdown of order and security has been tied to a preponderance of drug and alcohol abuse among government security forces, human rights violations, missing persons and murder.<sup>101</sup> With Ocalan's expulsion from Syria in 1998, and subsequent capture by the Turks in Nairobi a few months later, the crisis between Syria and Turkey was abated, but relations between the two countries remained strained over water issues.<sup>102</sup> Ocalan's capture, combined with in-fighting between the PKK, the Kurdish Union of Kurdistan (PUK), and the Kurdish Democratic Party (KDP), as the other Kurdish independence movements, significantly undermined the effectiveness of the Kurdish rebellion and diminished the organized and focused threat against the GAP.<sup>103</sup>

Syria has also found success in rallying the international community in condemnation of Turkey's GAP project and derivative foreign policy. Of particular significance was its role in the World Bank's withdrawal of continued project financing for the GAP in 1984.<sup>104</sup> With the World Bank's funding approval based on the

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<sup>100</sup> Mahmut Bali Akyan, "The Turkish-Syrian Crisis of October 1998: A Turkish View," *Middle East Policy*, VI (June, 1999), p 175.

<sup>101</sup> Mirella Galletti, "The Kurdish Issue in Turkey," *The International Spectator*, XXXIV (January-March, 1999), pp 2-3. <http://www.ciaonet.org/frame/oljourfrm.html>

<sup>102</sup> Seale, *Turkey and Syria*...., p 20.

<sup>103</sup> Barr Seitz. "Kurds Fight for Homeland." [ABCNEWS.com](http://abcnews.com). 13 Apr. 2003. 14 Oct. 1997 <http://abcnews.go.com/sections/world/DailyNews/kurds990216.html>.

concurrence of downstream riparians in the case of water control projects, Syria, and to a lesser degree Iraq, were able to convince the World Bank of the detrimental downstream effects of the Ataturk Dam. In the end, World Bank financing was discontinued and Turkey was forced to contract Turkish firms that would accept (pre-Lira) Dinars as payment, leading to financial shortfalls and construction delays for the venture.<sup>105</sup>

In probing forward on the subject, the current state of affairs in the Middle East, with coalition forces having wrested control of Iraq in Operation Iraqi Freedom, presents the opportunity to speculate on potential impacts on Turkey's Southeast Anatolia project. Of particular interest are the implications for Turkey of its failure to comply the American request to stage operations from Turkey as a northern front in Operation Iraqi Freedom.<sup>106</sup> Specifically, the coalition's intent to resurrect Iraq under a new democratic regime, and potentially provide the Iraqi Kurds with a federal state in northern Iraq, are reasons for Turkey to become concerned for the viability of its grand water scheme.

Although Iraq had relied upon the waters of both the Tigris and Euphrates for thousands of years, the almost irreparable pollution damage caused to the Tigris with the introduction of raw sewage has resulted in near exclusive reliance on the Euphrates.<sup>107</sup> With Baghdad having suffered from years of neglect under the Hussein regime, and receiving significant infrastructure damage during the recent coalition operation, one would expect it to become the early focal point of many forms of damage repair.

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<sup>104</sup> International Day of Action Against Dams, and for Rivers, Water and Life. "Appeal to Join the International Campaign Against the Construction of the Ilisu Dam, Kurdistan, Turkey." <http://www.irm.org/dayofaction/1999/turkey.shtml>

<sup>105</sup> Soffer, *Rivers of Fire: The Conflict Over Water in the Middle East*...., p 91.

<sup>106</sup> Frank Bruni, "US Ties to Turkey May Face Enduring Strain, Officials Say," *New York Times*, Mar 3, 2003, p W5.

<sup>107</sup> Elhance, *Hydropolitics in the Third World*...., p 128.

As the siege of Baghdad in April 2003 was chronicled live on television, who among us can forget the images of Iraqi citizens risking their lives in approaching coalition soldiers in search of drinking water. As it has for thousands of years, water will again play a central role in the construction and reconstruction of Middle East society, and that water must again come from the Euphrates. Regardless of previous hydro-politics between Turkey, Syria and Iraq, one can expect the coalition to demand sufficient flows from Turkey to meet the requirements of the 'new' Iraq. While such a directive would not likely be one that Turkey would ignore, compliance would play right into Syria's hands.

Of primary concern to Turkey would be retaining sufficient flow to meet its domestic utilitarian requirements as well as the power generation and irrigation capacity of the GAP. However, given that the coalition, and potentially the UN, will undoubtedly construct new water management infrastructure, and repair that damaged from conflict and neglect, Iraq's new demands for water will exceed previous allotments.

In meeting the new, directed demands of the coalition in the interest of Iraq, Syria's consequent accessibility to increased volumes of water would undoubtedly allow it to escape from under the political thumb of Turkey. Unless Syria is, indeed, found to be harboring members of Iraq's senior leadership that fled during Operation Iraqi Freedom, it remains uncertain as to whether the United States would intervene in Turkey's interest in any non-threatening water-based confrontation with Syria. With Turkey no longer able to follow through on its threats of reduced water flows, any renewed Syrian support of the Kurds, or the re-emergence of the PKK, could go



unchecked, and the movement to establish an independent state for the Kurds in Turkey could once again lead to a violent insurgency.

The establishment of an independent Kurdish state in Southeast Anatolia is, however, something over which Turkey would have some control. More worrisome is a political evolution beyond the series of events that took place in northern Iraq during Operation Iraqi Freedom.

At the conclusion of the Gulf War in 1991, the US-led coalition chose not to destroy Saddam Hussein's political regime. Consequently, the Kurds in northern Iraq staged an unsuccessful reprisal against Hussein, and thousands were driven into sanctuary in Turkey to escape the likely genocide. As the influx of thousands of frustrated Kurds into Southeast Anatolia was a recipe for disaster in terms of regional stability and the GAP, the Turks agreed to provide Incirlik Air Base for the staging of the US-British Operation Provide Comfort in ensuring a zone of protection for Iraqi Kurds north of the 36<sup>th</sup> parallel. In a predictable scenario, the Iraqi Kurds took advantage of the coalition protection from Hussein's military forces to establish an autonomous Kurdish polity in northern Iraq with a number of camps along the Iraqi-Turkish border.<sup>108</sup>

Of serious concern to the Turks was the success of the independent Kurdish entity in northern Iraq. In the twelve years that have elapsed between the Gulf War and Operation Iraqi Freedom, the Kurds have made remarkable progress toward the achievement of democratic principles and self-government originally promised to them by the Treaty of Sevres in 1920<sup>109</sup>. Having held the first certifiable free and fair elections in the history of the Kurds, and elected a parliament and ruling executive under a

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<sup>108</sup> Sabri Sayari, "Turkey and the Middle East in the 1990s," *Journal of Palestine Studies*, XXVI (Spring, 1997), p 46.

moderate, secular leadership, the Kurdish independent government is likely the most successful democracy Iraq has ever seen.<sup>110</sup> For the Turks, the legitimacy in the eyes of the international community, of this practice of democracy by the Kurds, represented a threat to Turkey.

As Operation Iraqi Freedom moved into northern Iraq, Turkey's fears that the coalition would allow Kurdish fighters to enter cities outside their independent state were realized. Of particular concern were the cities of Kirkuk and Mosul. Both of these cities have long been claimed by Kurds as part of Kurdistan. Given that both are rich in oil and minerals, Turkey's main concern is that any successful expansion of Kurdish autonomy into Kirkuk and Mosul, potentially with the aid of a U.S. proposal for a Kurdish federal state, would provide the Iraqi Kurds with the inspiration and funds to sponsor a coordinated insurrection in Turkey.<sup>111</sup> At stake for Turkey is not only political instability, but also control of the Kurdish motherland in Southeast Anatolia, and therefore control of the headwaters of the Tigris and Euphrates.

## **Conclusion**

The study of the Southeast Anatolia Project is a study of transformation. Regionally, the GAP can be a model of transforming a non-productive landscape into one of the most significant engineering projects in the world, and of integrating a depressed sector of the country into the mainstream of self-sufficiency. From a hydroelectric power generation project to a massive agriculture-based industrial and economic stimulus, it has

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<sup>109</sup> Mayall, *Turkey Today: Troubled Ally's*...., p 15.

<sup>110</sup> Barham A. Salih, Sources of Conflict in the Middle East: The Kurds, in *Powder Keg in the Middle East: The Struggle for Gulf Security*, ed by Geoffrey Kemp and Janice Stein (Boston: Rowman and Littlefield, 1995), p 243.

<sup>111</sup> Charlie leDuff and David Rohde, "Troops Won't be Sent to Kurdish Areas, Turkish Military Chief Says," *The New York Times*, Apr 3, 2003, p W2.

the capability to alter the country's economic stature, significantly enhancing standards of quality of life, and promoting Turkey as a progressive, modern society worthy of EU integration. On the macro-regional level, the GAP has the potential to bind the countries of the Middle East with the assurance of sufficient freshwater resources to meet their own individual sustainment, agricultural, industrial, and economic objectives. The international community would, under those conditions, see the GAP as a peace-broker, and an example of the power of sharing and cooperation in resolving disputes at all levels.

To espouse a utopian vision of the GAP is, however, to remain oblivious to the politics of religion, ideology, and history in the region that are as old as civilization. In a region encompassing the Middle East where distrust, self-reliance and independence have been fought over for centuries, and remain more important than the lives of its citizens, its not surprising that negotiations over other national interests are often protracted and fruitless.

In this same region, the Southeast Anatolia Project threatens even greater instability. Both Iraq and Syria remain in constant fear of Turkey's unrestricted ability to control the flow of the Euphrates River beyond its border. Reduced river volumes available to Syria and Iraq affect not only their own irrigation and hydroelectric power generating capabilities, but often lead to water quality issues and public health crises. Lack of control over its water resources affects every growth segment of society: industrial, agricultural, social, and ultimately the very viability of its government.

For Syria, already enduring an uneasy relationship with Israel, political instability brought about by domestic water issues could make it particularly vulnerable to Israeli

hegemony. Syria's destabilization would also be the advantage of its other neighbors, including Iran, Iraq, as well as Turkey. All are considered somewhat water self-sufficient and would arguably have something to gain in subjugating Syria in Middle East politics.

Remarkably, the GAP also represents a threat to Turkey's stability. Despite its proprietary control of the headwaters of the Euphrates River, the demonstrated ability of a terrorist organization and the Kurdish independence movement to threaten the project by undermining Ankara's control of the Southeast Anatolia region remains disconcerting.

The resolution of the Euphrates River dispute will only come with the cooperation and trust of the riparians and the implementation of internationally recognized and binding agreements on the sharing of transboundary waters. As the most credible international organization, the United Nations should be charged with the responsibility of developing a solution that considers all of the fresh water rivers in the region in allotting adequate quantities of water to each country in the Middle East. Funding should come, in part, from those organizations that would most benefit from peace and stability in the region, particularly NATO, the UN, and the EU. Policy change in the form of strengthened international law must consolidate these recommendations into a legal framework that clearly delineates rights of access to transboundary and international rivers.

Academic research would be wisely invested in a comprehensive study of the region, its hydrology and physical environment. Similar to Turkey's proposed three-stage plan, an assessment of each country's water management and irrigation practices should be conducted to validate the requirement for water and eliminate wasteful

legacies. Rigid conservation of scarce water resources will foster credibility and respect among the riparians, and the indiscriminate commitment of the international community.

Of no less importance, efforts should be made by Turkey and the new Iraqi regime to reconcile with the Kurdish people, and to negotiate mutually beneficial terms of their achievement of autonomy. The establishment of a Kurdish federal system in Northern Iraq would provide the Kurds with the resources to sustain themselves and prosper, thus eliminating threats to other countries.

In concluding, the Southeast Anatolia Project with its political, cultural, and economic ramifications poses a significant threat to the peace, security, and instability of the region. Only a concerted effort by the riparians, with the aid of the international community, will lead to the fair and equitable distribution of water from the Euphrates River, and the recognition and preservation of each country's right to pursue its national interests.

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