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EU Water Diplomacy: A Critical Tool for Regional Stability

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Introduction

Water, as a vital resource, does not recognize political borders. States around the world share water bodies-rivers, lakes, and aquifers-that are essential for human survival, economic growth, and environmental sustainability. Worldwide, more than 310 river basins and around 468 aguifers are shared between two or more countries (McCracken & Wolf, 2019). According to the EC study (2012), 75 international river basins were identified within European territory. Twenty EU countries rely on the neighbouring countries for more than 10% of their waters and five downstream EU countries are dependent on upstream countries for more than 75% of their resources (Black & Kauffmann, 2013). In the European Union (EU), several major rivers, such as the Danube River, which is shared by 10 countries, underline the need for cross-border cooperation. While the EU has put in place directives like the Water Framework Directive and the Floods Directive, and regional agreements such as the Danube River Protection Convention to foster collaboration, challenges remain. Noncompliance with these directives, as well as the involvement of non-EU member states, complicate cooperation.

Since the 1980s, the pressures on water quality and quantity have globally intensified, due to growing populations, increasing water demand, unsustainable management patterns and their environmental impacts (UNESCO & European Commission, 2021). The climate crisis impacts put

Highlights

Over 310 river basins and 468 aquifers worldwide are shared by multiple countries, necessitating cooperation to balance human, economic, and environmental needs.

The Water Framework Directive and Floods Directive promote cross-border water management, but challenges persist, particularly with non-EU states.

Cases like the Oder River pollution (Germany-Poland) and Danube navigation tensions (Hungary-Serbia) highlight ongoing ecological and economic conflicts.

Diplomatic negotiations at multiple levels (Track 1–3) help prevent conflicts and strengthen cooperation over shared water resources.

The International Commission for the Protection of the Rhine (ICPR) demonstrates how sustained multilateral efforts can successfully address pollution and foster regional stability.





additional pressure on water resources in terms of water quality and quantity. Disputes arise due to competing national interests, different priorities, and varying dependencies on water, which can lead to conflicts. Recent tensions between Poland and Germany over pollution in the <u>Oder River</u> and between Hungary and Serbia over Danube navigation illustrate how these challenges play out. To address emerging water issues, the concepts of water cooperation and water diplomacy, which are often closely linked, have evolved (Molnar et al., 2017). The concept of water diplomacy emerged in the 1990s as water management shifted from purely technical approaches to more governance-based models. However, implementation challenges and difficulties in integrating international laws often lead to disputes among countries over shared water resources.

EU Directives Towards Water Cooperation

The EU fosters cooperation over shared waters primarily through the Water Framework Directive (WFD) and the Floods Directive, complemented by regional agreements such as the Danube River Protection Convention (DRPC). The WFD (Directive 2000/60/EC) provides a comprehensive framework for managing water resources sustainably, requiring cross-

Water diplomacy involves various actors, including governments, international organizations, NGOs, religious groups, and think tanks, aiming to promote conflict prevention, peace, dialogue, and cooperation, and to improve foreign relations

According to Sehring et al. (2022), water diplomacy is defined as a branch of diplomacy focused on bilateral and multilateral negotiations regarding water-related issues, especially availability and quality. Water diplomacy involves various actors, including governments, international organizations, NGOs, religious groups, and think tanks, aiming to promote conflict prevention, peace, dialogue, and cooperation, and to improve foreign relations (Molnar et al., 2017).

Water Diplomacy as a Tool of EU Regional Stability

Despite the prevalence of cooperation over water compared to conflicts (Petersen-Perlman & Wolf, 2015), the world's ongoing polycrisis—marked by interlinked and complex challenges—underscores the importance of water diplomacy. This tool not only helps prevent disputes but also facilitates dialogue around existing or potential tensions. Many experts argue that the climate crisis is reflected through water-related challenges, citing unpredictable and extreme patterns of scarcity (e.g., severe droughts in <u>Spain</u>, 2023), excess (e.g., floods in <u>Germany</u>, 2021 and <u>Spain</u>, 2024) or deteriorating water quality, all of which are exacerbated by climate change. Given that water resources are shared across national and regional boundaries, their management becomes a deeply political issue. The European Union has introduced directives, and international water laws also aim to regulate conflicts. border cooperation (including the non-EU members) in river basins to achieve the "good ecological status" of water bodies. Similarly, the Floods Directive (Directive 2007/60/EC) mandates coordinated efforts to assess and manage flood risks, particularly in shared basins, aiming to reduce cross-border impacts of flooding. Regional

agreements like the DRPC reinforce these frameworks, promoting joint action among Danube Basin countriesincluding EU and non-EU states—on pollution control, flood management, and ecosystem conservation. These instruments collectively ensure integrated water management and conflict mitigation across Europe. Despite the directives and the international and regional conventions, water disputes continue both within Europe and between EU and non-EU states: In the Danube River Basin, shared by 19 countries, disputes have arisen over water allocation, pollution, and hydropower projects. In the Rhine River, there have been historical disputes over chemical pollution and water quality standards among upstream and downstream countries. Issues over water between Spain and Portugal related to the Albufeira Agreement, which regulates shared river basins like the Tagus, Douro, and Guadiana, also continue.

Emerging EU water issues?

The Oder River dispute between Germany and Poland highlights ongoing tensions over ecological management and economic priorities. A <u>2022 fish die-off</u>, attributed to toxic algae blooms worsened by industrial discharges and high salinity levels, escalated concerns over Poland's river expansion plans. Environmentalists and German authorities argue these developments violate EU ecological standards, while Poland insists on balancing economic growth with environmental protection. The case underscores broader EU challenges in state cooperation in addressing the Oder crisis (Politico, 2023; Deutsche Welle, 2022). The dispute between Hungary and Serbia over the Danube River focuses on balancing economic development with environmental preservation. Hungary's plans for deepening parts of the river to improve navigation have raised environmental concerns, particularly from NGOs and EU regulators, as such activities threaten the river's biodiversity and habitats. Serbia, a non-EU state, shares interests in ensuring the sustainable use of the Danube for trade and ecological stability. Climate change further complicates the issue by causing irregular water flows and increasing pressures on shared management (Danube Commission, 2024).

Unsolved water issues

Water diplomacy emerges as a key mechanism for addressing these disputes and maintaining broader stability. This is because water intersects with economic, social, and environmental issues, all of which can influence regional stability. The interconnected nature of EU member states further emphasizes the need for cooperative approaches to water management. Water issues in Europe can cascade into severe economic losses, environmental degradation, and social tensions. Water conflicts disrupt agriculture, leading to reduced crop yields and higher food prices, while also affecting hydropower generation and water-intensive industries. Tourism, particularly in regions dependent on water bodies, suffers from degraded resources. Aquatic ecosystems face degradation, with reduced biodiversity and increased pollution. Issues over water hinder climate adaptation efforts, exacerbating vulnerabilities like droughts and floods, and causing transboundary environmental issues. Like any other conflict, water conflicts can strain political relationships

between EU member states and neighbouring non-EU countries. This can lead to reduced regional cooperation on other pressing issues, A decline in water quality or availability can lead to public health risks and migration or population displacement in

Collaborative efforts on water management foster stronger political and economic bonds between EU member states and neighbouring countries

areas facing severe water scarcity. Disputes can delay the enforcement of EU-wide water directives, such as the Water Framework Directive, which aims to ensure sustainable water management. Prolonged disputes often lead to expensive international court cases or arbitration, diverting funds away from water infrastructure or environmental restoration projects. Addressing these challenges requires robust water

The International Commission for the Protection of the Rhine (ICPR) exemplifies effective water diplomacy through its role as a river basin organization (RBO) (Schmeier & Schubber, 2018). Founded in 1950 by Germany, France, Luxembourg, the Netherlands, and Switzerland, it addressed growing pollution and harmonized monitoring methods. Despite

diplomacy, regional cooperation, and the implementation of sustainable water management practices under EU frameworks.

Water diplomacy in practice – The Danube River basin paradigm

Water diplomacy operates through various tracks: **Track 1:** Official diplomacy conducted between governmental actors (e.g., negotiations and agreements). **Track 2:** Diplomacy conducted by non-governmental actors (academics, religious leaders, NGO representatives, and others) with the aim of influencing governmental decisionmaking (e.g., education and advising policymakers by academic institutions).

Track 1.5: A hybrid approach where official and unofficial actors, including both governmental and non-governmental stakeholders, collaborate to resolve disputes (e.g., participatory monitoring of flood management). Track 3: "Citizen diplomacy," carried out between citizens and non-governmental actors (e.g., local collaborations to address flood challenges).

Water diplomacy plays a crucial role in maintaining regional stability. It reduces the risk of conflict by encouraging cooperation and discussions over shared water resources. Ensuring fair water allocation helps minimize tensions between nations. It also promotes sustainable management practices, addressing issues such as pollution, overuse, and climate-related water challenges. Collaborative efforts on water management foster stronger political and economic bonds between EU member states and neighbouring countries. Moreover, it safeguards ecosystems and improves public health by ensuring access to clean water. Together, all these factors contribute to overall regional stability. early challenges, the ICPR fostered trust and cooperation, leading to legally binding agreements, such as the 1963 Bern Convention. Major turning points, like the 1986 Sandoz chemical spill, mobilized public and governmental action, resulting in the ambitious Rhine Action Programme to restore water quality and ecosystems. Over decades, the ICPR integrated environmental, industrial, and agricultural interests, promoting sustainable management and inspiring global RBO practices in water diplomacy. reduced pollution, and restored ecosystems through sustained multilateral cooperation. Similarly, the Danube River Protection Convention integrates EU and non-EU states, providing a model for balancing development and environmental preservation in a shared basin.

Looking ahead, water diplomacy must play a central role in addressing emerging water challenges. It should emphasize inclusivity by engaging non-governmental actors, promote

In an interconnected world facing a poly-crisis of environmental and resource challenges, water diplomacy is not merely an option but an imperative

adaptive governance to respond to climate impacts, and leverage technology to enhance data sharing and transparency. Institutional mechanisms like river basin organizations (RBOs) must evolve to address not only technical water management

Such examples underline the role of multilateral agreements and institutional mechanisms in resolving conflicts and fostering regional stability. These agreements focus not only on technical water management but also on diplomatic dialogue to address differences and align goals. They are critical for promoting peaceful cooperation over shared water resources.

Conclusion

Water is a finite and vital resource that transcends political boundaries, making its shared management both a necessity and a challenge. The examples of the Rhine, Danube, and Oder rivers illustrate the complexity of transboundary water issues in Europe, where ecological concerns, economic interests, and political dynamics often collide. Despite regional frameworks like the EU Water Framework Directive and international agreements such as the Rhine Convention, disputes over water allocation, pollution, and sustainable management persist, underscoring the limitations of existing mechanisms. Climate change exacerbates these challenges by intensifying water scarcity, flooding, and ecological degradation, further stressing the need for cooperative solutions.

Water diplomacy, as both a concept and a practice, offers a pathway to resolving these disputes while fostering regional stability. By emphasizing negotiation, collaboration, and mutual benefit, it aligns the interests of diverse stakeholders governments, NGOs, businesses, and local communities. The International Commission for the Protection of the Rhine (ICPR) exemplifies the potential of water diplomacy, having successfully harmonized monitoring standards, but also geopolitical tensions. In an interconnected world facing a poly-crisis of environmental and resource challenges, water diplomacy is not merely an option but an imperative. By prioritizing sustainable and cooperative water management, we can secure not only the health of ecosystems but also the political and economic stability of regions dependent on shared water resources.

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