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## The EU Water Framework Directive Twenty Years On: Introducing the Special Issue

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**ABSTRACT:** Twenty years ago, the European Union launched one of its flagship environmental regulations, the Water Framework Directive (WFD). Since its inception in 2000, the WFD has been a guiding light for water professionals within and beyond the EU; it has pioneered ecological standards for water quality, cycles of river basin management planning, participatory forms of water governance, novel economic instruments, and a recurrent assessment regime. At the same time, the WFD has – by virtue of the far-reaching nature of its interventions – aroused political resistance and encountered bureaucratic lethargy; together with many other factors, these have significantly limited its positive impact on the aquatic environment. This Special Issue looks back over the past 20 years to assess what the WFD has achieved, where it has fallen short of expectations, and why. In this introductory piece, the guest editors set the scene and summarise the key findings of the 12 subsequent papers in terms of 6 processes that are characteristic of the WFD’s trajectory: implementation, indication, incrementation, inspiration, imitation and insubordination.

**KEYWORDS:** European Union, Water Framework Directive, water policy, implementation

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### INTRODUCTION

As water professionals across the European Union prepare the third – and currently final – implementation phase of the Water Framework Directive (WFD), it is a most appropriate time to reflect on how the directive has performed over the 20 years since its inception. This third cycle of river basin management planning is the last chance for EU member states to introduce measures that are capable of delivering the WFD’s ambitious targets for surface and groundwater quality by the 2027 deadline. In 2000, the European Union launched the WFD as a flagship environmental directive. Since then, the WFD has been a guiding light for water professionals within and beyond the EU; it has pioneered ecological standards for water quality, cycles of river basin management planning, participatory forms of water governance, novel economic instruments, and a recurrent assessment regime. At the same time, the WFD

has – by virtue of the far-reaching nature of its interventions – aroused political resistance and encountered bureaucratic lethargy; together with many other factors, these have significantly limited its positive impact on the aquatic environment. This Special Issue looks back over the past 20 years to assess what the WFD has achieved, where it has fallen short of expectations, and why.

Disappointment is often the dominant sentiment expressed by scholars who consider the consequences of international laws and treaties regulating the environment. Researchers conducting investigations in this domain often find a considerable gap between what they expected when the text was adopted, and the results obtained. There are not many examples of enthusiastic evaluation, despite the diversity of regimes governing different environmental sectors and the very different means and mandates of the political institutions that develop these regulations. This is true of the Conference of the Parties on Climate Change (Aykut and Dahan, 2014), the Convention on Biological Diversity (Hrabanski and Pesche, 2016), the Action Plan of the European Forest Law Enforcement, Governance and Trade (EU FLEGT) (Rutt and al., 2018), and it is also the case for the European Water Framework Directive that was adopted in 2000 by the European Parliament and the Council (EC, 2000). So why devote a special issue to an evaluation of a European environmental policy that we already know will be dominated by a sense of dissatisfaction? Because dissatisfaction is both structural and transformative.

It is structural because many political actors have vested interests in exaggerating the environmentalist ambition of a text at the time of its adoption. Social mobilisation is often responsible for putting environmental problems on the political agenda and regulation is a political response addressed to this public. In this context, actors who have negotiated derogations and possibilities to extend the timetable do not wish to publicise the concessions they have obtained, while environmentalists who often denounce the lack of ambition of regulations need to stage a few victories for the credibility of their fight. The disappointment in the implementation of these regulations is therefore partly due to the exaggeration of their presentation as pure victories. This is the case with the WFD, which was presented as a successful strategy by the European Parliament's environment committee. This committee, notably its then chairman Ben Collins, organised pro and con public hearings in order to balance arguments of deregulations. They used the Parliament's new veto rules, as granted by the Treaty of Amsterdam, to reject certain Council amendments that were aimed at making the directive less binding (Kaika and Page, 2003); even so, provisions for delaying or lowering objectives have remained in the adopted text.

Dissatisfactory appraisals are also structural because investigations that produce unexpected results or point to a contradiction are more likely to be considered and published. Trains that arrive on time do not make headlines. Good news is not what research funders expect from in-depth assessments. Institutions responsible for enforcing environmental regulations do not wait for researchers to publish indicators showing their good results. In the context of new public management and public demand for accountability, they must publish their outputs on a regular basis and according to precise and negotiated indicators. Managers and in-house evaluations tend to emphasise successful examples and to stick to mandatory indicators to account for their actions. External criticism is more likely to highlight failures and to question the general framework of public action. This is, however, less the case for the WFD, which has already been the subject of fairly critical in-house institutional evaluation (European Commission, 2019a, 2019b). Nevertheless, these evaluations stick to the general framework of the directive and reporting indicators, whereas this Special Issue shows that more can be said using a broader range of data and perspectives.

Dissatisfaction is also structural because the disasters that the environmental regulations have helped to avoid are not part of what is credited in the balance sheet of their relative merits (Mermet cited by de Carlo, 2020). By contrast, new threats to the environment that were publicly acknowledged after the text was adopted are often referred to in critical assessments, while no one refers to scenarios that could have occurred in the absence of such regulations. The existence of the regulations, however, reshaped what was deemed plausible in many strategic plans; they provided actors with new justifications for

opposing some projects and changed the incentive structure of many options. Such merits are often discounted.

Despite its wet-blanket, kill-joy character, critical evaluation is necessary and irreplaceable to the transformation of public action. Independent actors are needed to produce information that is not accessible to managers, to step back from the implicit paradigms that have steered action in one direction, and to identify the winners and losers of policy and those whose actions are not always visible or whose voices are not always audible. There can be no improvement without highlighting regulatory blind spots, contradictions between policies, categories of law that are proving to be inadequate, and long-term trends.

This critical voice is often perceived as being biased because it emphasises one particular aspect to the detriment of the whole. For evaluation to produce new knowledge, it requires a narrow focus. This focus is needed in the forging of appropriate tools and methods, and accurate results depend on this specialisation. Weighing up different issues in order to come up with a political trade-off is the work of public deliberation.

This assessment is often painful for managers because it does not do justice to the system of constraints in which they find themselves and the mandate they have been given. The evaluation produces recommendations that sometimes profoundly question the meaning of managers' actions. In order to carry out their mission, managers develop routines to save time and be more effective. They identify practices to disseminate and mistakes to avoid. All this learning takes time. Managers who have acquired skills in this process have a legitimate aspiration to promote them, and this explains much of the inertia of public action and the reluctance to criticise. Some institutional actors, however, may be well placed to observe the limits of their action within a locked-in situation. Confronted with opposition, impossibilities, and impasses without always having the freedom of speech to express them, they may welcome external criticism to help them do their job. Once publicly expressed, policy recommendations give more legitimacy to internal actors changing things from within.

In this context, the rationale of a Special Issue on the 20 years of the Water Framework Directive is to compile critical assessments in order to draw up a pluralist report that is as exhaustive as possible. The contributions grouped together in this Special Issue shed light on six processes that are induced by the Water Framework Directive that can be described as six 'I's': implementation, indication, incrementation, inspiration, imitation and insubordination. 'Implementation' refers to experiences in transforming member state water policy, planning, and practice in order to accommodate the WFD's objectives and stipulations. 'Indication' is about the contested metrics involved in the new parameter for measuring and monitoring water quality. 'Incrementation' relates to how the WFD has been subsequently embellished with supplementary regulations and guidance. 'Inspiration' is about how the WFD has generated fresh interest and enthusiasm for water protection within EU member states, going beyond the 'letter of the law'. 'Imitation' looks at how elements of the WFD have been copied and appropriated outside the EU. 'Insubordination', finally, is about efforts to resist, undermine, or circumvent the WFD and its component parts. The remainder of this introduction takes each of these processes in turn, illustrating how the 12 papers in the Special Issue contribute to their better understanding.

## **IMPLEMENTATION**

Implementation and enforcement are key aspects of the performance of measures in environmental policies. The policy measures of the WFD differentiate between mandatory basic measures and optional supplementary measures, all implemented via river basin management plans. The basic measures include other water legislation such as the Nitrates Directive or the Urban Waste Water Treatment Directive, point and non-point pollution abatement, water pricing, and control of water abstractions. The supplementary measures include legislative, administrative, and economic instruments, codes of good practices, demand management, and enhancements of water efficiency. EU member states have

considerable flexibility in selecting the adequate combination of measures in each river basin management plan.

Having now reached the end of the second phase of WFD implementation, it is obvious that the ambitious targets set 20 years ago are still well out of reach. Many commentators reflecting on the WFD's performance point to a significant gap between aspirations and achievements (Voulvoulis et al., 2017; Carvalho et al., 2019). The European Commission itself concedes that there has been a generally poor level of achievement for the environmental objectives of good water status. Its latest assessment of implementation status across the EU sombrely concludes that, "(t)he path towards full compliance with the WFD's objectives by 2027 (...) seems at this stage very challenging" (European Commission, 2019b: 10).

Several articles in this Special Issue tackle the problem of WFD implementation. Schröder et al. (2020, *this issue*) investigate the reasons behind the level of implementation in Germany; they find that the best outcomes are often the result of collaboration between water authorities and nature conservation authorities. This collaborative approach is needed where WFD implementation remains stunted. Linton and Krueger (2020, *this issue*) argue that the failure to reach implementation goals is due to a fundamental conceptual problem rather than a lack of political will or implementation deficits. The authors argue that this problem, or "ontological fallacy", of the WFD derives from the conceptual separation of nature from human society. As evidence of how the human – nature divide has been institutionalised, they point to the Driver-Pressure-State-Impact-Response (DPSIR) framework and to ecological 'reference conditions'.

Martínez-Fernández et al. (2020, *this issue*) explain how the implementation of the WFD in Spain and Portugal has been overwhelmed by conflicting interests regarding the diagnosis and identification of pressures and the implementation of measures. These controversies focus on issues such as the role of public participation, the use of economic instruments (cost recovery and subsidies), and the extensive use of exemptions. They find that although the previous "hydraulic paradigm" persists over time, better governance is being introduced with improvements in transparency, better knowledge of aquatic ecosystems, and the inclusion of social scientists, biologists, and geologists in water management agencies.

Macháč et al. (2020, *this issue*) analyse the justification of exemptions to achieve the good status of water bodies in Central Europe. The motives for not implementing measures, they reveal, are a lack of technical feasibility, disproportionate costs, and impeding natural conditions. The authors indicate that disproportionate costs are not the main justification for exemptions in Central European countries, but rather a lack of technical feasibility. Austria apart, Central European countries, indeed, do not often resort to disproportionate costs. In the case of the Czech Republic, disproportionate costs are not employed as a justification for exemptions because of lack of experience in ranking measures by cost-benefit analysis or cost-efficiency.

Zingraff-Hamed et al. (2020, *this issue*) review the limitations of WFD implementation with an EU-wide expert survey which explores the perceptions of governance bottlenecks over the last two decades. The authors find that the main barriers to implementation are intersectoral communication problems, insufficient land reserves, low staffing levels, and inadequate funding. The findings indicate that implementation difficulties derive from the lack of horizontal collaboration and communication, rather than from insufficient policy integration as suggested in previous studies.

Issues of scale are foregrounded in the study of WFD implementation in the Danube River Basin by Syed et al. (2020, *this issue*). They find that implementation is not fully effective because policy design takes place at the basin level while the scale of implementation is at the national and sub-basin level. They argue that the difficulty of cross-scale cooperation between biophysical and governance scales requires a cross-spatial and cross-sectoral shift for effective implementation of the WFD.

Additional implementation questions are raised in the articles by Berbel and Expósito (2020, *this issue*), Bouleau et al. (2020, *this issue*) and Albiac et al. (2020, *this issue*). Berbel and Expósito question the use of water pricing as an environmental policy instrument for recovering environmental and resource costs; they advocate a policy mix that includes water pricing, non-pricing measures, and government initiatives. Bouleau et al. examine the literature on WFD implementation relating to the abatement of non-point pollution, and assess the difficulties of reducing agricultural pollution in the Seine River. They find that the difficulties are explained by the dispersal of both stakeholders and potential benefits. Albiac et al. discuss the policy instruments for implementing the WFD and demonstrate that water pricing in irrigation has little impact on water scarcity and agricultural pollution problems. They recommend the use of a combination of instruments to address the public good, common pool resource, and private good characteristics of water.

## INDICATION

The WFD has set in motion a massive EU-wide programme to monitor the ecological status of water bodies. This ecological status is measured using biological, hydromorphological and physico-chemical quality indicators. This work is supported through "intercalibration", which involves extensive cross-comparisons of the status of European water bodies. The assignment of ecological status or class depends on the worst quality element in each indicator of the water body affected by human activities; this is what is known as the 'one out, all out' principle (Macháč et al., 2020, *this issue*). Despite the significant monitoring effort, the effects of human pressures on ecosystems are poorly known (Carvalho et al., 2019). This linkage between pressures and impacts is critical for developing sound measures that improve the ecological status in basins, assuming they are politically feasible.

The biological, hydromorphological and physico-chemical indicators are the basis for the WFD's system of assessment. Conceptually, this system is based on the Pressure – State – Response model developed by the OECD, which was adapted by the European Environment Agency by adding the driver and impact components. The indicators show the gap between the current conditions of a water body and the 'undisturbed' condition which is required. WFD policy measures are aimed at offsetting any human disturbances. The programmes of measures are embedded in the river basin management plans; they are meant to be built on previous assessments of pressures and impacts that follow a systemic approach that is designed to capture all relevant interactions.

Many of the papers in this Special Issue discuss the indicators that are used to assess good water status and the monitoring procedure that is required to measure and report levels of achievement. The monitoring system has, indeed, become a key technical-administrative lever of WFD implementation (Demirbilek et al., 2020, *this issue*). What appeared fit-for-purpose in terms of the ecological focus and governance logic of the WFD, has in practice revealed a number of shortcomings that have restricted success in the restoration of water bodies (Zingraff-Hamed et al., 2020, *this issue*). Macháč et al. (2020, *this issue*) demonstrate how it became necessary in Central European countries to apply a greater number of exemptions in the second management cycle due to the 'one out, all out' rule; they show how this undermined earlier progress in meeting water quality targets. Martínez-Fernández et al. (2020, *this issue*) show how the indicators used to classify the status of many Spanish water bodies made such classification inconsistent with the requirements of the WFD. The practice there of using individual biological indicators – rather than a combination of several – to evaluate ecological status resulted in a misleadingly high proportion of surface water bodies showing good status.

Other papers highlight contextual or structural factors that have undermined the efficacy of the indicator-driven model. Syed et al. (2020, *this issue*) describe the challenges of harmonising data collection and reporting across the Danube River Basin. These challenges relate not only to the huge variety of riparian states along the Danube, but also to the disparity that occurred between data collected at national and at river basin scales despite concerted efforts to align reporting structures to meet WFD

requirements. Martínez-Fernández et al. (2020, *this issue*) demonstrate how the economic crisis of 2008/2009 was directly responsible for the disuse and decommissioning of several monitoring stations in Portugal, making it extremely difficult to monitor the evolution of stream flows in important sections of its watercourses. These arguments would seem to substantiate the more fundamental critique by Linton and Krueger (2020, *this issue*) that the WFD's assessment regime, which privileges ecological over human indicators, was bound to run into serious difficulties when applied in real-world contexts.

## INCREMENTATION

With its holistic and ecosystem-based approach to all water resources, the WFD heralded a new era in European environmental regulation. It has since been followed by a number of water-related directives and regulations that bear similar governance characteristics, particularly a focus on process and goal achievements rather than command and control, periodic planning regimes, and public participation (Hassler et al., 2019). Three of these directives substantiate and complement the WFD in content as well as style. The Groundwater Directive (2006/118/EC) strengthens the WFD with new binding environmental objectives on all groundwater bodies for nitrates and hazardous substances (Bouleau et al., 2020, *this issue*); the Floods Directive (2007/60/EC) requires flood risk management plans analogous to the WFD's river basin management plans; the Marine Strategy Framework Directive (2008/56/EC) extends the focus beyond freshwater resources, setting environmental objectives for marine waters that require additional interventions in upstream flows. How far these water-related directives complement each other in practice has been the subject of recent research, for example on the coordination of public participation processes under the WFD and the Floods Directive (Albrecht, 2016; Challies et al., 2017) and on procedures for setting and achieving environmental goals between the WFD and the Marine Strategy Framework Directive (Borja et al., 2010). Beyond the field of aquatic environments, other EU policy fields with a bearing on WFD performance have also attracted attention, notably the Common Agricultural Policy and the Habitats Directive.

As documented by several papers in this Special Issue, considerable hope was initially placed in the potential synergies between the WFD and other EU directives. In their survey of water managers from across Europe, Zingraff-Hamed et al. (2020, *this issue*) report that it was widely anticipated that the Floods Directive would blend well with the river basin approach of the WFD and that the Habitats Directive would support the ecological thrust of the WFD's water quality objectives. Schröder et al. (2020, *this issue*) offer evidence of the latter interface in their analysis of collaboration between water managers and nature conservationists in Germany.

At the same time, water stakeholders and academics alike express frustration at intersectoral conflicts and their debilitating effects on WFD implementation (Zingraff-Hamed et al., 2020, *this issue*). Bouleau et al. (2020, *this issue*) describe how EU agricultural policy, especially its subsidy regime, continues to encourage farming practices that undermine the environmental objectives of both the WFD and the Marine Strategy Framework Directive. Schröder et al. (2020, *this issue*) highlight the difficulties involved in reaching agreement between improving the hydromorphology of a river and changing existing natural habitats. Referring to the Spanish experience, Martínez-Fernández et al. (2020, *this issue*) call for avoidance of the current contradictions through better coordination between measures pursued by river basin management plans under the WFD and flood risk management plans developed under the Floods Directive. As Zingraff-Hamed et al. (2020, *this issue*) point out, the European Commission, in its first WFD fitness check which was carried out in 2012, acknowledged the need to align other water-related directives – such as the Floods Directive – more closely with WFD objectives. The water professionals that they questioned ranked the Habitats Directive as the most conflict-ridden environmental directive; in second place was the Floods Directive.

The most recent addition to the EU's water-related tool kit is the European Commission's regulation on minimum requirements for water reuse (European Commission, 2020). Introduced in June 2020, this

regulation is designed to address water scarcity issues by promoting water reuse in agriculture. Martínez-Fernández et al. (2020, *this issue*) consider the potential benefits of water reuse in the achievement of WFD goals, particularly in helping to alleviate water scarcity in water-stressed areas and relieve pressure on water ecosystems. However, they also point to the danger of water reuse perpetuating unsustainably high levels of water use, polluting water courses and reducing water flows in rivers and streams, as witnessed in some water-scarce basins in Spain.

## INSPIRATION

One of the strengths of the WFD has always been its power to inspire. This is founded less in the 'letter of the law' than in the spirit underpinning this innovative directive (Schröder et al., 2020, *this issue*). The WFD is widely regarded as a landmark in European water resources management and protection (Zingraff-Hamed et al., 2020, *this issue*; Voulvoulis et al., 2017). It has indeed been described as, "the most ambitious and complex piece of legislation on the environment ever enacted in the EU" (Manuel Menéndez Prieto, cited in Giakoumis and Voulvoulis, 2018: 819).

Great expectations have been placed on the WFD since its inception in 2000, as confirmed by several of the papers in this Special Issue (Bouleau et al., 2020, *this issue*; Martínez-Fernández et al., 2020, *this issue*; Rimmert et al., 2020, *this issue*). Its sheer ambition has, for many reasons, excited keen interest amongst water professionals and environmentalists. It strives to achieve good ecological, as well as chemical, water quality. It targets whole river basins rather than just watercourses and aquifers, even those basins reaching beyond the limits of the EU (Syed et al., 2020, *this issue*). It aspires to engage with the public more broadly in order to optimise both the process and impact of water protection measures (Rimmert et al., 2020, *this issue*).

Even more inspirational has been the expectation that the directive would initiate a paradigm shift in water policy on several planes (Giakoumis and Voulvoulis, 2018). First, it represented a shift from fragmented water policy instruments to a holistic mode of water governance, with the directive living up to its name as a framework providing orientation for subsequent specification (Foster et al., 2019). Second, it marked a shift towards systems thinking, as expressed in the integrated management of water and water-relevant land uses across whole catchments (Voulvoulis et al., 2017). Third, it embraced flexibility as a principle of implementation, in acknowledgement of the contextual diversity across member states and river basins that had confounded earlier water-related directives. Fourth, it incorporated opportunities for policy learning into its very design, encompassing a long-term, iterative process of goal-setting, monitoring, and adaptation that allowed for experimentalism under the guidance of informal dialogue platforms such as the Common Implementation Strategy (Voulvoulis et al., 2017; Giakoumis and Voulvoulis, 2018).

The papers in this Special Issue provide examples of how inspirational the WFD has proven to be in several member states. In France, the WFD coincided with the growing political momentum around environmental issues that occurred in the mid-2000s, encouraging a more ambitious interpretation of its requirements there than in many other countries (Bouleau et al., 2020, *this issue*). In both Spain and Portugal, the WFD has played a pivotal role in challenging the dominant hydraulic paradigm (Martínez-Fernández et al., 2020, *this issue*). There, an alliance of academics, social activists, and water managers, organised under the New Water Culture Foundation, has drawn heavily on the WFD for legal and institutional support in promoting both participatory water governance and integrated water management at the basin scale. In Germany, the ecological thrust of the WFD has inspired instances of successful collaboration between those responsible for water resources management and those involved in nature conservation (Schröder et al., 2020, *this issue*). In some countries, the directive has also empowered environmentalists to take on powerful agricultural interests, using litigation procedures to promote stricter regulations on the use of fertilisers and manure (Bouleau et al., 2020, *this issue*).

Water professionals and researchers, however, all agree that the WFD, while achieving much, has failed to live up to many of the expectations. Over the past 20 years, there have clearly been difficulties in accommodating and combining diverse policy instruments that target environmental protection, economic efficiency, and participatory governance. As Rimmert et al. (2020, *this issue*) demonstrate, even public officials responsible for WFD implementation widely accept that participation has not had a major impact on either environmental standards or the implementation of measures; according to their expert survey, citizen participation was accorded virtually no significance. The flexibility built into the WFD has provided, in practice, a loophole for exemptions, redefinitions, and non-compliance which has, across the EU, undermined the implementation process and the efficacy of measures (Giakoumis and Voulvoulis, 2018; Carvalho et al., 2019). Overall, there is a palpable sense that the spirit of the WFD has been dissipated in the relentless grind of techno-managerial reductionism (Voulvoulis et al., 2017).

The research community has provided a wide range of explanations for this loss of momentum, which are summarised and elaborated upon in this Special Issue. Some critics argue that the WFD's inherent complexity could not be readily accommodated within existing organisational structures, knowledge systems, and operational practices of water management (Linton and Krueger, 2020, *this issue*). Especially in situations characterised by traditional hierarchical or market-based governance structures, efforts to institutionalise participatory forms of deliberation encountered major setbacks (Foster et al., 2019). Mismatches over spatial remits, funding programmes, and policy instruments between different sectors pertinent to achieving the WFD's goals have also been identified, as between water management and nature conservation (Schröder et al., 2020, *this issue*). Others have criticised the design of the WFD itself as being unrealistic or naïve. The timeline for achieving the directive's objectives of good quality of surface and groundwaters across the EU has proven, in retrospect, wildly optimistic; it underestimated the myriad challenges involved in developing, enacting, monitoring, and adapting highly complex measures in unison (Carvalho et al., 2019). The initial confidence placed in the power of participation and consensus-building to deliver environmental quality objectives often lacked an appreciation of the asymmetrical power relations at play in many contexts (Rimmert et al., 2020, *this issue*; Bouleau et al., 2020, *this issue*). The collaborative and experimental components of the WFD often fell afoul of vested interests, particularly agriculture and hydropower (Martínez-Fernández et al., 2020, *this issue*; cf. Voulvoulis et al., 2017).

How can the inspirational force of the WFD be revived and rendered more productive than it has been till now? This question is taxing the minds of those responsible for devising the third, and currently final, cycle of implementation. The dilemma is between, on the one hand, maintaining or even raising ambitions and, on the other hand, acknowledging what, based on past experience, is realistically possible by 2027 (Carvalho et al., 2019). One suggested way forward is the implementation of steps for taking greater account of the reflexive, adaptive, non-linear, and interactive nature of socio-hydrological systems (Demirbilek et al., 2020, *this issue*; cf. Giakoumis and Voulvoulis, 2018). Another is to return to the WFD's systemic intent by focusing on the functionality of water resources in relation to socio-economic circumstances rather than purely nature-based terms of reference (Linton and Krueger, 2020, *this issue*; cf. Giakoumis and Voulvoulis, 2018). A third recommendation is the development of governance strategies that are refined to suit particular localities and settings and targeted at involving more non-state actor groups (Rimmert et al., 2020, *this issue*). If the much-heralded spirit of the WFD is to hold sway in the future, it will – all commentators agree – have to be better grounded in the realities of implementation practice.

## IMITATION

The appeal of the WFD has never been limited to EU member states; it is a continuing source of inspiration for water professionals around the world. For many, it represents a model – for some, indeed, a blueprint – for Integrated Water Resources Management (IWRM) (Fritsch et al., 2020, *this issue*). The European



Commission has certainly shared this view, seeing in the WFD a policy instrument that is capable of promoting EU water policy in other countries and river basins. How, then, has the WFD been imitated elsewhere over the past 20 years? How successful has the EU been in exporting its flagship environmental directive? What factors would appear to advance or hinder transnational water policy transfer via the WFD?

Currently, the WFD is partly or fully in force in a number of associated countries. These include countries that belong to the European Economic Area, such as Norway (Hovik and Hanssen, 2016); EU membership candidates, such as Turkey (Demirbilek et al., 2020, *this issue*); and three states in the Danube River Basin (Syed et al., 2020, *this issue*). EU accession requirements have proven a powerful lever of transnational diffusion of EU policy and, as Demirbilek et al. (2020, *this issue*) describe, the WFD is no exception. The coercive context of EU accession has resulted in the adoption of significant institutional features of the WFD by Turkey since the early 2000s; these include the introduction of river basin districts, river basin management planning, water quality monitoring, and public participation processes. The authors argue that this 'Europeanisation' of Turkish water policy can be attributed to a process of social learning taking place in the "instrument constituencies" of EU and Turkish water actors. Through their interactions over time, EU water policy 'scripts' have been appropriated by the water policy community in Turkey.

The Turkish experience nevertheless reveals how transnational policy diffusion is often piecemeal and variable; in the case of that country, some key features of the WFD have not been taken up. This applies, for instance, to transboundary water management, which has proven to be challenging with Turkey's riparian neighbours, especially those outside the EU (Demirbilek et al., 2020, *this issue*). As WFD norms encounter established national forms of water governance, there emerge hybrid combinations of the old and the new that reflect a selective adoption and contextualised adaptation of the directive's tenets. The authors argue that if the WFD is to prove more influential in this and other accession states, greater attention should be paid to tailoring diffusion policy to the cultural, socio-economic, and institutional contexts of each country.

A second paper focusing on the WFD's impact outside the EU explores the fate of the EU Water Initiative (EUWI) in five global regions (Fritsch et al., 2020, *this issue*). The EUWI was set up under the auspices of the European Commission in 2002, shortly after the WFD was introduced. It was instituted as a network of regional partnerships entrusted with the promotion of sustainable and integrated water resources management in Africa, China, the countries of the former Soviet Union, Latin America, and the Mediterranean. This initiative of EU-inspired water policy diffusion drew on the WFD as a potential model, but also on the concepts of sustainable development and IWRM that encompassed wider agendas of social well-being and development aid.

Broad in scope, flexible in application, and non-binding for all involved, the EUWI has been interpreted and pursued in highly diverse ways across the globe. Fritsch et al. (2020, *this issue*) distinguish between three manifestations of the EUWI in practice: an economic one with a focus on investments in water technology (such as in China), a social one that prioritises questions of access, equity, and participation (like that found in Africa), and an environmental one that resonates most with the WFD (Mediterranean countries). The degree of knowledge and skills transfer has also varied hugely between the five regional partnerships. A key factor behind this divergence within the EUWI has been the incentive of political and economic integration that is associated with proximity to EU water policy. This was strongest in the partnerships in Eastern Europe, Central Asia, and the Mediterranean, but was absent in the partnerships with Africa, China, and Latin America. This indicates how dependent transnational water policy diffusion can be on wider, extraneous forces of international relations. It suggests that the EU should in future be more self-reflexive of its interests and expectations – and those of its partners – when seeking to export its own water policy norms (Fritsch et al., 2020, *this issue*).

## INSUBORDINATION

Compliance with the letter and the spirit of the law are two different things. Over the course of the past 20 years, practices of implementing the WFD have revealed numerous situations where the honourable intentions of European law-makers have been undermined by interpretations or specifications that are at odds with the spirit of the directive. This was perhaps inevitable given the overarching and non-specific nature of the original text. With the WFD covering all kinds of water bodies, pollutants, modifications, uses, and instruments, there was not much space for details. Member states were, indeed, encouraged to develop their own specifications in such a way as to reflect regional differences. The emergent problem was not simply that the 'devil is in the detail' (Jager et al., 2016; Voulvoulis et al., 2017); more worryingly, the freedom to adjust implementation to national (institutional) realities created space for opponents and sceptics of the WFD to lobby for exemptions, extensions, and derogations. This would not be a cause for concern, of course, if member states were close to meeting the environmental objectives of the WFD. As pointed out by numerous authors, however, this is only rarely the case (Phillips, 2014; EEA, 2018; Bouleau et al., 2020, *this issue*; Macháč et al., 2020, *this issue*).

Insubordination of the spirit, and sometimes the letter, of the WFD is addressed in several of the papers in this Special Issue. One frequently mentioned factor is the dichotomy between the interests and motives of member states and those of the European Commission. Martínez-Fernández et al. (2020, *this issue*) highlight the lack of political will for the correct and comprehensive implementation of the directive in Spain and Portugal, despite it having altered the perception of good water governance there. Bouleau et al. (2020, *this issue*) highlight the limited will to change business-as-usual in France and the obduracy of traditional water resource management practices in that country. By contrast, the expert survey presented by Zingraff-Hamed et al. (2020, *this issue*) does not rank national political will as the key WFD implementation bottleneck.

Another source of resistance is embedded in the problematic performance of particular WFD implementation steps or tools that, in the end, do not deliver expected outcomes. Rimmert et al. (2020, *this issue*) criticise the naïve presumption that mandatory citizen participation in river basin planning will help achieve WFD objectives. Based on a five-country expert survey, they conclude that planners have to focus much of their limited resources on fulfilling the technical procedures for participation activities that are unlikely to have a significant impact on the final version of the river basin plans. Martínez-Fernández et al. (2020, *this issue*) illustrate that participatory processes can be – and in many instances have been – dominated by representatives of lobby groups (such as farmers, infrastructure developers, or hydroelectric providers) who have a vested interest in retaining current water use practices. Albiac et al. (2020, *this issue*) and Bouleau et al. (2020, *this issue*) argue that water managers did not learn much from their experiences in implementing the earlier Nitrates Directive and other water pollution regulations, especially in terms of non-point pollution sources from agriculture. The mismatch between EU agricultural and water policies is a recurring and persistent theme in many papers (e.g. Zingraff-Hamed et al., 2020, *this issue*). According to Albiac et al. (2020, *this issue*), pricing water use in terms of the polluter-pays principle and environmental and resource costs is very difficult for many uses and in some national contexts.

Finally, Linton and Krueger (2020, *this issue*) interpret the frustration emerging from WFD implementation shortcomings as an expression of the directive's ontological fallacy. They argue that by treating water independently from its human dimensions and aspiring to an idealised (and unachievable) natural state of water bodies, the WFD is doomed to fail. As proofs of this ontological problem, they present deviations from the WFD's norms, widespread non-compliance, and expected future exemptions. Insubordination, from this perspective, is driven by the lack of credibility and legitimacy of comprehensive, but unenforceable legislation.

As guest editors of this Special Issue, we welcome the critical but constructive tone of the papers selected for inclusion. Together, they present cutting-edge research on the multiple facets of the WFD's

performance over the past 20 years. We are confident that they will provide not only fresh insight, but also helpful orientation, to those in and beyond academia who are struggling with ways to make the WFD work better as it approaches its third and final cycle.

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