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TRANSBOUNDARY WATER JUSTICE IN LEBANON

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Introduction

Located on the Mediterranean Sea, Lebanon shares terrestrial borders with Syria to the north and the east, and with Israel to the south, sharing surface and groundwater resources with its neighbors.

In the north, it shares with Syria the Nahr el Kebir al Janoubi that forms the border. The Orontes emanates from Lebanon, flows north to Syria, and continues until it reaches the Mediterranean Sea in Türkiye. Groundwater underlies these two transboundary rivers.

In the south of Lebanon, the Hasbani-Wazzani River flows southward into Israel, representing a branch of the Upper Jordan River. It is, therefore, part of the Jordan River basin shared between Israel, Jordan, Lebanon, Palestine, and Syria. The groundwater flows from Lebanon towards Israel.

All these shared basins fall under international water law. In 1999, Lebanon acceded to the UN Convention on the Law of Non-Navigational Uses of International Watercourses (UNWC), and Syria ratified it in the previous year.[1] Transboundary aquifers are covered by the "Draft articles on the law of transboundary aquifers" (DA) (2008), annexed to two UN General Assembly (UNGA) resolutions.[2] In addition, water receives protection under international humanitarian law, as codified in the Geneva Conventions of 1949 and their Additional Protocols of 1977. Lebanon has ratified the Geneva Conventions and two Additional Protocols.[3]

In addition, the UNGA recognized access to safe drinking water as a human right in 2010.[4] It is the responsibility of the States to ensure its progressive realization. Agenda 2030, adopted by the UNGA in 2015, includes a specific Sustainable Development Goal (SDG) 6 aiming to ensure "availability and sustainable management of water and sanitation for all".[5] Beyond SDG 6, water plays a cross-cutting role in several other goals.[6] As for the human right to water, achieving SDGs is the responsibility of the States, individually, collectively, and through the Global Partnership for Sustainable Development (SDG 17).[7]

This policy paper will address the issue of transboundary waters in Lebanon. It assesses the existing situation regarding just and equitable cooperation on transboundary waters that aims to achieve water justice in Lebanon and provides recommendations for possible ways forward to reach this objective.

The policy paper is based on a desk study, including a review of existing agreements (when available) and official instruments and literature on the topic.

1 UN, "Convention on the Law of the Non-Navigational Uses of International Watercourses", 1997, https://tinyurl.com/5xjbbrch [UNWC] ; Status of the Watercourses Convention https://treaties.un.org/pages/viewdetails.aspx?src=treaty&mtdsg_no=xxvii-12&chapter=27&clang=_en

2 UN, "Draft articles on the Law of Transboundary Aquifers", 2008, https://tinyurl.com/yfnwytyk)UN, "Draft articles on the Law of Transboundary Aquifers").

3 International Humanitarian Law Databases, "IHL Treaties", ICRC, https://tinyurl.com/u5aad38x

4 UN General Assembly (UNGA), "The Human Right to Water and Sanitation: Resolution / Adopted by the General Assembly" (A/Res/64/292), July 2010, https://digitallibrary.un.org/record/687002?ln=en&v=pdf (UNGA, "The Human Right to Water and Sanitation").

5 UN General Assembly (UNGA), "Transforming our world: the 2030 Agenda for Sustainable Development" (A/Res/70/1), September 2015, https://docs.un.org/en/A/RES/70/1

6 For example: SDG 2 End Hunger and Achieve Food Security; SDG 3 Ensure Healthy Lives; SDG 5 Achieve Gender Equality; SDG 8 Promote Sustained, Inclusive and Sustainable Economic Growth; SDG 13 Urgent Action to Combat Climate; and SDG 15 Protect, Restore, and Promote Sustainable Use of Terrestrial Ecosystems, see UN, "Sustainable Development Goals: 17 Goals to Sustain Our World", https://www.un.org/sustainabledevelopment/

7 This partnership was established previously under the Millenium Development Goals. The aim within Agenda 2030 is to revitalize it. The objective is for developing countries to implement their SDG commitments, see Sustainable Development Goals, "Goal 17: Revitalize the Global Partnership for Sustainable Development", UN, https://www.un.org/sustainabledevelopment/globalpartnerships/

Background and Overview: International Water Law Principles and Policies in Lebanon

As mentioned above, Lebanon is party to the 1997 UNWC. The Convention applies to international watercourses, defined as systems of surface waters and groundwaters connected together and flowing into a common terminus, parts of which are situated in different States.[8] It finds, therefore, its full application for the transboundary rivers of Lebanon. However, it remains limited regarding transboundary groundwater since it has to comply with two conditions to fall under its scope:

- Must be connected to a surface water body
- Must flow to the same terminus

In reality, these two conditions are rarely met together, or the exact conditions are not always known, given aquifer uncertainty. However, transboundary aquifers fall under the DA. In its last resolution on the topic (2022), the UNGA confirmed its earlier resolutions, and it commended the DA as guidance for arrangements on transboundary aquifer management. The DA covers the same principles as the Watercourses Convention with a specific application to the characteristics of transboundary aquifers.

The core principles of UNWC and DA are:

- Equitable and reasonable use: This principle provides the right to each riparian State to use the shared water body in an equitable and reasonable manner, considering the relevant factors (natural, socio-economic, etc.) and giving priority to the "vital human needs".[9] It also includes the correlative obligation for each State not to deprive the other States of their respective rights. Under this principle, riparian States have equal rights and are entitled to an equitable allocation of benefits among themselves.
- The obligation not to cause significant harm (while utilizing the shared water body): It represents an obligation of conduct not of result (due diligence), which means that the harm is not caused intentionally or by neglect. The harm has to be "significant", which is more than an adverse effect. There is no one definition of significant, and it is assessed on a case-by-case basis.[10]

These two principles are part of customary international water law, meaning they apply to all States even when they are not party to the Convention.[11]

Besides these principles on the management of shared waters, and, as mentioned above, under the Geneva Conventions and their related Protocols, water receives protection in times of armed conflict, whether it is international or not. Under the two Protocols, it is prohibited to target any water supply facilities and reserves, or to deprive the civilian population of access to water. Generally, the Geneva Conventions impose a duty of respect and protection for civilian installations, including those related to water supply. This safeguards the survival and dignity of populations affected by conflict. The protection of water and water-related infrastructure is recognized as a fundamental obligation during armed conflicts under customary international humanitarian law, therefore applying to all States, party or not, to the Conventions and the Protocols.[12]

Another important international policy and legal development took place in 2010 when the UNGA recognized the right to safe and clean drinking water and sanitation as a human right, and gave water a core and central status, acknowledging

8 UNWC, Article 2 §§ (a) and (b).

9 UN Watercourses Convention article 10§2; UN, "Draft articles on the Law of Transboundary Aquifers", Article 5 § 2.

10 UN Watercourses Convention article 7; UN, "Draft articles on the Law of Transboundary Aquifers", Article 6.

11 Or to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes. In all cases, neither Lebanon nor any of its neighbors is party to this Convention.

12 Lebanon has been party to the Geneva Conventions since 1951 and to the Protocols since 1997; Syria is party to the Geneva Conventions since 1953, and to Protocol I since 1983; and Israel is party to the Geneva Conventions since 1951, but is not party to the Protocols.

it as "essential for the full enjoyment of life and all human rights".[13] Later, the UNGA moved on to recognize that these are two different rights.[14] It is the responsibility of States to ensure the progressive realization of these rights, based on the following criteria: the right to water "entitles everyone, without discrimination, to have access to sufficient, safe, acceptable, physically accessible and affordable water".[15]

This recognition can be closely linked to SDG 6: "ensure access to water and sanitation for all". It is worth remembering here that under this goal, a specific target is related to transboundary cooperation. Target 6.5 states: "By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate."[16]

Transboundary Waters Between Lebanon and Syria

Cooperation on transboundary rivers: The agreements on the Orontes and Nahr el Kebir al Janoubi

Lebanon and Syria have agreements between themselves on the two rivers they share. These two agreements were negotiated and adopted during the period of Syria's military presence in Lebanon and its "institutionalized" influence on the country under the Treaty of Brotherhood, Cooperation, and Coordination, signed in 1991.[17]

The agreement on the Orontes

Discussions and negotiations on the Orontes River had been ongoing between Lebanon and Syria since the 1940s, and eventually led to the signing of an agreement in 1972 that never came into force, but formed the basis for the agreement signed in 1994.[18] This agreement mentions in Article 1 that both parties consider the Orontes River waters originating from Lebanese territory to be of mutual benefit. It establishes Lebanon's share at 80 million m^3 of water annually when the river flow at Jisr al-Hermel measurement station exceeds a specified volume of water, 400 million m^3 per year. If the flow drops below this threshold, Lebanon's share will be set at 20% of the total annual flow (Articles 3 and 4). The agreement prohibits digging new wells within the catchment area (located in Lebanon), while authorizing the exploitation of already existing legal wells (Article 8). This agreement was considered inequitable to Lebanon as a large part of the water allocated to the country during winter could not be used or stored, and groundwater development restrictions prohibited border villages in Lebanon from irrigating. A supplementary annex from 1997 attempted to reverse this inequity. It stipulates the exclusion of closed basin waters – Yammouneh, Labweh, Raqsh, Jbab el-Homr, Marjhin; estimated at about 16 million m^3 – from the calculation of Lebanon's allocated quantity in the 1994 agreement (Provision 6).[19] The country's annual share increased accordingly. In addition, according to this Provision, Lebanon benefits from all the waters deriving from the Labweh sources during the irrigation season (end of April till mid-October) as well as from

13 UNGA, "The Human Right to Water and Sanitation" (A/Res/64/292) https://digitallibrary.un.org/record/687002?v=pdf

14 UNGA, "The Human Rights to Safe Drinking Water and Sanitation: Resolution / Adopted by the General Assembly on 17 December 2015" (A/Res/70/169) https://digitallibrary.un.org/record/821067?v=pdf

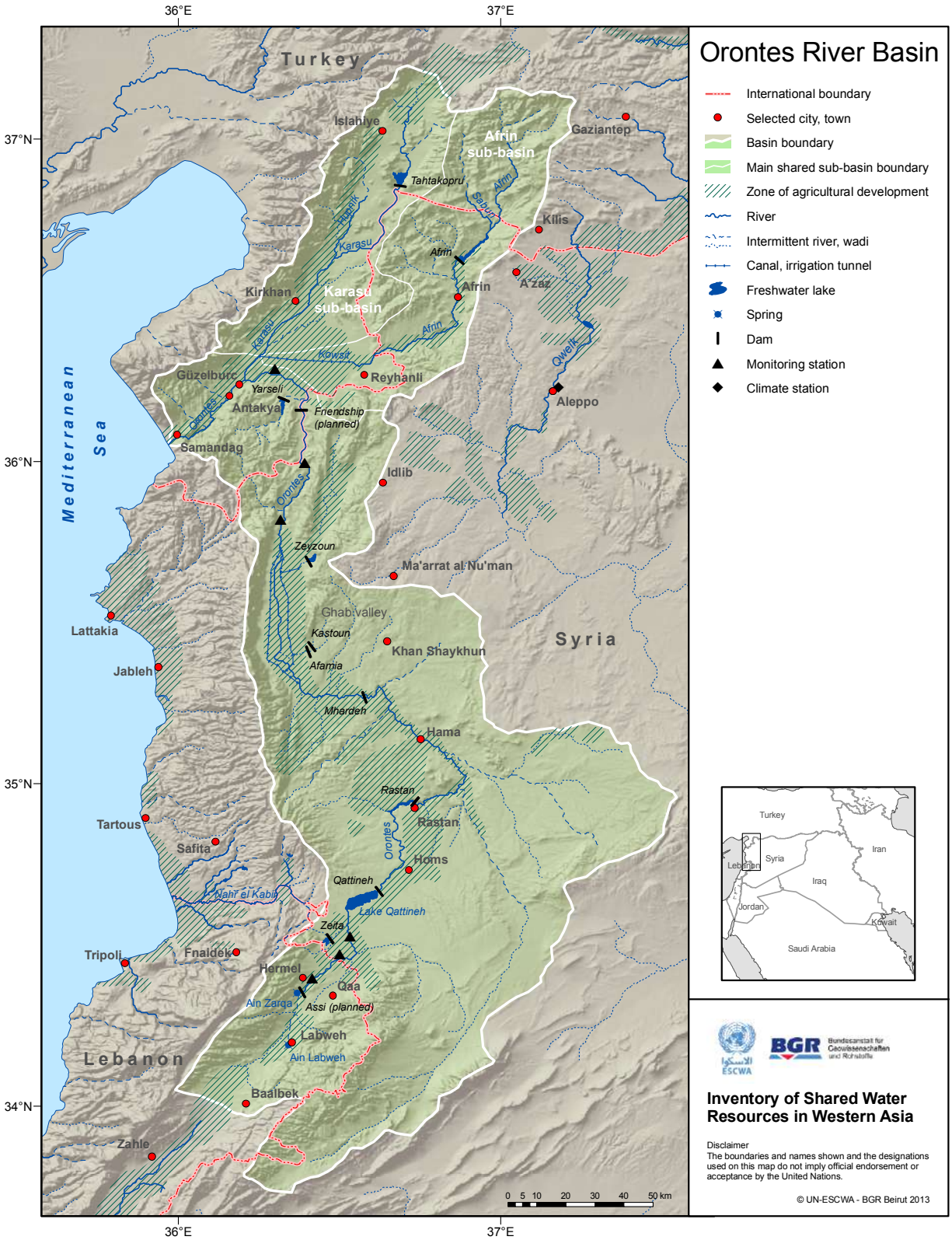
15 UN General Assembly, "The Human Right to Safe Drinking Water and Sanitation: Resolution / Adopted by the General Assembly" (A/Res/68/157), December 2013, https://digitallibrary.un.org/record/765754?v=pdf; UN General Assembly, "The Human Rights to Safe Drinking Water and Sanitation: Resolution / Adopted by the General Assembly" (A/Res/74/141), December 2019, https://digitallibrary.un.org/record/3848951?v=pdf

16 Sustainable Development Goals, "Goal 6: Ensure Access to Water and Sanitation for All", UN, https://www.un.org/sustainabledevelopment/water-and-sanitation/

17 Ahmet Conker and Hussam Hussein, "Hydropolitics and Issue Linkage along the Orontes River Basin: An Analysis of the Lebanon-Syria and Syria-Turkey Hydropolitical Relations", International Environmental Agreements: Politics, Law and Economics 20 (2019) pp. 103–121, https://doi.org/10.1007/s10784-019-09462-7

18 UN-ESCWA and Bundesanstalt für Geowissenschaften und Rohstoffe (BGR), Inventory of Shared Water Resources in Western Asia, June 2013, https://tinyurl.com/4e3hyzbz (UN-ESCWA and BGR, Inventory of Shared Water Resources).

19 Ahmad Haj Asaad, Water Management of the Assi River: A Test for Sovereignty or an Opportunity for Regional Integration (Arabic), Doha Institute, October 2025, https://tinyurl.com/bdfuh7mj (Asaad, Water Management of the Assi River).


Orontes River Basin
International boundary
Selected city, town
Basin boundary
Main shared sub-basin boundary
Zone of agricultural development
River
Intermittent river, wadi
Canal, irrigation tunnel
Freshwater lake
Spring
Dam
Monitoring station
Climate station
Turkey
Syria
Lebanon
Mediterranean Sea
Afrin sub-basin
Karasu sub-basin
Ghab valley
Islahiye
Gaziantep
Tahtakopru
Kilis
A'zaz
Kirkhan
Afrin
Karasu
Kowsik
Qweik
Güzelburc
Yarseli
Antakya
Friendship (planned)
Reyhanli
Aleppo
Samandag
Idlib
Zeyzoun
Ma'arrat al Nu'man
Lattakia
Kastoun
Afamia
Khan Shaykhun
Jableh
Mhardeh
Hama
Rastan
Tartous
Safita
Homs
Qattineh
Nahr el Kabir
Lake Qattineh
Zeita
Tripoli
Fnaidek
Hermel
Qaa
Ain Zarqa
Assi (planned)
Labweh
Ain Labweh
Baalbek
Zahle
36°E
37°E
37°N
36°N
35°N
34°N
0 5 10 20 30 40 50 km
Turkey
Syria
Iran
Lebanon
Iraq
Jordan
Kuwait
Saudi Arabia
Inventory of Shared Water Resources in Western Asia
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drinking water for neighboring villages. During the remaining months of the year, the Lebanese side commits to not limiting the flow of water from the spring or from rain into the Orontes River.

The situation evolved towards the signing of another agreement in 2002, comprising the 1994 agreement and its 1997 annex, as well as the approved Minutes of the Joint Lebanese-Syrian Meetings.[20] One main outcome of the 2002 agreement is the approval of the construction of two dams, based on technical and economic studies: a diversion dam that would benefit the two countries and a storage dam only for Lebanon.[21]

The agreement is managed by the Orontes River Joint Committee in the frame of the Lebanese-Syrian Joint Committee for Shared Water,[22] which is the central entity through which both countries cooperated over shared water resources.[23] The Orontes River Joint Committee comprises two sub-committees: the River Protection and Environmental Preservation Sub-Committee and the Sub-Committee for the Expropriation of Lands in the Vicinity of the Zeita Canals.

The agreement on Nahr el Kebir al Janoubi

Lebanon and Syria signed an agreement for the sharing of the water of Nahr el Kebir al Janoubi and the construction of a shared dam on the main course of the river (2002). The agreement refers explicitly in its preamble to the principles of international law, and to the UNWC. It establishes the respective shares of each party (60% Syria, 40% Lebanon; Article 3), which apply in all circumstances (humid, normal, or dry year; Article 4). While utilizing the waters, the parties should take into account the preservation of ecosystems. The Lebanese-Syrian Joint Committee for Shared Water is in charge of the implementation of the agreement (Article 7).[24] As in the case of the Orontes, a Nahr el Kebir Joint Committee is created, including members from both countries with two sub-committees: the Sub-Committee for the Control of Water Hyacinth and the Sub-Committee for River Protection and Environmental Preservation.[25]

The parties agree on the construction of a joint dam to cover each country's water needs (Article 6). The joint committee will be in charge of undertaking all necessary studies for this purpose (Article 9).[26]

Implementation: Results, difficulties, gaps, challenges

The agreements on the Orontes have received little implementation mainly because of security concerns, political tensions, weak institutions, and the absence of political will.[27] Lebanon's water use from the Orontes basin, based on the 1997 annex, remained limited and did not exceed 25% of its annual share. It was used mostly for drinking purposes (23%), and the rest for irrigation. The irrigated surface stayed restrained, reflecting water infrastructure weakness and the difficulty in implementing related projects.[28] Works on the storage dam started, but did not last long, as the project was destroyed by Israeli bombing during the 2006 war. The project could not restart due to problems with the foreign construction company; legal and procedural complications in Lebanon related to the necessary land expropriation; and resulting local social conflicts from spatial and economic changes that would result from the

20 Fadi G. Comair and Michael Scoullos, "Orontes Hydro-Diplomacy: Historical Overview and Lebanon's Transboundary Water Treaties", in *Science Diplomacy and Transboundary Water Management: The Orontes River Case,* Roberta Ballabio et al. (eds.), UNESCO, 2015, https://unesdoc.unesco.org/ark:/48223/pf0000233031; Asaad, Water Management of the Assi River.

21 Christopher C. Peterson, Reviewing the 1994, 1997, and 2002 Agreements on the Orontes River: Is Lebanon's Share Fair and Equitable? (Master's thesis), American University of Beirut, 2022, http://hdl.handle.net/10938/23534

22 This Committee is itself under the umbrella of the Syrian-Lebanese Higher Council created by the Fraternity, Cooperation and Coordination Treaty (1991) between the two countries. With the change of political regime in Syria, the new government decided to suspend the Higher Council, see NNA, "Syria Suspends Work of Lebanese-Syrian Higher Council, Restricts Communications to Diplomatic Channels", 10 October 2025, https://tinyurl.com/36ensxyz; This decision is supported by Lebanon. The suspension still needs to be ratified by respective parliaments, see Marlene Khalife, "The Suspension of the Lebanese–Syrian Higher Council Lacks Legal Basis…", Masdar Diplomacy, 13 October 2025, https://tinyurl.com/5n8s9e3c

23 UN-ESCWA and BGR, Inventory of Shared Water Resources.

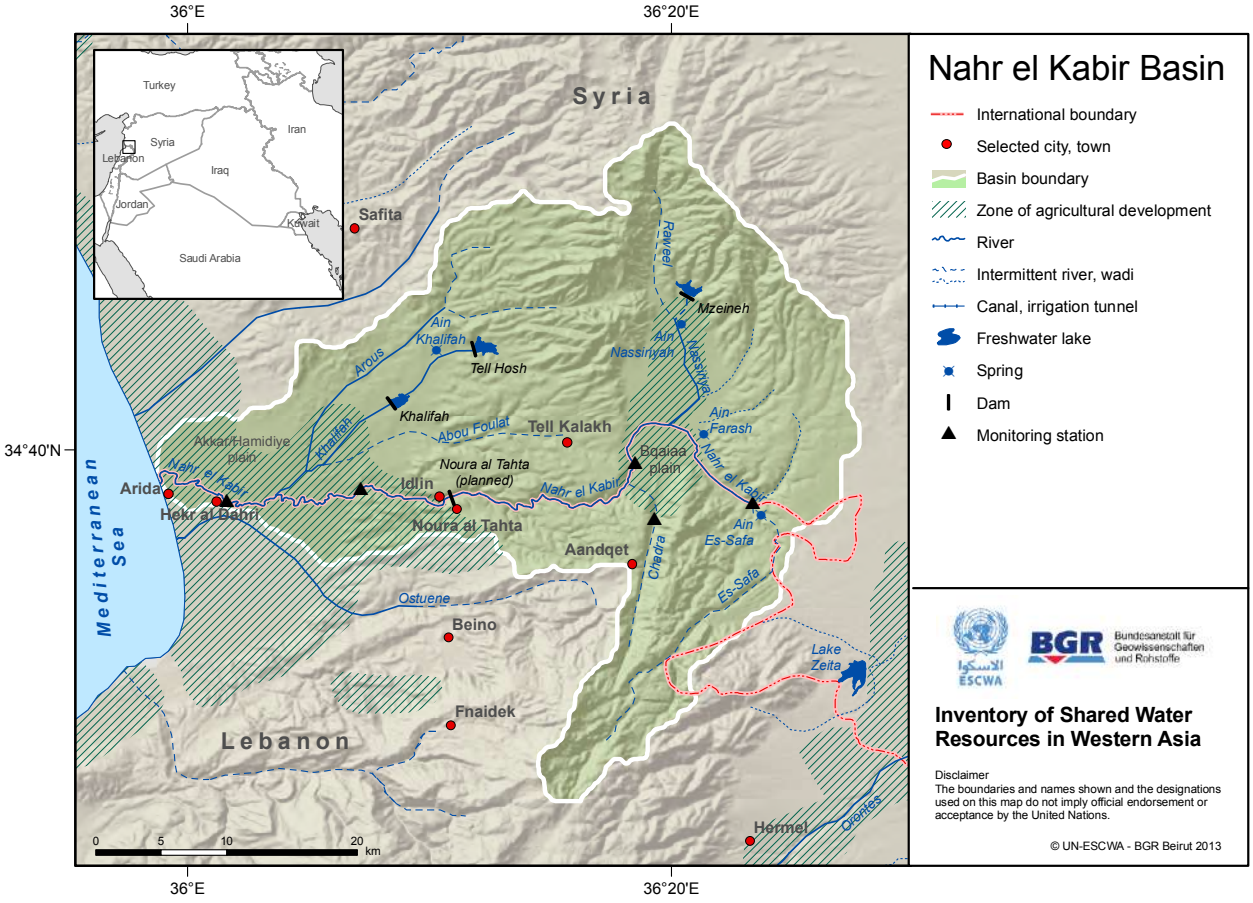
24 Food and Agriculture Organization (FAO), "An Agreement between the Syria Arab Republic and the Lebanese Republic for the Sharing of the Great Southern River Basin Waters and the Building of a Joint Dam", April 2002, https://tinyurl.com/36zur43v (FAO, "An Agreement between the Syria Arab Republic and the Lebanese Republic").

25 UN-ESCWA and BGR, Inventory of Shared Water Resources.

26 FAO, "An Agreement between the Syria Arab Republic and the Lebanese Republic".

27 Asaad, Water Management of the Assi River.

28 Asaad, Water Management of the Assi River.



project. Farmers in the region had questioned the flooding of their lands, which would occur because of the dam, as a result of developing irrigation on other lands, and expressed their concern about the marginalization of local interests compared to central policies.[29]

The agreement on the Orontes introduced restrictions on groundwater use. However, in reality, these were never respected. Existing wells were dug deeper from each side of the border, more water was pumped, and irrigated surfaces were extended. In addition, new wells were also developed. This situation demonstrates the weak provisional commitments of the agreement on the Lebanese side, and national regulations that prohibit well digging in the vicinity of the river on the Syrian side.[30] It also reflects a lack of enforcement mechanisms. Lastly, a major issue is that the agreement does not cover the whole basin, which extends to Türkiye,[31] and therefore its management is not approached in a holistic manner, integrating the basin's three countries; rather, in a fragmented manner, bilaterally, between Lebanon and Syria from one side, and between Syria and Türkiye on the other. A holistic agreement between the three allows for better apprehension of all interconnected issues.

The agreement on the Nahr el Kebir al Janoubi does not fare better, even though its text is clearer in terms of content and provisions. It is the only instrument on the Nahr el Kebir al Janoubi, contrary to the Orontes, where the initial 1994 agreement is complemented by the 1997 annex, and followed by the agreement of 2002, which created some complexity. The planned dam was never constructed,

29 Such a situation can be settled by conducting, inter alia, a social and economic assessment of the project to create mechanisms for equitable and just compensations if needed, which consider social stability. Otherwise, the situation can create latent local tensions, which can extend beyond the borders, see Asaad, Water Management of the Assi River.

30 Asaad, Water Management of the Assi River.

31 A bilateral agreement on the Orontes was signed between Syria and Türkiye in 2009 concerning the joint dam project (the Friendship dam).

and it is not clear if the annual programs for water use in the basins were drafted or not.[32] Furthermore, the basin faces surface and groundwater quality issues due to uncontrolled waste disposal, untreated domestic sewage, and unsustainable agricultural practices. The river and the springs bear important amounts of phosphorus and nitrogen, exceeding normal standards; heavy metals were found in the sediments on the riverbed.[33] Projects for the construction of new wastewater treatment plants were prepared in both countries; however, there is no information of them materializing. Other problems result from an absence of border control, smuggling, and contaminated material discharge along the river.[34]

With the suspension of the Syrian-Lebanese High Council, and all its components, the question of continuing the Committee on Shared Waters arises, as priority topics identified by the two parties are borders, detainees, and refugees.[35]

Transboundary aquifers

In addition, Lebanon and Syria share important groundwater resources and aquifers in the Anti-Lebanon region, located between the Bekaa plain in the west, the Damascus plain in the east, the Homs plain in the north, and extending beyond Mount Hermon in the south. The region hosts more than one aquifer system, shared between the two countries.[36] The complex hydrology and hydrogeology of the region is still poorly understood, including delineating catchment areas, vulnerability zones, determining water balance, and the impact of climate change. Despite the existence of the Syrian-Lebanese Joint Committee for Shared Water, it is not clear whether it has ever addressed water bodies in the Anti-Lebanon mountains.[37]

Transboundary Waters Between Lebanon and Israel: The Wazzani-Hasbani Case

Lebanon shares with its southern neighbor surface and groundwaters. The Hasbani-Wazzani River is the surface water body shared between Lebanon and Israel. It flows from Lebanon to the Hula Valley in northern Israel, where it joins the Banias River coming from the Golan, and the Dan springs in Israel. These three form the Upper Jordan River. It is completely part of the Jordan River basin shared between Israel, Jordan, Lebanon, Palestine, and Syria.

There is no agreement or cooperation on the Jordan River basin between the five riparians. The only agreements are bilateral: between Jordan and Syria on the Yarmouk River – a tributary to the Jordan River – and between Jordan and Israel as part of the 1994 Treaty of Peace. The right of Palestine to access the Jordan River is not recognized. As for Lebanon, the situation is as follows:

Since 1978, the Hasbani-Wazzani region remained under Israeli occupation, until its withdrawal in 2000. Lebanon then initiated a series of projects to develop the region, including projects on the Wazzani, such as a pumping station and a dam. This triggered protests from Israel, and threats of military interventions, as it estimated that these projects could affect water flow to Lake Tiberias. Contrarily, Lebanon estimated that the planned abstraction was only a fraction of its share of the Jordan River basin.[38] Mediation efforts between the United States, UN, and EU failed to resolve the dispute. Lebanon completed the pumping station but did not pursue other projects. The pumping station was bombed during the 2006 war, and again

32 Asaad, Water Management of the Assi River; Amin Shaban and Mouïn Hamzé, Shared Water Resources of Lebanon, Nova Science Publishers, New York, 2017. (Shaban and Hamzé, Shared Water Resources of Lebanon).

33 Shaban and Hamzé, Shared Water Resources of Lebanon.

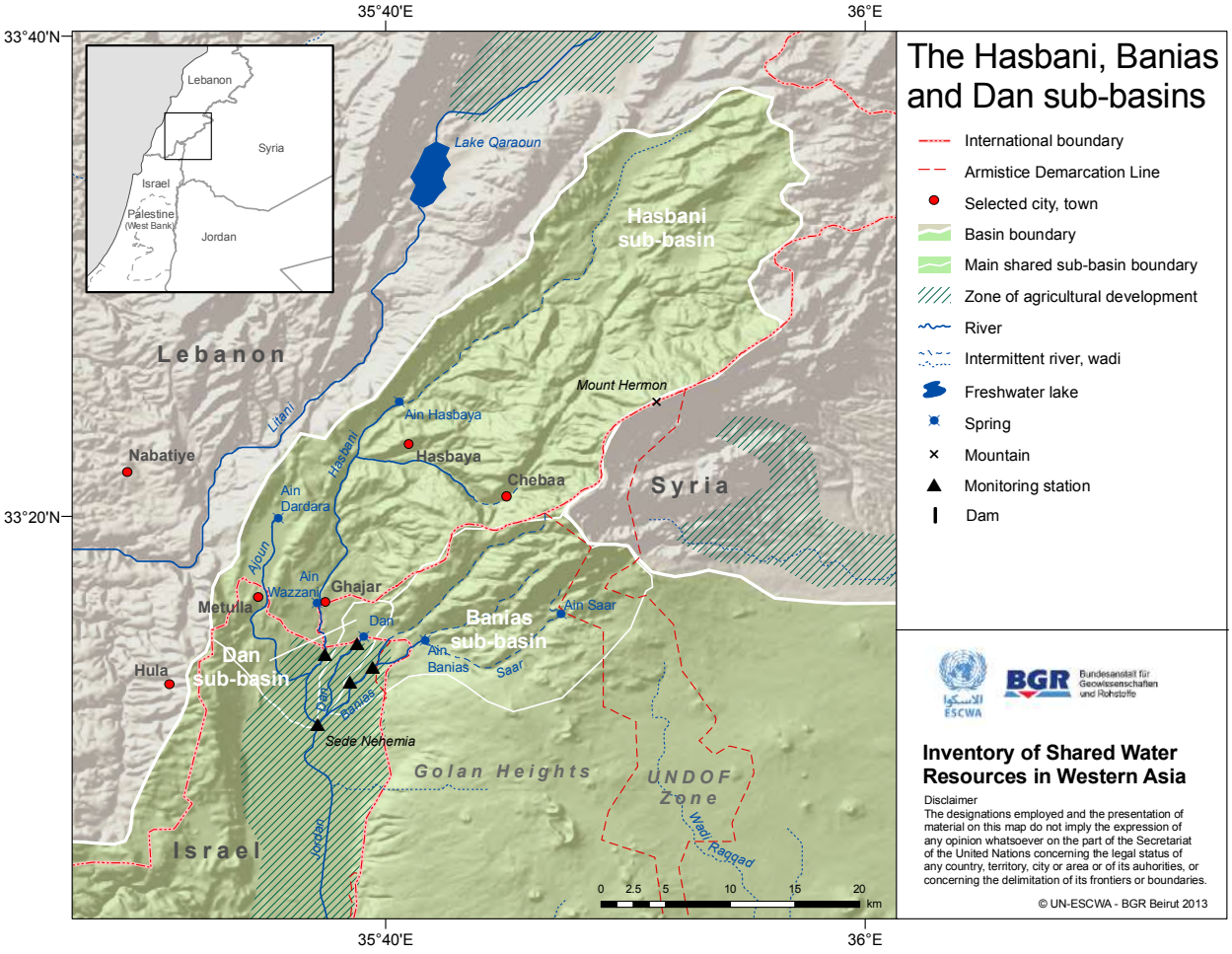
34 Shaban and Hamzé, Shared Water Resources of Lebanon.

35 Jad Yateem, "A Thorny Legacy: Settling Outstanding Issues in Syrian-Lebanese Relations and Their Regional Implications", Emirates Policy Center, 29 October 2025, https://tinyurl.com/2try5bmd

36 UN-ESCWA and BGR, Inventory of Shared Water Resources, pp. 444–456.

37 UN-ESCWA and BGR, Inventory of Shared Water Resources.

38 UN-ESCWA and BGR, Inventory of Shared Water Resources.



in 2024,[39] limiting the population's access to water and burdening the Lebanese government.[40]

Besides surface waters, there are groundwater flows between Israel and Lebanon. The two countries share two major aquifers. A considerable portion of groundwater flows from the Lebanese side.[41] It is estimated that the groundwater flowing from Lebanon into Israel feeds the Liddan River, which rises in Israel; and the base flows of the Banias River running from the Golan Heights into Israel.[42] Still, there is significant uncertainty around this groundwater due to unreliable data.

This illustrates the system's interconnectivity of surface and groundwater, which needs to be tackled as one unit between the five riparians. In addition, given the region's complex situation, any agreement on shared water resources will need to be concluded within a wider plan, aimed at achieving complete justice.

39 Edmond Sassine, "Wazzani Water Pumping Station: Renewed Bombing Threatens Water Security in South Lebanon", LBC International, 8 February 2024, https://tinyurl.com/ta7xzh2k

40 Action Against Hunger, Insecurity Insight and Oxfam, When Bombs Turn the Taps Off: The Impact of Conflict on Water Infrastructure in Lebanon, October 2023–April 2025, August 2025, https://tinyurl.com/46trusbm

41 Shaban and Hamzé, Shared Water Resources of Lebanon.

42 Mark Zeitoun et al., Hydro-Political Baseline of the Upper Jordan River, Association of the Friends of Ibrahim Abd el Al, 2012, https://tinyurl.com/2hsys2ka

Conclusions and a Way Forward

The situation of transboundary waters in Lebanon has suffered and continues to suffer from the political situation within the country, and with its neighbors. Cooperation was initiated on surface waters with Syria through agreements on the Orontes and the Nahr el Kebir, based on clear references to international water law principles.[43] However, these, if at all, have been poorly implemented. This situation was aggravated by an Israeli bombing of water infrastructure around the Orontes, preventing storage dam construction. This bombing is against the principles of international humanitarian law, which provides for the protection of water infrastructure, and forbids the targeting of civilian objects. The same violation of international humanitarian law occurred with the destruction by Israel of the Wazzani pumping station, depriving the local population of access to water.

Groundwater was largely left unaddressed, under surface water cooperation with Syria, or dealt with in a very limited manner, even though the volume of Lebanon's shared groundwater resources is estimated to exceed that of shared surface waters.[44] The current situation is that most shared aquifers are experiencing declining water volumes and falling water tables, because of uncontrolled groundwater utilization and its over-exploitation in Lebanon and in Syria.

The change in Syria's regime had brought the perspective of building a new and different relation between the two countries. However, until February 2026, no significant improvement has happened, blocked on the issue of Syrian prisoners in Lebanon, and the presence in Lebanon of dignitaries from the former Syrian regime.[45]

The Syrian regime represents an opportunity to reengage the cooperation process on the Orontes and the Nahr el Kebir, based on principles of international water law. This, of course, requires the political will to move forward and open bilateral cooperation on important issues touching the population's needs. In view of reviving this cooperation on a solid basis, a first step would be to establish renewed joint technical committees for each basin, which will provide an institutional framework to properly implement the agreements and enhance joint activities. This first step would certainly require developing committee member capacities to ensure proper implementation of the agreed requirements. In both basins, establishing monitoring and data exchange is essential, preferably through a joint network on both sides of the border that can assess the quality and quantity, surface-groundwater interactions, and any other identified parameters. For groundwater, it would be necessary to undertake common studies, with the objective of developing knowledge.

All these steps contribute to elaborate management planning, including prevention and protection measures from pollution, based on the situation of the water bodies, and adapted to specific needs. In addition, in the case of Nahr el Kebir al Janoubi, the joint dam project could be revived and reassessed. In the case of the Orontes, the planned infrastructure (dams and others) should be reconsidered in view of regional water needs and social realities. One important aspect is to ensure compliance with the terms of the agreements and related national regulations. The joint committee can play an important role here. In the long term, discussions could be initiated between the three riparians (Lebanon, Syria, and Türkiye) to integrate the Orontes under one agreement for the whole basin.

Lebanon having suffered attacks on water infrastructures – destruction of the Wazzani pumping station, and the strike on dam construction on the Orontes – could file a complaint at the international level, at the UN Security Council against international humanitarian law violations, as it had done in the case of the wall built by Israel on its territory, or Israel's intention regarding glyphosate spraying on southern villages, which causes severe contamination.[46]

43 In the agreement on the Nahr el Kebir, and the updated agreement on the Orontes (2002).

44 Shaban and Hamzé, Shared Water Resources of Lebanon.

45 Paul Khalifeh, "Lebanon-Syria: Relations at a Standstill Despite the Fall of Bashar al-Assad's Regime" (French), Radio France International (RFI), 3 February 2026, https://tinyurl.com/3vm773n8

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About the Arab Reform Initiative

The Arab Reform Initiative is an independent Arab think tank working with expert partners in the Middle East and North Africa and beyond to articulate a home-grown agenda for democratic change and social justice. It conducts research and policy analysis and provides a platform for inspirational voices based on the principles of diversity, impartiality, and gender equality.

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