



International Conference on Water, Peace and Security:
Water as a catalyst for peace and cooperation

Nairobi

27-28 October

**Geopolitical Risk Assessment of Water and Climate in the Tigris–
Euphrates Basin: From Transboundary Tensions to Local
Vulnerabilities in Iraq and Syria**

Hiba Mohammad, Blue Peace Middle East

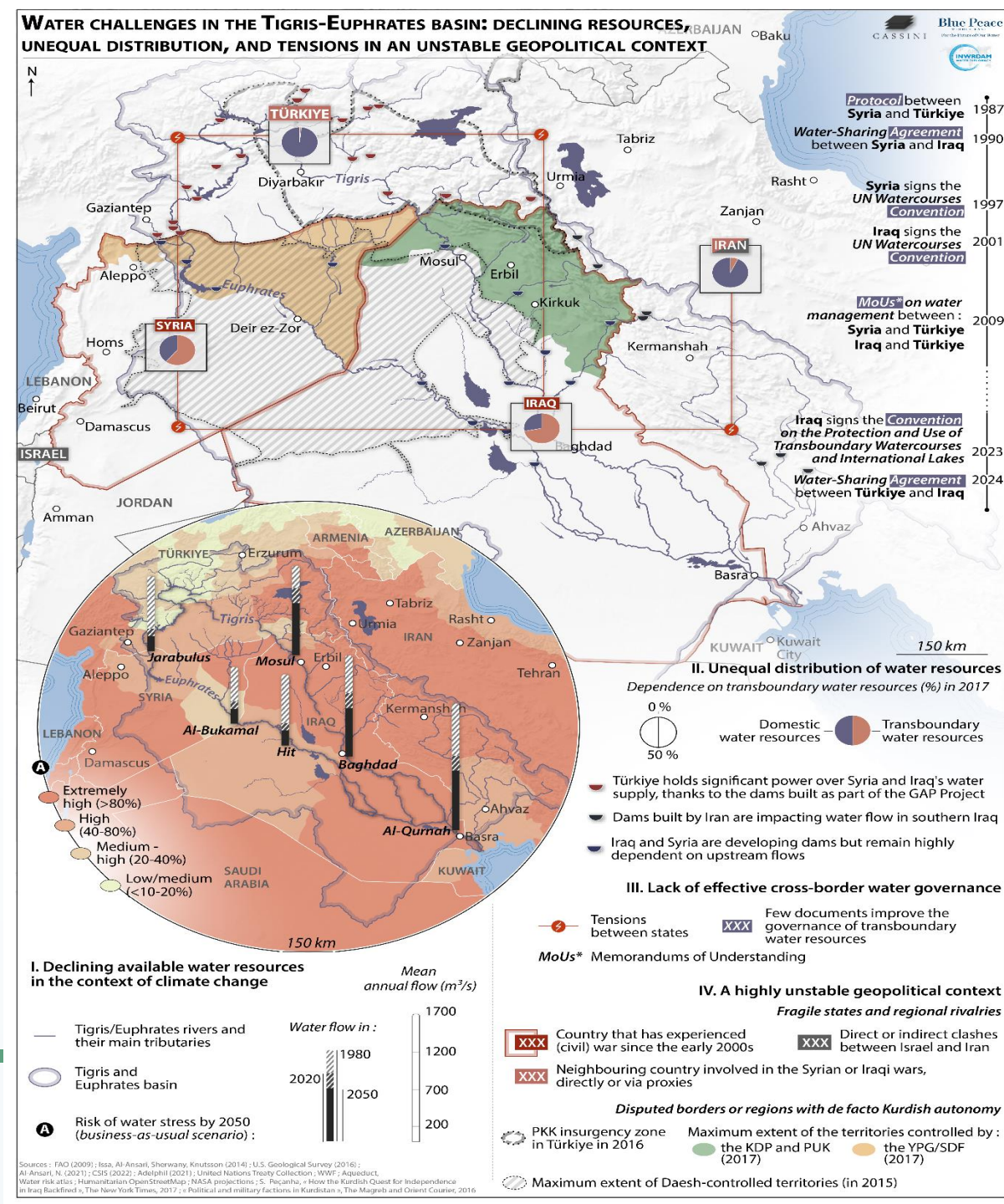
Dario Salinas Palacios, Cassini Group Spain – French Institute of Geopolitics

The Defining Challenge: Water Insecurity in the Basin

A Perfect Storm in a Chronically Unstable Geopolitical Context

Beyond this backdrop, the basin faces three intensifying pressures:

- **Climate Stress** (drought and increased volatility)
- **Upstream Interventions** (unilateral developments, reduced downstream flows)
- **Fragmented Governance** (lack of basin-wide cooperation)
- **The Downstream Impact:** Iraq and Syria face acute vulnerabilities and chronic scarcity.



Connecting the Dots: A Multiscale Geopolitical Approach

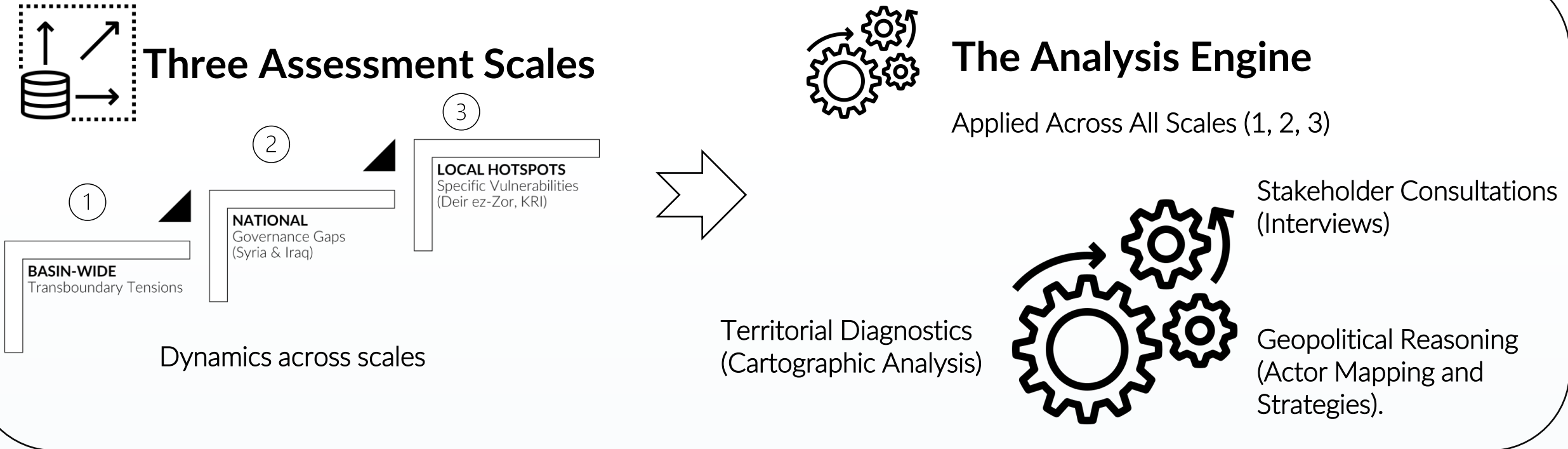


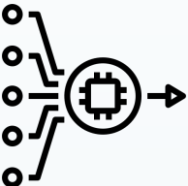
To provide a multiscale geopolitical risk assessment linking regional tensions to local vulnerabilities, commissioned by **Première Urgence Internationale (PUI)**.

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Multiscale Assessment Methodology Diagram



 **Decision-Ready Outputs**

- Roadmap for Donors
- Risk Matrix
- Prioritized Entry Points

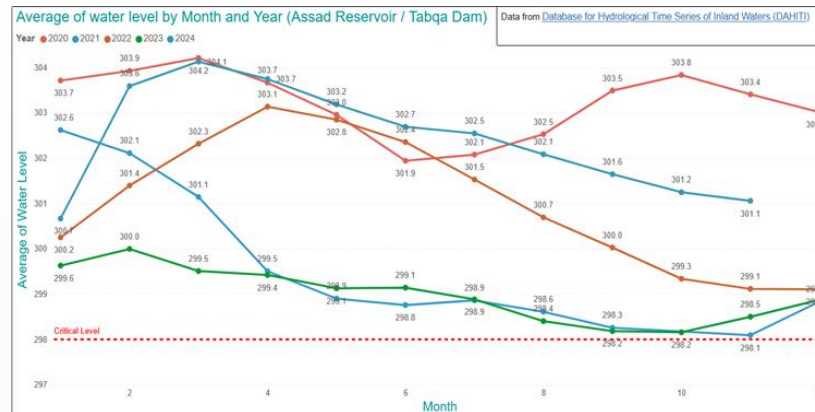


Key Finding 1: Regional and National Fragmentation

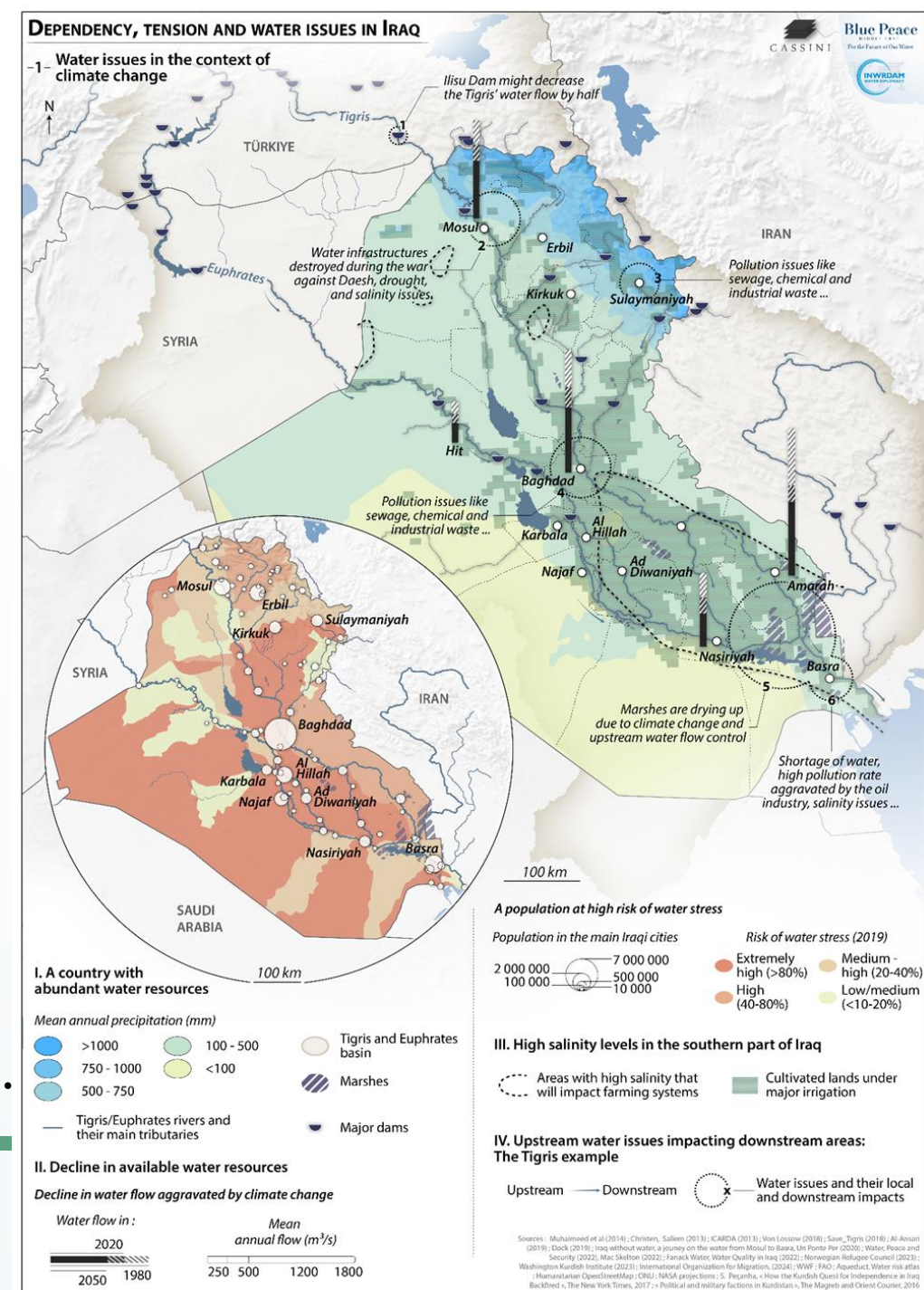
Regional Hydro-tensions:

River flows have declined significantly (up to **40% reduction** in Euphrates inflows in specific periods).

Average of water level by month and year of Tabqa Dam in Syria .
Source: NES WASH Working Group(a)



- The **absence of effective basin-wide cooperation** heightens hydropolitical tensions.
- Existing bilateral arrangements are **partial and weakly enforced**.

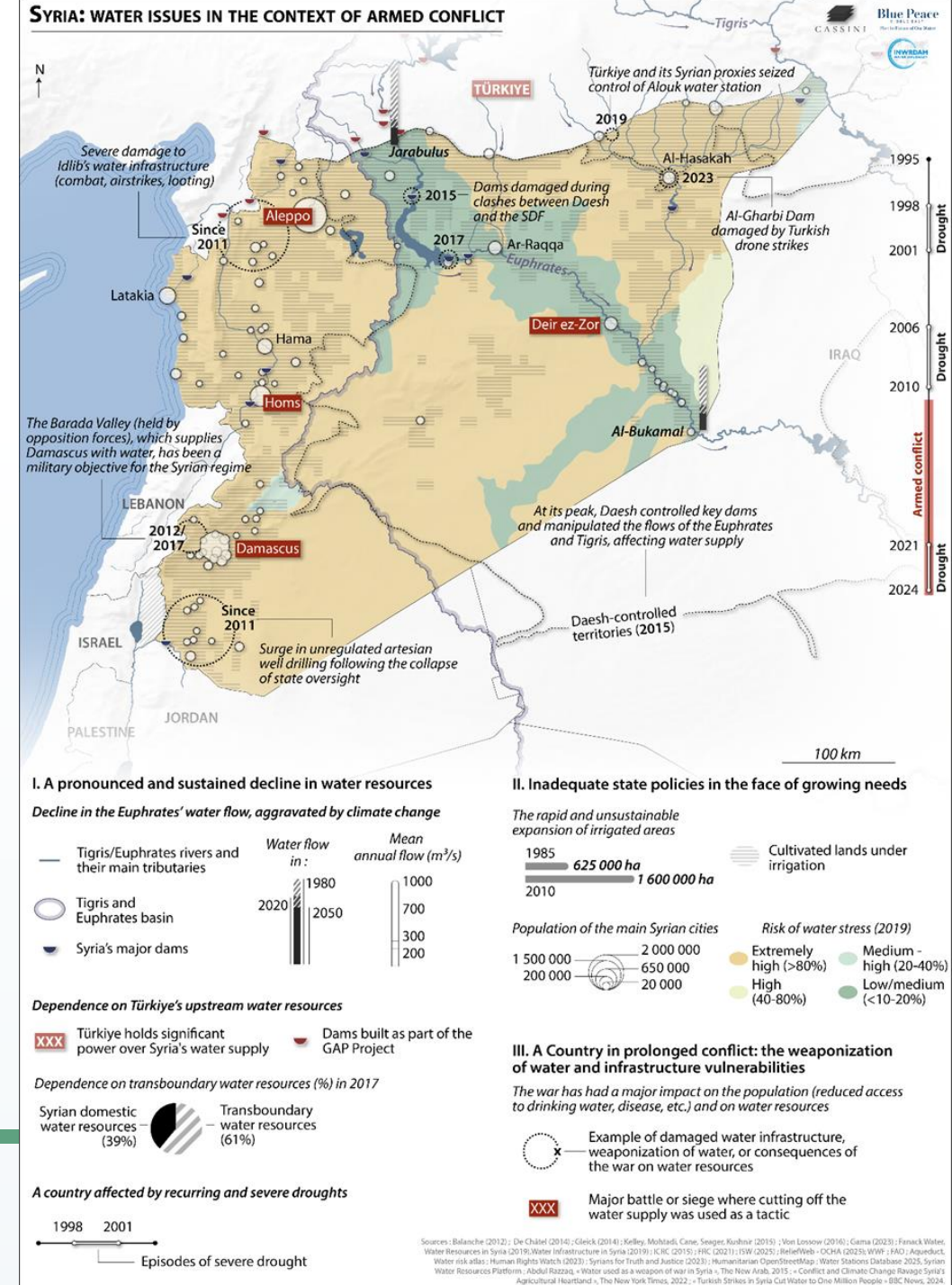


Key Finding 1: Regional and National Fragmentation

National Fragility in Syria:

14 years of conflict have devastated water infrastructure.

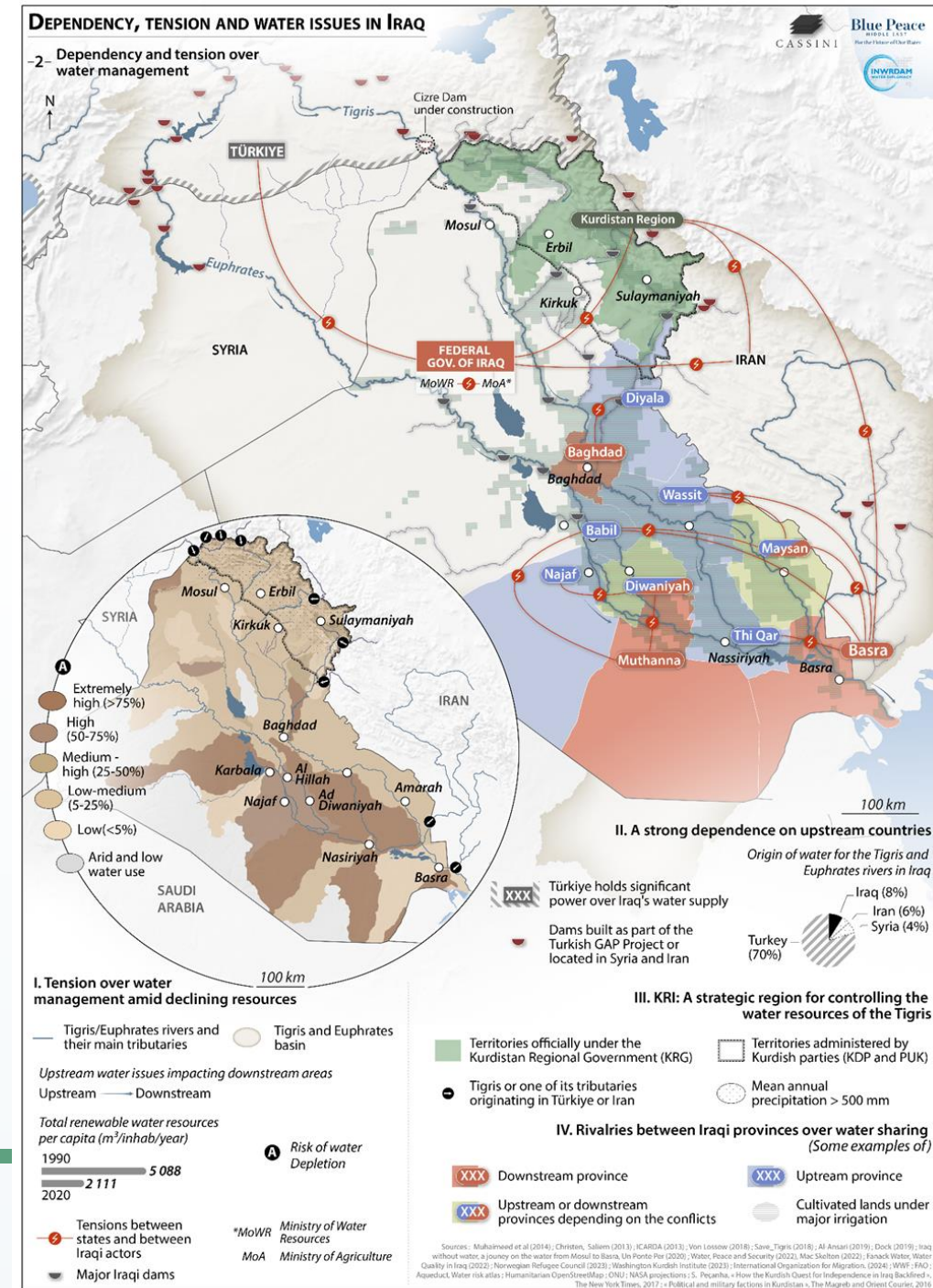
- Approximately two-thirds of treatment plants and half of pumping stations are damaged or destroyed.
- Service is undermined by institutional fragmentation and reliance on ad-hoc solutions



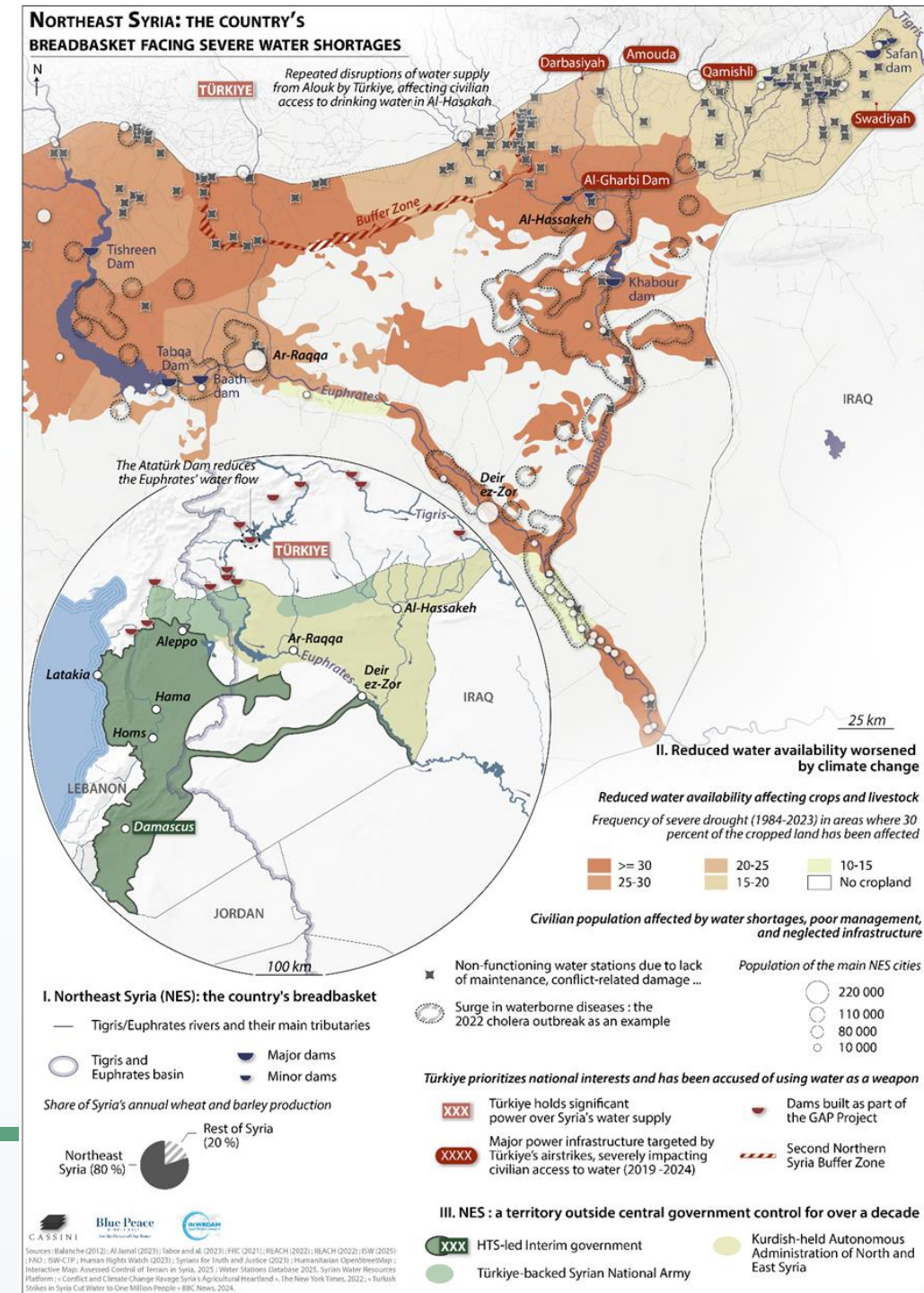
Key Finding 1: Regional and National Fragmentation

National Friction in Iraq:

Persistent federal–regional differences between Baghdad and Erbil have hindered the development of a unified water strategy, thereby weakening Iraq’s overall climate resilience.



- Faces **chronic shortages, infrastructure disruption, and recurrent cholera outbreaks.**
- Reliance **on unsustainable emergency coping mechanisms** (trucked water, unregulated wells) is costly.

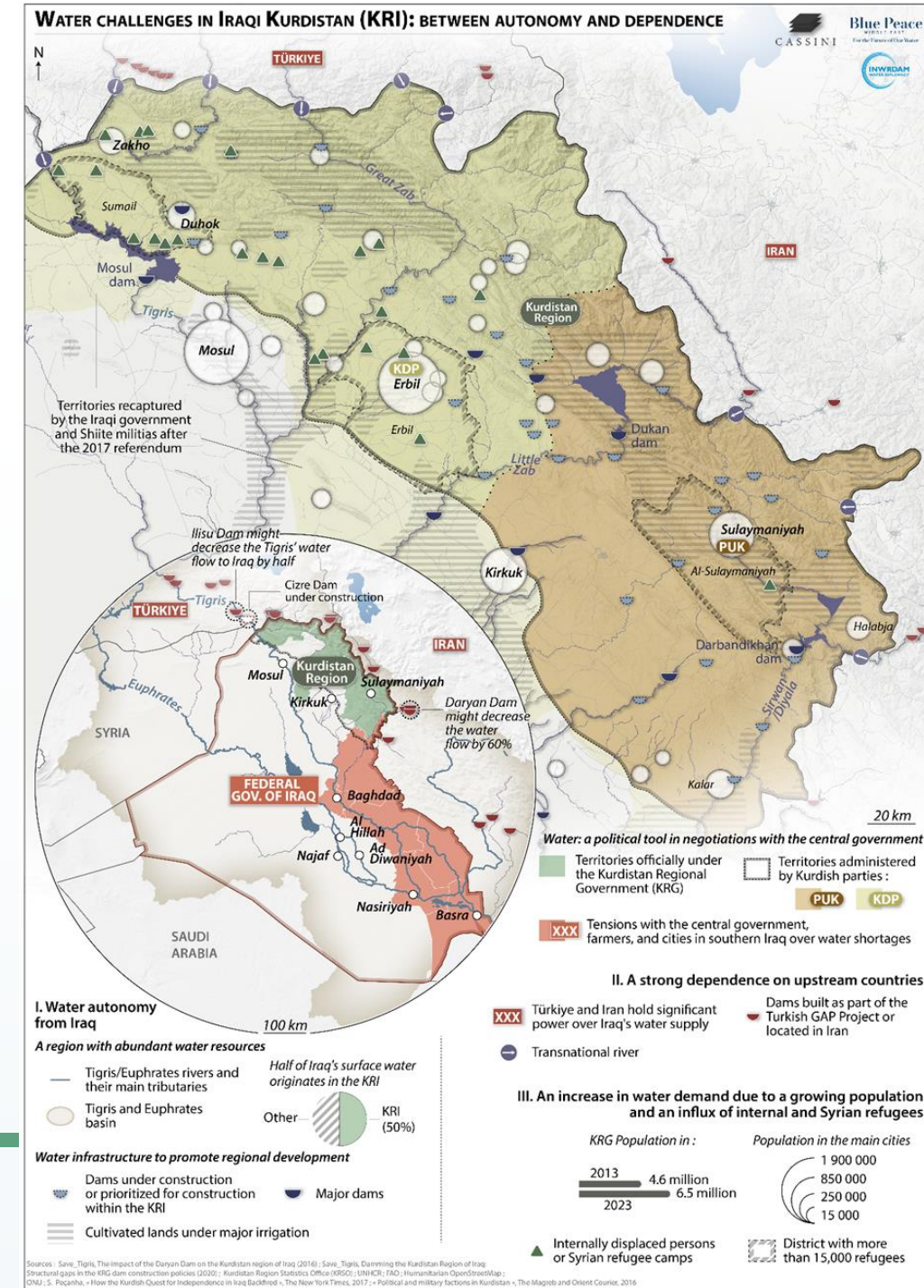


Key Finding 2: Local Hotspots and Vulnerabilities

Local Manifestation: Kurdistan Region of Iraq (KRI):

In Kurdistan Region of Iraq (KRI), competition and environmental stress are driving localized conflict.

- Suffering from sustained **groundwater over-extraction** and **rising competition**.
- The presence of displaced populations exacerbates tensions and increases the **risk of long-term aquifer depletion**



Strategic Priorities: A Roadmap for Resilience



Near Term:

Stabilize Critical Assets

- Focus on **targeted rehabilitation** of core assets (treatment plants, pumping stations, irrigation networks).
- Deploy **solar pumping** and safe wastewater reuse where feasible and promote rainwater harvesting..



Medium Term:

Consolidate Governance & Modernize

- Clarify **governance mandates**, revitalise monitoring, and enable water-user associations.
- Promote a transition toward **drought-resilient crops** and reduce reliance on flood irrigation.



Over Time:

Foster Regional Cooperation

Use incremental data-sharing, seasonal coordination, and confidence-building measures..

Strategic Priorities: A Roadmap for Resilience

Core Insights:

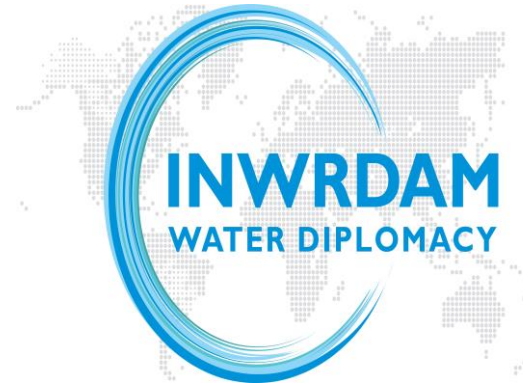
- Water scarcity is a geopolitical and governance issue, not just technical.
- Linking territorial diagnostics to policy sequencing provides actionable pathways.
- Framework is replicable across other fragile basins.
- **Opportunity:** Transforming water stress into regional cooperation.

Water can be a driver of stability, not only a source of conflict.

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