

# Environmental Report and Call for Action regarding the Excessive Control of the Al Fourate “Euphrates” River and Its Environmental Impacts

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This detailed report is part of a series of early-warning environmental legal notices sent by Dr. Samira Mobaied regarding threats to the environment in Syria. Urgent general notes had previously been sent to the United Nations in September 2024 and May 2026, warning of the environmental risks posed by the presence of de facto authorities and the absence of Syrian state institutions.

## The scientific methodology adopted in the report

This report adopted a multidisciplinary approach combining environmental science, public health, science diplomacy, and research ethics, reflecting a methodological integration between the analysis of environmental data and an understanding of its impact on humans, and linking the findings to international decision-making mechanisms. This methodology is grounded in competencies demonstrated through specialized academic programs, developed in Dr. Samira Mobaied research's, Ph.D. dissertations, and peer-reviewed scientific articles (MOBAIED, 2016; MOBAIED & RUDANT, 2019; MOBAIED, 2022)

## The Legal Basis for Environmental Reporting

This report is based on the growing international recognition of the human right to a clean, healthy, and sustainable environment, as affirmed by the United Nations General Assembly in its Resolution No. 76/300, dated July 28, 2022, as a fundamental human right, thereby affirming that environmental protection constitutes a legal obligation closely linked to the right to life, health, and human dignity.

Accordingly, any failure to protect the environment or any unsustainable exploitation of natural resources cannot be considered merely an internal or administrative question, but constitutes a breach of relevant international obligations under human rights law and international environmental law, particularly when it affects the civilian population and threatens their survival and stability.

In addition, environmental damage has compounding effects in the context of global climate change, as its impacts are not confined to their immediate scope but are exacerbated by interactions with extreme and unstable weather phenomena, leading to cascading environmental consequences that exceed the scope of local control, affecting regional and international ecological balance, and increasing the level of risks threatening the lives and fundamental rights of populations, as outlined in the 1992 United Nations Framework Convention on Climate Change.

The obligation to protect the environment is not limited to states but applies to all local entities, including de facto authorities, which bear legal consequences for any harm they cause to the security of the population and natural resources in any area where they operate.

## The Natural Environment of the Al Fourate

The Al Fourate River is a functional ecosystem that provides vital ecological services to its surrounding biome. It encompasses a riverine environment characterized by aquatic biodiversity, riverbanks, and wetlands of high functional and ecological value, in addition to serving as a habitat for hundreds of bird species. Furthermore, there are human activities dependent on the river, such as agriculture and livestock farming, as well as the natural resources upon which the economy of human communities linked to the Al Fourate' ecosystem functions relies.

## Ecological imbalance caused by the managed system of the Al Fourate River

Since the 1970s, numerous large and medium-sized dams have been built along the Al Fourate River, enabling the control of the river's flow and water for development and energy purposes, a legitimate goal as long as the ecological, natural, and demographic balance in the affected areas is respected.

However, the changes affecting the Al Fourate River over the past decades have not been subject to systematic evaluation or guided by sound environmental policies. Rather, it can be described as excessive water control, accompanied by cross-border political tensions among the countries through which the river flows, as well as internal and border-related political tensions aimed at bringing about demographic changes, which has led to a clear environmental imbalance in the river's natural dynamics, as its flow has shifted from a natural, gradual seasonal pattern—aligned with nature's capacity to accommodate seasonal change—to situations of excessive control that result in abrupt changes based on ill-considered decisions, leading to floods and numerous hazards affecting areas adjacent to dams or villages and cities along the riverbanks.

Numerous cases demonstrate the unlawful use of transboundary water management for political purposes, at the expense of ecological balances and the interests of civilians living along the riverbanks of the Al Fourate. Among these examples, we note the following:

- The submersion of lands in the 1970s, associated with the construction of the Al Fourate Dam and known as the “Maghmoura” areas, submerged vast agricultural lands and rural regions inhabited by local tribes, most of whom were Arab. Their residents were resettled in other areas, leading to a forced demographic shift caused by the control of the river's waters.
- The drainage of the Mesopotamian Marshlands in southern Iraq during the 1990s, which coincided with internal political tensions, resulted in the destruction of a vital ecological habitat and the displacement of its inhabitants, most of whom belonged to local Arab tribes. This constitutes a clear example of how water resource management was used as a political tool to reshape population distribution.
- The Southeastern Anatolia Project (GAP), launched in the 1990s, involves excessive control over the flow of the Al Fourate River, which has had and has contributed to have a direct impact on the livelihoods of the local population, most of whom are Kurdish, and is leading to the displacement of communities.
- The Southeastern Anatolia Project (GAP), launched in the 1990s, entails excessive control over the flow of the Al Fourate River. This has had, and continues to have, a

direct impact on the livelihoods of the local population, most of whom are Kurds, and has contributed to the displacement of communities.

- Among the recently documented cases is the situation in northeastern Syria over the past decade, where the level of the Al Fourate River water, flowing from Turkey, has repeatedly fallen below the levels stipulated in relevant agreements, leading to crises in water supply, electricity, and agriculture. This situation reflects the political instrumentalization of a vital resource in the context of ongoing conflict, in contradiction with the principles of international humanitarian law, particularly the protection of resources indispensable to the survival of the civilian population, as articulated in Article 54 of Additional Protocol I to the 1977 Geneva Conventions.
- Among the recently documented cases is the flooding of the Al Fourate River in May 2026. This event was not a natural phenomenon, but rather a direct result of the river's management through transboundary dams. The consequences of this mismanagement affected civilian populations in Syrian cities, particularly Araka and Dērelzor, placing additional pressure on regions already severely impacted by prolonged conflict. This case highlights the urgent need to safeguard civilians from the consequences of mismanagement of vital resources and underscores the importance of preventing the recurrence of such incidents.

Also, plans to divert water from the AL Fourate River to the center of the country were first proposed during the regime of the ousted Bashar al-Assad and were subsequently proposed again by the armed de facto authorities in place since the end of 2024. The aim of these projects is to transfer water to other regions, including areas with desert or semi-desert characteristics.

These projects, whether in terms of implementation or proposal, reflect a lack of environmental and scientific rigor, as they seek to redistribute water resources beyond their natural ecological range toward areas with different environmental characteristics, thereby risking the creation of imbalances in the affected ecosystems.

### The Natural Environment of the Al Fourate: A Protected Ecosystem

Like all transboundary rivers and water bodies, the Al Fourate River is covered by international watercourse agreements, such as the 1997 United Nations Convention, which aims to regulate the use, protection, management, and cooperation regarding international rivers.

Also, the wetlands along the Al Fourate River fall under the Ramsar Convention on Wetlands, but this convention falls short of covering the entire river environment as it focuses on protecting a specific site, the Mesopotamian marshlands in the case of the Al Fourate, even though changes in the river's dynamics are a direct factor affecting the sustainability and conservation of the wetlands. This highlights a gap between international environmental laws and the reality on the ground, which is heavily influenced by political decisions in the case of the Al Fourate River.

Furthermore, the marshlands, located at the confluence of the Al Fourate and Tigris rivers, were designated a World Heritage Site in 2016, indicating that the region represents a unique wetland ecosystem with all its biological diversity; yet, it is nevertheless subject to

degradation due to excessive control by upstream countries over the river's hydrological dynamics.

### Environmental Risks

Recent studies have shown a radical change in the natural balance and dynamics of rivers, particularly in terms of water volume, flow regularity, and ecological characteristics (Rahimi, 2023).

Other studies have also shown that the imbalance in the river's ecosystem has had a direct impact on the biodiversity of aquatic species, including fish diversity, which has seen a decline in the total number of species and, more specifically, in native species associated with the flow regime and the nature of river habitats (Freyhof et al., 2021; Abdullah et al., 2026).

In addition to these changes, the accompanying increase in salinity has led to a shift in vegetation cover in the areas surrounding the river (Habeeb et al., 2023).

These findings confirm that excessive control of river water is not limited to disrupting the natural dynamics of the Al Fourate but also directly affects the balance and biodiversity of the ecosystem, which plays a vital functional role, and that the aforementioned environmental risks, taken as a whole, are exacerbated by climate change, which in turn leads to changes in water flows and flow instability, thereby intensifying environmental pressures on the river system (Bozkurt et al., 2013).

### Activating international obligations

Based on the above as the governing international and regional legal framework for environmental protection and relevant international conventions, this statement affirms that these agreements are not being implemented and are neither robust nor sufficient to protect a vital resource such as the waters of the Al Fourate River, which is directly linked to vital ecological functions affecting the lives and well-being of a large number of people in the region.

Nevertheless, this report calls for the activation of all agreements related to the Al Fourate River, and it calls on all regional and international organizations and the Syrian public opinion to exert pressure to establish modern agreements and programs for the direct functional rehabilitation of the Al Fourate' ecological habitats that are binding, credible, and executable in order to protect the Al Fourate environment and all surrounding ecosystems.

### Recommended Immediate Actions

- Issue environmental directives to the countries bordering the Al Fourate River to limit irreparable damage and hold all noncompliant parties accountable for any environmental or health consequences, as well as the direct and indirect damages that may be inflicted on civilians as a result of negligence or disregard for international legal obligations related to the environment and the right to life
- Document the violations and damages resulting from decades of mismanagement of the river, demand compensation for all those affected, and isolate entities that treat vital resources

as tools for totalitarian, repressive, or destructive political ends, preventing them from causing any future harm to the Al Fourate ecosystem or any vital Syrian site.

- Prevent the launch of any projects that are detrimental to the environment, in the Al Fourate region or throughout Syria.
- Supporting Syrian environmental studies on the Al Fourate River, as environmental knowledge strengthens the ability to protect vital resources and counter environmental degradation caused by the control of a vital, highly functional resource, and the importance of biodiversity for the well-being and sustainability of stability and development, by political actors who lack knowledge and environmental awareness.

## Conclusion

This notification is not limited to describing potential environmental risks; rather, it constitutes a legal notice of a possible threat to a shared regional ecosystem and calls on the international community to take the necessary preventive measures.

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