

Law in Integrated and Adaptive Governance of Freshwaters

*A Study of the Swedish Implementation
of the EU Water Framework Directive*

Johanna Söderasp

Law

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Johanna Söderasp

Luleå University of Technology
Division of Social Sciences
Legal Science Unit
971 87 Luleå
Sweden

Johanna.Soderasp@ltu.se

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To my mother.

Abstract

Water is essential for sustaining life and providing ecosystem services for different human needs. In 2000, the European Union Water Framework Directive (WFD) was adopted against the background of increasing pressure on the waters of Europe. With the WFD, a new approach to governing freshwater resources within the Union was introduced, aimed at facilitating a shift from fragmented and sectoral water policies to a more holistic, integrated and adaptive governance system at the hydrological scale of river basins. This thesis has examined the Swedish implementation of the directive, with a primary aim to determine whether the Swedish formal institutional framework and water administration are sufficient to fully implement the freshwater governance model provided by the WFD and achieve the environmental results prescribed. The thesis consists of two main parts, where the first provides the contextual framework for the thesis, and the second part consists of four appended papers, which all in different ways contribute to achieving the overall purpose of the thesis. The thesis is founded on legal analysis and qualitative text interpretation of various sources of law, with emphasis on the analysis of national law in light of the WFD as well as EU legal principles and case law developed by the CJEU.

The results show that the Swedish freshwater governance system and formal institutional framework encompasses opportunities as well as barriers for implementing the WFD. The governance arrangements reflect the hydrological requirement of the directive, and the Swedish system holds good opportunities for participation in decision-making procedures as well as adaptive potential, as the general legal framework for environmental and water law contains a relatively high degree of flexibility or adaptable rules. However, when analysing the Swedish freshwater governance system in light of four key functions (objectives and direction; administrative structure; adaptive capacity; and control and enforcement) identified in this study as crucial for the formal institutional framework to deliver in such integrated, adaptive and multi-level governance systems the WFD represents, the results reveal that central aspects of all four key functions are missing in the Swedish system. Due to these shortcomings, the overall conclusion is that no full regime shift towards the hydrological, adaptive and integrated system of the WFD has occurred in Sweden; the system for water planning and governance is not clearly reflected in the formal institutional framework nor sufficiently underpinned by the administrative structure at national level. Ten different proposals are presented to remedy the shortcomings.

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List of Papers

This thesis builds on the work described in the four appended papers listed below, referred to in the text by their corresponding Roman numerals.

Paper I Söderasp, Johanna, ‘What about State Implementation? New Governance and the case of the European Union Water Framework Directive in Sweden’.
Europarättslig Tidskrift, 2015, Vol. 3, pp. 508-524.

Paper II Söderasp, Johanna and Pettersson, Maria, ‘Before and After Weser: Legal Application of the WFD Environmental Objectives in Sweden’.
This article has been accepted for publication in *Journal of Environmental Law*, (forthcoming 2019, Vol. 2) Published by Oxford University Press.

Paper III Söderasp, Johanna, ‘The Water Framework Directive and Spatial Planning in Sweden – Time for Legal Integration!’.
(*Manuscript*)

Paper IV Söderberg, Johanna, ‘EU:s ramdirektiv för vatten och dagvattenförorening – Klarar Sverige kraven? (The EU Water Framework Directive and Storm water Pollution – Can Sweden Cope with the Requirements?)’.
Nordic Environmental Law Journal, 2011, Vol. 1, pp. 3-30.

Abbreviations and Translations

CJEU – Court of Justice of the European Union

EC - European Community

EU – European Union

EQS – Environmental Quality Standard

Geological Survey of Sweden – Sveriges Geologiska Undersökning (SGU)

Government Bill – Proposition

Government Official Report – Statens offentliga utredningar

OJ – Official Journal

PoM – Programme of Measures

RBMP – River Basin Management Plan

TEU – Treaty on the European Union

TFEU – Treaty on the Function of the European Union

SwAM – Swedish Agency for Marine and Water Management

WFD – EU Water Framework Directive (2000/60/EC)

Translations of Swedish authorities and key instruments

County Administrative Board – Länsstyrelse

Environmental Quality Standard – Miljökvalitetsnorm (EQS)

Land and Environment Court of Appeal – Mark- och miljödomstolen (MÖD)

Programme of Measures – Åtgärdsprogram (PoM)

River Basin Management Plan – Förvaltningsplan (RBMP)

Swedish Agency for Marine and Water Management – Havs- och vattenmyndigheten (SwAM)

Water Councils – Vattenråd

Water District Authorities – Vattenmyndigheterna

Water District Board – Vattendelegation

RDV – EU:s ramdirektiv för vatten

1. Introduction

1.1 Background

Water is essential for sustaining life and providing ecosystem services for different human needs, such as fish and food production, water provisioning, and water purification.¹ As a result, water ecosystems have been heavily modified by societies for millennia, and at an accelerating speed during the 20th century.² In 2000, the European Union Water Framework Directive (WFD)³ was adopted against the background of increasing pressure on the waters of Europe from the continuous growth in demand for sufficient quantities of water of good quality for diverse purposes.⁴ The directive aims to ensure protection and sustainable use of freshwater resources within the EU, as these resources are “a heritage which must be protected, defended and treated as such”.⁵ The scope of the directive extends from lakes, rivers, and groundwater to transitional and coastal waters.⁶ The implementation of the WFD has however proven to be a challenge to the conventional, long-standing freshwater governance systems in several Member States, including Sweden.

This thesis primarily examines the Swedish implementation of the freshwater governance system prescribed by the WFD, focusing on the legal implications and challenges. With the WFD, a new approach to governing freshwater resources within the Union was introduced, aimed at facilitating a shift from fragmented and sectoral water policies to a more holistic, integrated and adaptive governance system at the hydrological scale of river basins.⁷ An ambition of the directive is also to get the citizens of the EU more involved in water governance.⁸

As a framework directive adopted under article 192 (175) of the Treaty on the Function of the European Union (TFEU), the WFD leaves responsibility, but also room for flexibility and national discretion in implementation, to

¹ Grizzetti et al, ‘Assessing water ecosystem services for water resource management’, 2016, p. 194.

² See e.g. Cosens et al, ‘Identifying legal, ecological and governance obstacles, and opportunities for adapting to climate change’, 2014, p. 2339.

³ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

⁴ Directive 2000/60/EC, rec. 4.

⁵ Directive 2000/60/EC, art. 1 and recs. 1, 5, 13 and 18.

⁶ Directive 2000/60/EC, art. 1.

⁷ See e.g. Grimeaud, ‘The EC Water Framework Directive: An Instrument for Integrating Water Policy’, 2004, p. 34; Howarth, ‘The progression towards ecological quality standards’, 2006; Baaner, ‘The Programme of Measures of the Water Framework Directive’, 2011, p. 92; and Voulvoulis, Arpon, & Giakoumis, ‘The EU Water Framework Directive: From great expectations to problems with implementation’, 2017.

⁸ Directive 2000/60/EC, art. 14 and rec. 46.

Member States.⁹ Under the principle of sincere cooperation in art 4(3) of the Treaty on European Union (TEU) in conjunction with the general legal obligation to achieve the prescribed results of a directive in art 288 of the TFEU, Sweden, as a Member State of the EU, is obliged to implement the water governance system of the WFD, and, ultimately, achieve its environmental objectives.¹⁰

The WFD represents a ‘governance’ or ‘multi-level governance’ (‘polycentric’)¹¹ approach within EU environmental law and policy.¹² Compared to more traditional top-down governmental steering and control from the EU, a governance approach favours flexible framework directives over detailed directives or regulations, and prioritizes consideration of national diversities in implementation under the general principles of proportionality and subsidiarity in TEU article 5(3).¹³ As reflected in the EU Commission’s 2001 white paper on governance – which presented new strategies for developing EU legislation – a governance approach is assumed

⁹ The term ‘implementation’ is used in this thesis to describe all stages of national implementation: ‘transposition’, ‘application’, and ‘enforcement’. See Prechal, *Directives in EC law*, 2005, pp. 5-6. While the responsibility for transposition lies with the national legislators (i.e. governments and parliaments), the main responsibilities for application and enforcement lie with the national administrative authorities and with the courts. The latter stages are often described as ‘judicial implementation’ or enforcement of EU law through loyal interpretation and full application of EU legal norms by national courts and other administrative authorities; requirements that primarily arise in situations where the legislator has failed to transpose a directive properly into national law.

¹⁰ In order to ensure the full effectiveness of a directive in accordance with the result it pursues, the CJEU generally requires Member States to adopt ‘all necessary measures’ into their national legal system. What constitutes all necessary measures, however, varies from one directive to another since it depends on the specific result prescribed. Normally, the requirement at least includes that any laws, regulations and administrative provisions contrary to a directive’s objective must be abolished. See e.g. Case 14/83, *Von Colson und Kamann v. Lans Nordrhein-Westfalen*, [1984] ECR 1891, paras 15-17; and, as regards the WFD, Case C-32/05 *Commission v Luxembourg* [2006] ECR I-11323, paras 35-37.

¹¹ In this thesis, polycentricity and multi-level governance are used synonymously, to describe that the governance of freshwater should be structured on several authoritative levels, with multiple centres of authority, and with overlap in jurisdictions rather than being concentrated under one central authority or strictly hierarchically organised. The concept includes ensuring that the levels of authority should be independent and flexible, but at the same time nested with each other in the meaning that lower-level authorities have representation at higher levels, to facilitate communication and prevent conflicts between the governance bodies involved. See e.g. Hooghe & Marks, ‘Unraveling the Central State, but How? Types of Multi-level Governance’, 2003, pp. 234-241; Ostrom, *Understanding Institutional Diversity*, 2005, pp. 281-288; Huitema et al, ‘Adaptive Water Governance’, 2009; and Cosens et al, ‘The role of law in adaptive governance’, 2017.

¹² See e.g. van Kempen, ‘Countering the Obscurity of Obligations in European Environmental Law’, 2012, p. 525; and van Holten & van Rijswijk, ‘The governance approach in European Union Environmental Directives and its consequences for flexibility, effectiveness and legitimacy’, 2014, pp. 13-14. See also paper I for a closer discussion of the governance approach of EU environmental law and policy in general and of the WFD in particular.

¹³ von Homeyer, ‘The Evolution of Environmental Governance’, 2009, p. 20.

to increase both effectiveness and legitimacy¹⁴ in implementation.¹⁵ The use of framework directives is assumed to increase effectiveness, due to the fact that provisions can be implemented taking national, regional and local conditions into account,¹⁶ while legitimacy is assumed to increase as a result of including several participants (including stakeholders and the public), rather than one central government.¹⁷ A governance approach within the EU context thus, generally, promotes steering by goals and procedure rather than by precise rules; delegation of formal power and responsibility to lower authoritative levels; and the emergence of a more integrated administrative structure within the EU, including participation of stakeholders and the general public.¹⁸

However, governance and the use of framework directives also means that the main responsibility for implementation lies with the Member States; they are required to “exercise their own command capacity”,¹⁹ by fleshing out the general requirements of EU law with sufficient rules on national level to ensure compliance with the EU provisions and, ultimately, the result prescribed.²⁰ The WFD, for example, prescribes a non-deterioration requirement and ambitious environmental objectives aiming at achieving ‘good water status’ of all surface and groundwater bodies within the EU; originally to be achieved by 2015 and with a current absolute deadline set to

¹⁴ ‘Legitimacy’ in this specific context mainly refers to the political dimension of the concept, i.e. to whether the public experience State behaviour as legitimate. However, legitimacy also has a legal dimension, foremost entailing that State power and authoritative decision-making are exercised under the law so that public decision-makers can be held accountable for their decisions. The legal dimension of legitimacy thus also includes transparency and accountability in decision-making, and the possibility of having access to courts. See e.g. van Holten & van Rijswijk, ‘The consequences of a governance approach in European Environmental directives for flexibility, effectiveness and legitimacy’, 2014, pp. 21-22; and further section 2.3.2.

¹⁵ EU Commission, ‘European Governance – A white paper’, COM(2001) 428 final, pp. 3 ff.

¹⁶ Ibid, pp. 5 and 20.

¹⁷ Ibid, p. 11. However, as Kochskämper et al point out in their comparative study of participation in implementation of the WFD, there is still a lack of understanding of how and under what conditions collaboration and participation can be expected to improve environmental outcomes, see Kochskämper et al, ‘Participation for effective environmental governance?’, 2016, p. 737.

¹⁸ See e.g. Scott, ‘Governing Without Law or Governing Without Government?’, 2009, pp. 167-170; Scott & Trubek, ‘Mind the Gap: Law and New Approaches to Governance in the European Union’, 2002, pp. 2, 5-6; and Reichel, *God förvaltning i EU och Sverige*, 2006, p. 564.

¹⁹ Lee, ‘Law and Governance of Water Protection Policy’, 2009, p. 41. See also Scott, ‘Governing Without Law or Governing Without Government?’, 2009, pp. 161-162 and 167-170; and Holzinger, Knill & Schäfer, ‘Rhetoric or Reality?’, 2006, p. 409.

²⁰ This entails, for example, that the aim and objectives of a directive must be clearly reflected in binding national legislation, and its provisions transposed with unquestionable binding force into the national legal order to satisfy the requirement of legal certainty. The provisions of a directive need not, however, be incorporated in the same words in specific, concrete national provisions. See e.g. Case C-50/09 *Commission v Ireland* [2011] ECR I-873, para 46. See also paper I; Lee, ‘Law and Governance of Water Protection Policy’, 2009, p. 45-46; Jans & Vedder, *European Environmental Law – After Lisbon*, 2012, pp. 139-160; and Scott, ‘Governing Without Law or Governing Without Government?’, 2009, pp. 161-162 and 169-170.

year 2027.²¹ Besides the environmental objectives, the directive prescribes a rather detailed freshwater governance system that Member States must transpose into their national legal orders and water administrations.

The freshwater governance system of the WFD is founded on three key pillars. *First*, Member States' water governance arrangements must be hydrologically based, following the natural flow of water rather than pre-existing administrative or geographical boundaries.²² *Second*, the directive prescribes an integrated²³ planning approach, to be carried out at the river basin district level through the adoption of a Programme of Measures (PoM) and a River Basin Management Plan (RBMP) for each district.²⁴ *Third*, an 'adaptive management' approach²⁵ is prescribed by the directive. The approach is conducted in six-year cycles, where chosen measures and strategies are evaluated in view of their success in achieving the environmental objectives, and a review of the objectives, the PoMs and the RBMPs must be carried out every six years. The directive relies on procedural requirements to supervise implementation, where the Member States, for example, must establish procedures for stakeholder involvement, and regularly report on progress made to the EU Commission.

As implied, an adaptive approach in governing water resources calls for a system that allows for flexibility and change in the measures taken, since improving environmental quality and achieving set environmental objectives

²¹ However, a revision of the directive, most likely including an extension of the absolute deadline, is planned to be initiated in 2019.

²² Directive 2000/60/EC, art. 3.

²³ As one of the central principles of EU environmental law, 'integration' has long been advocated as a way to promote sustainability and environmental protection requirements when defining and implementing policies. The integrative approach of the WFD is multifaceted and targets both procedural and substantive elements, aiming primarily at integrating the environmental objectives of the directive into all stages of implementation. From a legal perspective, integration primarily entails coordination in implementation with other EU water directives and national water law, as well as with legal frameworks and policies in other policy fields, such as energy, agriculture, regional policy and spatial planning. It thus includes 'vertical integration' between different decision-making levels and actors including involvement of stakeholders and the public within a specific policy field, as well as 'horizontal integration' of the environmental objectives and water governance system of the WFD into other policies, sectors, activities and measures. See e.g. van Oosten, Uzamukunda & Runhaar, 'Strategies for achieving environmental policy integration at the landscape level', 2018, p. 64; Hedin et al., 'The Water Framework Directive in the Baltic Sea Region, 2007, pp. 23 ff; and Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, pp. 322-328.

²⁴ Directive 2000/60/EC, arts. 11 and 13.

²⁵ As will be further explained in section 2.2, adaptive management is an approach to natural resource management that relies on iterative cycles of determining goals, taking appropriate action, monitoring outcome, evaluating the performance and adjusting management strategies in light of monitoring results. The approach also integrates ecological information, environmental considerations, assessments and planning processes into the criteria for adaptation of management strategies. See e.g. Holling (ed.), *Adaptive environmental assessment and management*, 1978, pp. 137-139; and Craig & Ruhl, 'Designing Administrative Law for Adaptive Management', 2014, p. 17.

are in focus.²⁶ While water *management* activities are focused on improving water quality through implementing measures, monitoring, and evaluating progress in specific river basins, *governance* sets the rules for management activities by providing structures and processes for power distribution and decision-making at several levels.²⁷ Governance includes both ‘formal institutions’ (such as laws and legally binding policies, decision-making procedures, distribution of power and authority and enforcement mechanisms) and ‘informal institutions’ (such as informal rules, power relations, practices and societal rules for decision-making developed within a governance regime).²⁸ ‘Adaptive governance’ thus expands the focus from adaptive management of the particular resource, to address the broader administrative and social contexts in which decisions are made. As this is a study in environmental law, the focus lies on the role of formal institutions in their implementation of the adaptive freshwater governance system of the WFD.

Even though roughly eighteen years have passed since the WFD was adopted, the EU Member States, including Sweden, are still seeming to struggle with interpretative and methodological implementation problems, rather than achieving the desired environmental results.²⁹ For example, in the latest evaluation report it was estimated that only about 50 per cent of Europe’s surface water will have attained the ultimate goal of good water status in 2021.³⁰ Considering that EU legislation on water quality has existed since the 1970s, and that many of the WFD requirements actually stem from such older water directives, this is a remarkably poor result.³¹ Sweden, for

²⁶ A concrete example of how adaptive management can be applied in relation to water is by prescribing adjustable conditions in combination with real-time monitoring directly in a permit for water-related activities, such as dredging. Since the environmental effects of dredging in water often varies with different combinations of weather and tide, absolute limits of e.g. suspended sediment levels or concentrates of pollutants in combination with real-time monitoring, can prevent avoidable adverse impacts to the water environment. The adaptive or flexible part of the conditions in this situation could be that dredging must be cancelled when monitoring reveals the limits are exceeded, and/or alternative methods must be undertaken if the levels are exceeded more often than previously anticipated.

²⁷ See e.g. Pahl-Wostl et al, ‘From applying panaceas to mastering complexity’, 2012, p. 25; Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, p. 444; Dietz, Ostrom & Stern, ‘The struggle to govern the commons’, 2003, pp. 1907-12.

²⁸ Huitema et al, ‘Adaptive Water Governance’, 2009; and Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, p. 444.

²⁹ Giakoumis & Voulvoulis, ‘The Transition of EU Water Policy Towards the Water Framework Directive’s Integrated River Basin Management Paradigm’, 2018; Voulvoulis, Arpon, & Giakoumis, ‘The EU Water Framework Directive: From great expectations to problems with implementation’, 2017, p. 358; EU Commission, ‘The Water Framework Directive and the Floods Directive’, COM(2015) 120 final, p. 3; EU Commission, ‘Blueprint to safeguard Europe’s Water Resources’, COM(2012) 673 final.

³⁰ EU Commission, ‘The Water Framework Directive and the Floods Directive’, COM(2015) 120 final, p. 3.

³¹ van Rijswijk & Backes, ‘Ground Breaking Landmark Case on Environmental Quality Standards?’, 2015, p. 366. See also Howarth, ‘The progression towards ecological quality standards’, 2006, p. 20, who argues that the

example, reported in 2015 that 58 per cent of natural surface waters had attained good ecological status while only 2 per cent of artificial or heavily modified surface waters had attained the lower goal of good ecological potential. None of Sweden's surface waters but 98 per cent of the groundwater bodies had attained good chemical status in 2015.³²

It has been argued that a paradigm-shift towards the hydrological, adaptive and integrated system of the WFD is key to a successful implementation in the Member States,³³ and that law and the design of the formal institutional framework are essential to facilitate such a shift towards a new regime.³⁴ Law, as the basis of the formal institutions, is an inherent part of any governance system, and the aim of law in new contexts must therefore be to provide for adequate governance arrangements that support a new regime and, ultimately, contributes to a sustainable development.³⁵ More knowledge of how the design of formal institutional frameworks affects implementation of adaptive governance is, however, still needed,³⁶ and a further understanding of how adaptive management approaches can be legally operationalised in different contexts has been called for in the literature.³⁷

Since law and legal frameworks are primarily a national concern and part of a specific legal culture and administrative system, it is crucial to examine and identify legal barriers and opportunities in each individual legal system. As Frohlich et al argue, specific studies that focus on discussing how the recommendations from the literature can be used to improve the legal framework are valuable contributions to improving our knowledge about the role of law in adaptive management of natural resources.³⁸ This thesis contributes to filling this knowledge gap, by analysing the Swedish formal institutional framework for freshwater governance and assessing whether or not it can be considered sufficient to fully implement the adaptive and integrated freshwater governance system prescribed by the WFD.

As implied above, Sweden, as well as most other Member States, has encountered difficulties in its implementation of the directive, which also have

WFD, besides updating and integrating previous EU water legislation, introduced ecological quality requirements as its most radical innovation.

³² EU Commission, 'Granskningen av genomförandet av EU:s miljöpolitik. Landrapport - Sverige', SWE(2017) 56 final, p. 18.

³³ Voulvoulis, Arpon, & Giakoumis, 'The EU Water Framework Directive', 2017, p. 358.

³⁴ See e.g. Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, pp. 46, and 407-424; Cosens, Gunderson & Chaffin, 'The Adaptive Water Governance Project', 2014, p. 6; and Ebbesson & Heys, 'Introduction: Where in law is social-ecological resilience?', 2013.

³⁵ See e.g. Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, p. 376.

³⁶ Frohlich et al, 'The relationship between adaptive management of social-ecological systems and law', 2018.

³⁷ McDonald & Styles, 'Legal Strategies for Adaptive Management under Climate Change', 2014, p. 27.

³⁸ Frohlich et al, 'The relationship between adaptive management of social-ecological systems and law', 2018.

attracted attention by the EU Commission.³⁹ For example, the environmental objectives of the WFD were primarily transposed as Environmental Quality Standards (EQSs) in Sweden – a legal instrument that in the Swedish context has suffered from both uncertainty regarding its legal status and weaknesses in implementation.⁴⁰ The administration of freshwater introduced to implement the WFD has also suffered from weaknesses and uncertainties that have hampered the operational work of achieving the environmental objectives.⁴¹ The latter implementation problem was recently addressed by the Swedish government with the initiation of an inquiry to review the Swedish freshwater administration.⁴² The mission shall be reported in the second half of 2019.

Another recent official government report in Sweden has, in light of the implementation difficulties, called for a transition to a more centralised and top-down system of water government in Sweden.⁴³ However, as Voulvoulis, Arpon and Giakoumis point out, this general tendency to request more traditional and hierarchical government arrangements in lack of attained environmental results, is likely to “lead to significant barriers to the enabling of the effective multi-sectorial integration and governance championed by the WFD”.⁴⁴ Considering this, it is important to identify *which* kind of formal governance arrangements that are able to support efficiently adaptive and integrated governance of freshwater involving several actors and levels, and, conversely, which arrangements are not. To contribute to such identification is an important incentive for this study. In essence, this thesis intends to explore the role of law in supporting a shift towards a holistic, adaptive and

³⁹ EU Commission, Infringement procedure 2007/2239. The EU Commission has primarily criticised how certain parts of the WFD originally were transposed in Sweden, and submitted a reasoned opinion on the matter on January 25 2018 (dnr UD2018/01748/RS). As a result of the infringement procedure, important legal changes were adopted by the Swedish Parliament in June 2018, see Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’; Act (2018:1407) amending the Environmental Code. The legislative changes are analysed in section 3.3.2.3.

⁴⁰ See e.g. Government Official Reports (SOU) 2002:107, ‘Bestämmelser om miljö kvalitet’; Government Official Report (SOU) 2005:113, ‘Åtgärdsprogram för miljö kvalitetsnormer’; Government Bill (prop.) 2009/10:184, ‘Åtgärdsprogram och tillämpningen av miljö kvalitetsnormer’; Fröberg & Bjällås, ‘Är målen i EU-direktiven som rör vatten genomförda på ett juridiskt korrekt sätt i svensk rätt?’, 2013; Olsen Lundh, ‘Miljö kvalitetskrav eller miljö kvalitetsnormer?’, 2014; Bjällås, Fröberg, & Sundelin, ‘Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas?’, 2015, pp. 22-25; Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016; and further section 3.3.2.2.

⁴¹ See e.g. Government Official Reports (SOU) 2002:105, ‘Klart som vatten’; Government Bill (prop.) 2008/09:170, ‘En sammanhållen svensk havspolitik’; Government Bill (prop.) 2010/11:86, ‘Havs- och vattenmyndigheten’; Government Review Directions (Dir.) 2017:96, ‘Översyn av vattenförvaltningens organisation’; Lundqvist, ‘Integrating Swedish Water Resource Management’, 2004, pp. 415-422; Söderberg, ‘Complex governance structures and incoherent policies’, 2016, pp. 93-96; and further section 3.3.2.1.

⁴² Government Review Directions (Dir.) 2017:96, ‘Översyn av vattenförvaltningens organisation’, p. 5.

⁴³ Government Official Report (SOU) 2015:43, ‘Vägar till ett effektivare miljöarbete’, pp. 380-382.

⁴⁴ Voulvoulis, Arpon, & Giakoumis, ‘The EU Water Framework Directive: From great expectations to problems with implementation’, 2017, p. 362.

polycentric governance structure at the scale of river basins, in lieu of the long-standing conventional structure in Swedish water governance primarily based on traditional administrative and geographical boundaries between authorities, counties and municipalities.

1.2 Aim and delimitations

The overall aim of this thesis is to identify, analyse and discuss the role of law and the design of the formal institutional framework in supporting national implementation⁴⁵ of the integrated and adaptive freshwater governance system of the WFD, with Sweden as the main object of study. The study focuses in particular on determining whether Sweden's formal institutional framework, including legal rules, principles, instruments and the administrative structure, is sufficient to fully implement the freshwater governance model provided by the WFD, and, ultimately, achieve the prescribed environmental results. Part of the aim is to suggest improvements in Swedish law and water administration where deficiencies are found.

I pursue this aim by, *first*, exploring the literature concerning environmental and adaptive governance of natural resources, including freshwater, with the primary purpose of identifying the role of law and formal institutions in such complex governance systems the WFD represents. *Second*, I analyse the WFD and the general implementation requirements under EU law, to identify the legal obligations lying with Member States in their national implementation of the directive. *Third*, I analyse how the Swedish formal institutional framework for freshwater governance facilitates and hinders implementation of the WFD.

As regards the Swedish implementation, the primary focus is to study the public administrative *system* for freshwater governance. Thus, the study is limited to the public and administrative law perspective of governance, focusing on formal institutions that establish structure, authority, and processes for governing freshwater resources.⁴⁶ Key issues of relevance for the aim of this thesis are how the public power and authority are distributed among the different authorities involved; how decisions are made and the procedures that guide authoritative decision-making; how conflicts are resolved within the governance system; and which control and enforcement mechanisms that exist and whether they can be considered sufficient for the

⁴⁵ As noted in section 1.1, 'implementation' is used in this thesis as a summarising term including transposition, application and enforcement of an EU directive. It thus includes all stages of implementation.

⁴⁶ See e.g. Cosens et al, 'The role of law in adaptive governance', 2017.

purpose of coercion. As a result, specific legal rules or instruments of Swedish environmental and water law aimed at regulating the behaviour of private actors are not closely examined.

Although freshwater governance in accordance with the WFD is the main focus in this study, large parts of the results can be of interest also in the governance of other natural resources. Since the study primarily focuses on the process of implementation in Sweden, I will not, however, critically analyse the freshwater governance system the directive prescribes in any detail. This means that I will not immerse myself in the discussion of possible future WFD improvements, although certain shortcomings identified in previous studies are acknowledged and discussed to some extent. The focus on the Swedish implementation of the WFD also means that governance of transboundary water courses has not been closely examined here.⁴⁷

1.3 Research approach, methods and material

1.3.1 Initial points of departure

This is a doctoral thesis in environmental law, largely focused on the role of law and the design of the formal institutional framework in achieving environmental objectives, which in this case are prescribed by the WFD. A first and initial point of departure for this study is thus the attainment of established and legally binding environmental objectives. The view taken here is that law and formal institutional frameworks play a crucial role in accomplishing that task. In this respect, I approach the law purposively – as a means to achieve defined environmental objectives – rather than as an end in itself;⁴⁸ the legal solutions proposed and discussed as a result of this study, aim, overall, to encourage the implementation of the water governance system of the WFD and achieve its ultimate goal of good water status.

A second central point of departure is that the EU legal order is hierarchically superior to the national, in particular as regards adopted legal Acts (regulations and directives), as well as general legal principles and case law developed by the CJEU.⁴⁹ This general starting point entails that the main

⁴⁷ Transboundary water courses have several individual legal principles and different/additional tools for handling them, which are mainly treated in international water law, while this study focuses exclusively on the EU WFD.

⁴⁸ For a similar approach, see Howarth, 'The progression towards ecological quality standards', 2006, p. 4.

⁴⁹ See e.g. Case 6/64, *Flaminio Costa v. E.N.E.L.* [1964] ECR 585, para 594, where the Court first established the primacy doctrine of EU law by holding that in situations where a provision of EU law is found to collide with a national measure the EU provision must be given primacy, since the law stemming from the Treaty would

responsibility for implementing EU directives, in this case the WFD, lies with the Member States. They are responsible for adopting rules and instating proper administrative arrangements, sufficiently underpinned by the formal institutional framework, to facilitate a shift towards the integrated and adaptive freshwater governance system of the directive. In this respect, I share the argument of DeCaro et al, that national traditional centres of authority, foremost governments and national parliaments, must establish conditions that enable incremental steps towards facilitating the achievement of set environmental objectives and towards supporting cooperation between actors and levels involved.⁵⁰

Thirdly, and related to the previous points of departure, this study is based on a societal⁵¹ and problem-oriented perspective, meaning that it is the environmental problem that defines the methods of how it should be resolved.⁵² This approach is also referred to as a proactive methodological approach within environmental law methodology, where law and legal functions are analysed in their capacity to legally operationalise environmental objectives and promote sustainability.⁵³ The analysis of legal materials are hence conducted in view of their ability to achieve sustainable freshwater governance and good water status, by facilitating implementation of the integrated and adaptive governance system of the WFD. The societal and problem-oriented perspective also, in part, entails an interdisciplinary approach to legal research in this thesis; literature produced outside legal scholarship has been used for a deeper understanding of particular problems and the role and implications of law in resolving them.⁵⁴

otherwise be deprived of its character as Community law. See also Reichel, 'EU-rättslig metod', 2018, p. 112-115.

⁵⁰ DeCaro et al, 'Legal and institutional foundations of adaptive environmental governance', 2017.

⁵¹ As Sandgren emphasises, the societal relevance of a particular legal study is one of the most important criteria to assess its quality. See Sandgren, 'Rättsvetenskap och samhällsnytta', 2007, p. 5.

⁵² Westerlund, *Fundamentals of Environmental Law*, 2007, p. 79; and Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, p. 371.

⁵³ Jóhannsdóttir, 'The Value of Proactive Methodological Approaches for understanding Environmental Law', 2014, pp. 250-252. This approach has also been referred to as 'constructive jurisprudence'. See e.g. Gipperth, *Miljökvalitetsnormer*, 1999, p. 245; Westerlund, *Fundamentals of environmental law*, 2007, pp. 545-555; and Pettersson, *Renewable Energy Development and the Function of Law*, 2008, p. 3.

⁵⁴ See e.g. Sandgren, 'Rättsvetenskap och samhällsnytta', 2007, p. 18; Sandgren, 'Framtidens avhandlingar i rättsvetenskap', 2007, p. 275; Zamboni, *Law and Politics. A dilemma for contemporary legal theory*, 2008, p. 9; and Gooch, *Protecting Ecological Integrity in Transboundary Watercourses*, 2016, pp. 30-31. As Gräns stresses, the use of knowledge produced outside legal scholarship in this thesis means that I view the law as an open, dynamic and flexible system, rather than as a closed and internal system independent of other scientific fields, as suggested by Kelsen's *Reine Rechtslehre* from 1934. See Gräns, 'Allmänt om användningen av andra vetenskaper inom juridiken', 2018, pp. 429-430 and 436-438.

1.3.2 Methods and materials

This thesis is primarily founded on legal analysis and qualitative text interpretation of various sources of law at both national and EU levels.⁵⁵ The study thus departs from a traditional legal method based on the theory of the sources of law, where legal materials are the focus of analysis and interpretation.⁵⁶ While legal rules are considered the principal source of interpretation and analysis in this theory, supplementary legal materials are often necessary to establish the content and meaning of legal texts. However, as Svensson stresses, there is neither only one legal method nor one single theory on the sources of law, which makes it important to describe which legal sources have been used and how they are interpreted in a particular study.⁵⁷

In this study, the legal method essentially means that legal materials have been systematised and analysed with a view to describing the content and meaning of, primarily, the legal rules, as well as the balance between legal principles, statutes and provisions developed at both EU and national levels. As this is a study of the national implementation of an EU directive, emphasis has been placed on the analysis of national law in light of the law and legal principles developed within the EU legal system, primarily the WFD and legal principles and case law developed by the CJEU.⁵⁸

Different interpretative methods have been used in this study, decided foremost by the main purpose of the task or topic. With respect to legal rules, from the EU as well as the Swedish legal system, the initial purpose of interpretation has been to determine their legal meaning and content. For this purpose, a traditional 'legal dogmatic' or 'analytical approach' has been used,⁵⁹ where the wording ('linguistic interpretation') of the rules combined with their context ('systematic interpretation') and interpretative guidance

⁵⁵ Nääv & Zamboni, *Juridisk metodlära*, 2018, p. 17; and Sandgren, 'Om teoribildning och rättsvetenskap', 2004-05, p. 316.

⁵⁶ See e.g. Munck, 'Rättskällor förr och nu', 2014, pp. 199-208; Peczenik, *On Law and Reason*, 2008, pp. 257-303; Olsen, 'Rättsvetenskapliga perspektiv', 2004, pp. 105-145; Jareborg, 'Rättsdogmatik som vetenskap', 2004, p. 9; Lehrberg, *Praktisk juridisk metod*, 2016, pp. 101-118; and Bernitz et al, *Finna rätt*, 2017, in particular chapters 3-6 and 8-9.

⁵⁷ Svensson, 'De legala tolkningarna', 2014, pp. 211-212.

⁵⁸ Reichel, 'EU-rättslig metod', 2018, pp. 109-110, 126-127. See also Neergaard, Nielsen & Roseberry (eds.), *European Legal Method*, 2011.

⁵⁹ While some scholars prefer the term 'legal dogmatics' others prefer 'analytical study of law' to describe essentially the same legal approach in legal scholarship, see Peczenik, *On Law and Reason*, 2008, pp. 13-14. For a recent description of the dogmatic approach, see Kleinman, 'Rättsdogmatisk metod', 2018, pp. 21-46. See also Jareborg, 'Rättsdogmatik som vetenskap', 2004. Cf. Sandgren, 'Rättsvetenskap och samhällsnytta', 2007, p. 16; and Sandgren, 'Är rättsdogmatiken rättsdogmatisk?', 2005, p. 656, who argues for the latter term as a more accurate description of legal scholarship.

from supplementary legal sources have been used in the analysis.⁶⁰ For Swedish law, such supplementary legal materials have primarily consisted of preparatory works, case law and, to some extent, scholarly literature. As for establishing the content and meaning of EU legal rules, case law and general legal principles developed by the CJEU, combined with scholarly literature and guidance developed by the informal Common Implementation Strategy (CIS) have been the primary supplementary legal materials used.

In the analysis of EU law, the method preferred by the CJEU, that is the 'objective teleological approach', has been used as complement to the linguistic and systematic approaches.⁶¹ Characteristic for this interpretative method is that the overall aim and purpose of the legal text (*ratio legis*) are emphasised when determining its content, meaning, and how it should be applied in contemporary society, rather than adhering to the subjective intentions of the legislator when the law was adopted.⁶² As a method based on purposiveness, the teleological interpretative approach is also the method that best describes how the overarching question of this thesis has been addressed. More specifically, the focus of this analysis has regarded whether the Swedish formal institutional framework for freshwater governance is sufficient to fully implement the system for freshwater governance imposed through the WFD and achieve the environmental objectives prescribed.

Mindful that literature from other academic fields can contribute to solutions to how one can ensure that natural resources, in this case freshwater, is sustainably governed, materials produced outside legal scholarship have also been used in the thesis. External materials of interest to this study have foremost been developed within the social sciences, ecology, as well as adaptive environmental governance and resilience research. The materials have been used with the view to developing a deeper understanding of sustainable water governance, including how the law can be used in achieving

⁶⁰ Peczenik, *On Law and Reason*, 2008, pp. 312-317; and Neergaard & Nielsen, 'Where Did the Spirit and Its Friends go? On the European Legal Method(s) and the Interpretational Style of the Court of Justice', 2011, p. 99.

⁶¹ In the EU context, the teleological approach is often described as 'meta-teleological', as the CJEU often emphasises the overall aim and objectives of the Treaties and the general *effet utile* of EU law, besides the aim and objectives of a specific legal Act. For discussions of this objective teleological interpretative method, see Mayr, 'Putting a Leash on the Court of Justice? Preconceptions in National Methodology v *Effet Utile* as a Meta-Rule', 2012/13, pp. 10-17; Neergaard & Nielsen, 'Where Did the Spirit and Its Friends go? On the European Legal Method(s) and the Interpretational Style of the Court of Justice', 2011, pp. 108-128; Derlén, Lindholm & Naarttijärvi, *Konstitutionell rätt*, 2016, p. 504; and Reichel, 'EU-rättslig metod', 2018, p. 122.

⁶² For discussions of the general differences between subjective and objective legal interpretative methods, see Strömholm, *Rätt, rättskällor och rättsstillämpning*, 1996, pp. 453-456; and Peczenik, *On Law and Reason*, 2008, pp. 282-285, and 330-339.

sustainability.⁶³ The remainder of this section describes the main legal and external material analysed in the different parts of the thesis.

Paper I builds on an analysis of the WFD and the Swedish legal implementation, combined with an extensive literature review of official reports on implementation and legal and governance literature on governance approaches to natural resource management. The emphasis of material used is thus placed on law and literature produced within and outside of legal scholarship, while preparatory works and case law have been sparsely used in this paper. Paper II is primarily based on an analysis of case law from the CJEU as well as from the Swedish Land and Environment Courts and the Land and Environment Court of Appeal. In addition, regarding the Swedish implementation of the WFD, preparatory works and legal literature were used in the analysis.

In paper III, the legal framework for implementing the WFD in Sweden was the primary legal source analysed, while preparatory works, case law and legal literature on planning and Swedish spatial planning law constituted the additional material. Lastly, paper IV emphasises the examination of the legal framework for handling polluted storm water. Preparatory works and official reports were used as supplements to analysing and interpreting the legal texts. In order to understand the environmental problems that polluted storm water causes in the water environment, scientific and technical material constituted important additional material for the analysis. Interviews with key actors in the Bothnian Bay River Basin District were also conducted to better understand the practical handling of polluted storm water in the particular river basin district. These interviews exemplified the legal discussion in the paper.

As for the chapters in this contextual framework for the thesis, chapters 2, 3 and 5 require specific methodological reflections. Chapter 2 is based on an extensive, but not exhaustive, literature review and analysis of the law and governance literature in general and on integrated and adaptive environmental and water law and governance in particular. In addition, the literature on environmental law, sustainability, and resilience was examined. This literature is published in international academic journals as well as Swedish and Nordic journals. The overall purpose of the literature review was to identify key functions the formal institutional framework needs to provide in the integrated, adaptive and multi-level governance system of the WFD.

⁶³ The legal rules have thus been studied in a wider social-ecological context. See e.g. Sandgren, 'Om teoribildning och rättsvetenskap', 2004-05, p. 299, discussing the use of theories developed outside of law in jurisprudence. See also Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 545-554; and Pettersson, *Renewable Energy Development and the Function of Law*, 2008, p. 3.

In chapter 3, the analysis of the Swedish legal sources regarding implementation of the WFD (rules, preparatory works, case law and scholarly literature) was combined with an analysis of the relevant sources of EU law (the WFD, general legal principles, CJEU case law, official guidance, and scholarly literature). The EU legal sources were examined primarily to identify the legal requirements that are imposed on Member States under the WFD. In addition, certain governance literature regarding implementation of the WFD in Sweden, was used for a wider understanding of specific implementation problems.

Finally, in chapter 5, I combine the result of the literature review from chapter 2 with the results from chapter 3 and the four papers regarding the Swedish implementation process of the WFD. The aim here is to draw conclusions in light of the overall purpose of this thesis and discuss potential improvements to the Swedish formal institutional framework for freshwater governance.

1.4 Previous related research

This thesis builds on earlier work in environmental law, in particular such theoretical work related to the role of law and the design of the formal institutional framework in governing natural resources and achieving environmental objectives. In this respect, the work of Westerlund, Gipperth, Carlman and Christiernsson have been of particular importance for this study. Westerlund for example, focuses in several studies on the role of law and the design of the legal framework in order to achieve set environmental objectives, and ultimately a sustainable development.⁶⁴ Gipperth's work similarly relates to the legal operationalisation of EQSs, where a key aspect is how to handle 'implementation deficits'; the lack of correlation between set environmental objectives and achieved environmental results.⁶⁵ To scientifically explain this gap, for example by trying to find legal functions that hinder an effective implementation of environmental objectives and/or propose legal solutions that potentially can decrease 'contra productive functions' in the law, is an important task within environmental legal scholarship to which this thesis intends to contribute.⁶⁶

⁶⁴ Westerlund, *En hållbar rättsordning*, 1997, chapters 1-4, and 15; Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, in particular pp. 376-379; and Westerlund, *Fundamentals of Environmental Law Methodology*, 2007.

⁶⁵ Gipperth, *Miljökvalitetsnormer*, 1999, pp. 39-49.

⁶⁶ *Ibid*, p. 269; Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, p. 373; and Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, pp. 153-189.

Carlman builds on the theoretical framework developed by Gipperth and forms a theory referred to as ‘adaptive environmental planning’. In such a planning system, the objectives and limits are drawn up from the top, and based on the ecological conditions.⁶⁷ All planning conducted at lower-authoritative levels must be within the limits provided for by the planning developed at higher hierarchical levels.⁶⁸ Christiernsson focuses in her thesis primarily on how the law and design of the legal framework relates to the protection of biological diversity when regulating and planning hunting activities.⁶⁹ For this study, her theoretical discussion on adaptive and ecosystem-based management from a legal perspective and more general conclusions on the role of law in governing complex and dynamic ecosystems have been of principal interest.

With respect to implementing the WFD in Sweden, a couple of studies were published during the first cycles of implementation. While most of the early studies mainly focused on the character of the legal obligations under the directive,⁷⁰ the more recent studies have mainly been concerned with legal analysis in light of the CJEU *Weser* case⁷¹ in 2015.⁷² The debates concerning the Swedish legal obligations under the WFD before and after *Weser* have been of interest to this study, as reflected in the references, particularly in chapter 3. Other previous studies related to the Swedish implementation of the WFD have focused mostly on traditional aspects of Swedish water law, foremost the WFD’s implications for older rights and existing water operations.⁷³ The legal debate and government official reports on this subject

⁶⁷ Carlman, ‘Adaptiv miljöplanering nästa’, 2003, pp. 292-294, and 299. See also Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 225.

⁶⁸ Carlman, ‘Adaptiv miljöplanering nästa’, 2003, p. 293. See also Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, p. 323.

⁶⁹ Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011.

⁷⁰ See e.g. Ekelund-Entsson & Gipperth, ‘Mot samma mål? Implementeringen av EU:s ramdirektiv för vatten i Skandinavien’, 2010, pp. 34-35; Fröberg & Bjällås, ‘Är målen i EU-direktiven som rör vatten genomförda på ett juridiskt korrekt sätt i svensk rätt och kan genomförandet anses funktionellt?’, 2013; and Olsen Lundh, ‘Miljökvalitetskrav eller miljökvalitetsnormer?’, 2014, taking a completely opposing view from Fröberg & Bjällås in crucial aspects of the directive.

⁷¹ Case C-461/13, *Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland* [2015] ECR I-433 (‘*Weser*’).

⁷² See e.g. Michanek, ‘Tillstånd får inte ges in aktuell ytvattenstatus försämrats eller uppnåendet av god ytvattenstatus äventyras’, 2015; Bjällås, Fröberg & Sundelin, ‘Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas?’, 2015; and SwAM, ‘Följder av Weserdomen. Analys av rättsläget med sammanställning av domar’, 2016.

⁷³ See e.g. Darpö, ‘Tradition och förnyelse på vattenrättens område’, 2014; Darpö, ‘Så nära, och ändå så långt bort’, 2016; Olsen Lundh, ‘Tvenne gånger tvenne ruttna gärdesgårdar’, 2013; Lindqvist, ‘Privilegiebrev och urminnes hävd’, 2013; and Strömberg, ‘Urminnes hävd och vattenrätten’, 2014. See also Government Official Report (SOU) 2009:42, ‘Vattenverksamhetsutredningen’; Government Official Report (SOU) 2012:89, ‘4 kap. 6 § miljöbalken’; Government Official Report (SOU) 2013:69, ‘Ny tid ny prövning – förslag till ändrade vattenrättsliga regler’; Government Official Report (SOU) 2014:35, ‘I vått och torrt – förslag till ändrade vattenrättsliga regler’.

have been of interest here, and part of the complexity is reflected in paper II of this thesis. However, parts of the previous legal debate will become obsolete when the new law proposal for hydropower operations enters into force on January 1.⁷⁴ This thesis, including the final analysis of the legal framework in chapter 5, has considered these forthcoming legal changes.

The more recent interdisciplinary research programme 'A Systems Perspective on Environmental Quality Standards' (SPEQS)⁷⁵ has been of particular interest to this study, not least because the programme in certain respects concerned the implementation of the WFD in Sweden. Specifically, SPEQS aimed to analyse and suggest improvements to the Swedish system for implementing EQSs. For this study, primarily the legal studies conducted within the program, as well as the overall results presented in the final report were of interest,⁷⁶ as my study is focused on implementation of the governance system of the WFD and the water-related EQSs. For example, Olsen Lundh's comprehensive study of environmental quality objectives and EQSs in both the EU and the Swedish contexts, have been used for an increased understanding of the complexity of these instruments and their implementation in Sweden, from a wider perspective than just water quality.⁷⁷

Naturally, also general legal studies on the WFD as well as its implementation in other EU Member States have been of interest to me. Dutch legal research on the interpretation and implementation of the directive, most often applied to the Dutch legal context, is particularly prominent in this respect.⁷⁸ Other primarily comparative studies from both the Nordic region⁷⁹ as well as other EU regions⁸⁰ have illustrated implementation problems and brought interesting analyses as to the causes of those problems in the context of foreign legal systems. These studies have primarily been interesting for the orientation of this thesis, as well as brought valuable input to the

⁷⁴ Government Bill (prop.) 2017/18:43, 'Vattenmiljö och vattenkraft'; and Act (2018:1407) amending the Environmental Code.

⁷⁵ See the webpage of the program, www.speqs.se, where the project description as well as all of the publications, including the final report of the programme are available (2018-04-24).

⁷⁶ See Michanek et al, *Genomförandet av det svenska systemet för miljökvalitetsnormer*, 2016, pp. 28 ff.

⁷⁷ Olsen Lundh, *Panta Rei*, 2016. See also Olsen Lundh, 'Four points on point four', 2014.

⁷⁸ See e.g. van Kempen, 'Countering the Obscurity of Obligations in European Environmental Law', 2012; Green et al, 'EU Water Governance: Striking the right balance between Regulatory Flexibility and Enforcement?', 2013; van Holten & van Rijswijk, 'The governance approach in European Union Environmental Directives', 2014; van Rijswijk et al, 'Ten building blocks for sustainable water governance', 2014; and van Rijswijk & Backes, 'Ground Breaking Landmark Case on Environmental Quality Standards?', 2015.

⁷⁹ Baaner, 'Programmes of Measures under the Water Framework Directive', 2011; Jacobsen, Tegner Anker & Baaner, 'Implementing the water framework directive in Denmark', 2017.

⁸⁰ See e.g. Keessen et al, 'European River Basin Districts: Are they swimming in the same implementation pool?', 2010; and Voulvoulis, Arpon, & Giakoumis, 'The EU Water Framework Directive: From great expectations to problems with implementation', 2017.

interpretation of the legal obligations under the WFD.⁸¹ Josefsson, for example, thoroughly examines and critically reviews the closer meaning of the good ecological status obligation under the WFD, combining a legal and ecological perspective.

Finally, the interdisciplinary *Adaptive Water Governance Project*,⁸² conducted in the US context and mainly by US scholars, has served as a source of inspiration for this thesis. Considering its focus on the US (legal) system, the project has primarily brought interesting theoretical analyses to bear on the identification of the role and functions of law in adaptive and integrated freshwater governance systems, driven by bottom-up approaches.⁸³ Previous Swedish studies on the role of law in the governance of complex social-ecological systems have similarly been used mainly as theoretical inspiration in the identification of the role of law and crucial legal functions applied to the specific object of this thesis, i.e. freshwater governance. In particular, the work of Ebbesson,⁸⁴ Bohman,⁸⁵ Nilsson and Bohman,⁸⁶ and, to some extent, Gooch,⁸⁷ who focuses on protecting the ecological integrity of transboundary water courses, have been of interest in this respect.

To sum up, the present thesis builds on the results of several previous studies, applied to the legal analysis of the Swedish implementation of the WFD. Through the analysis of how the Swedish formal institutional framework facilitates and hinders implementation of the freshwater governance system of the WFD in certain respects, important conclusions on the role of law in integrated and adaptive freshwater governance can be drawn. Based on these conclusions, suggestions can be made as for how the formal institutional framework can be improved to better implement the freshwater governance system of the WFD and thus enhance the chances of achieving its environmental objectives.

⁸¹ Josefsson, *Good Ecological Status*, 2015.

⁸² See e.g. Cosens, Gunderson & Chaffin, 'The Adaptive Water Governance Project' 2014.

⁸³ See e.g. Arnold & Gunderson, 'Adaptive Law and Resilience', 2013; Chaffin, Gosnell & Cosens, 'A decade of adaptive governance scholarship: synthesis and future directions', 2014; Cosens & Stow, 'Resilience and Water Governance', 2014; Cosens et al, 'Identifying legal, ecological and governance obstacles, and opportunities for adapting to climate change', 2014; DeCaro et al, 'Legal and institutional foundations of adaptive environmental governance', 2017; and Craig et al, 'Balancing stability and flexibility in adaptive governance', 2017.

⁸⁴ Ebbesson, 'The rule of law in governance of complex socio-ecological changes', 2010; and Ebbesson & Hey, 'Introduction: Where is Law in Social-Ecological Resilience?', 2013.

⁸⁵ Bohman, '*Transboundary Law for Social-Ecological Resilience. A study on Eutrophication in the Baltic Sea Area*', 2017.

⁸⁶ Nilsson & Bohman, 'Legal prerequisites for ecosystem-based management in the Baltic Sea area', 2015.

⁸⁷ Gooch, *Protecting Ecological Integrity in Transboundary Watercourses. An Integrational Approach to Implementing Environmental Flows*, 2016.

1.5 Organisation of the thesis

This thesis consists of two main parts. The first provides the contextual framework for this study, divided into five chapters. Following this introductory chapter, where I present the background, aim and delimitations, research approach and methodology, and previous research of interest for the thesis, the second chapter explores the role that law and formal institutional frameworks play in adaptive environmental governance regimes. The chapter explores legal and governance literature to identify key functions that the formal institutions need to provide to facilitate a shift towards more adaptive and integrated forms of natural resource governance.

The third chapter examines the freshwater law and governance system prescribed by the WFD, followed by a discussion of the Swedish process of implementation. The Swedish formal institutional framework and administrative system for freshwater governance are in focus in the discussion and previously identified implementation problems are described. The chapter ends with an analysis of the latest Bill adopted by the Swedish legislator, meaning that significant legal changes will enter into force on January 1 2019. The Bill is analysed through the lens of adaptive and integrated water governance, as prescribed by the WFD, and with a view to determining whether crucial requirements of the WFD can be considered to have been accurately transposed as a result of the forthcoming legislative changes.

The fourth chapter contains an overview of the four papers included in this thesis, where the main results of each paper are summarised. The fifth and concluding chapter contains the final analysis and main conclusions of this thesis. The chapter first summarises the main obligations that rest with EU Member States as a result of the WFD and how it has been interpreted by the CJEU. The focal part of the chapter analyses the Swedish implementation of the adaptive and integrated governance system of the directive, highlighting the implementation problems identified in this thesis. This analysis closes with emphasising possible legislative improvements, before a few concluding remarks are made.

The second part consists of four appended papers, which all in different ways contribute to achieving the overall purpose of the thesis. The focus of each of the papers is briefly explained below, where the main idea is to show how they contribute to the overall purpose of this thesis. The results of the papers are therefore not discussed in any detail here.

Paper I contributes to the overall aim of this thesis by focusing on implementation hurdles relating primarily to the administrative water

governance system in Sweden. In the paper, administrative difficulties within the Swedish system are identified and discussed, as they seem to hinder the practical implementation of the environmental objectives towards a good water status. An important argument in the paper is that national governments must properly transpose framework directives, such as the WFD, into their national legal frameworks. It is maintained that the law serves as a foundation when implementing new regimes, such as integrated planning and adaptive management of freshwater resources, where each actor is properly empowered and supported by formal rules and the administrative system.

Paper II provides an examination of the environmental objectives of the WFD, including how its exemptions and derogations may be used, in light of the case law developed by the CJEU. The paper also provides an examination and legal analysis of how the Swedish Land and Environment Courts, including their Court of Appeal, have interpreted and applied the WFD's environmental objectives both before and after the important CJEU clarifications. The paper contributes to the overall purpose of this thesis by showing, for example, that the lack of legal rules transposing the requirements of the directive properly into the national legal system has hampered the implementation of the environmental objectives in individual licensing procedures. The article especially illustrates how difficult it is for new regimes or environmental principles to have an impact in individual situations, when competing with more traditional legal principles protected under the rule of law.

Paper III examines the extent to which the adaptive and integrated planning approach of the WFD at the scale of river basins has been integrated into Swedish spatial planning law, in particular chapters 3-6 of the Environmental Code (1998:808) and the municipal Planning and Building Act (2010:900). It contributes to the overall purpose of this thesis by illustrating the need for proper horizontal integration between the water planning system of the WFD and spatial planning activities conducted at the municipal level. Drawing on previous knowledge of the crucial role of spatial planning activities in the achievement of EQSs for water, combined with the varying level of ambition for municipalities allowed under the current legal framework, the paper argues for and suggests improvements to the Swedish legal framework as regards horizontal integration of the WFD. The legislative changes are suggested in order to improve both the general possibilities to achieve the decided EQSs for water (the environmental objectives of the WFD), as well as the implementation of the holistic and integrated planning approach of the WFD.

Paper IV, finally, examines and discusses the freshwater governance system of the WFD with a particular focus on the environmental effects of polluted storm water. Against the background of storm water from roads, buildings and paved surfaces in densely populated areas constituting a dominant source of the supply of pollutants into surface waters as well as a potential source of groundwater pollution, the paper contributes to the aim of the thesis by drawing attention to the importance of addressing the problem in order to achieve the environmental objectives of the WFD. At centre stage in the analysis is the role of law and design of the legal framework for handling polluted storm water, where the main argument of the paper is that the current legal framework in Sweden is insufficient in this regard.

Together, the four papers and the contextual framework provide a sound basis for fulfilling the overall aim of the thesis.

2. Analytical Framework: Identifying the Role of Law in Adaptive Environmental Governance

2.1 Introduction

This chapter explores the literature concerning environmental governance of natural resources, such as freshwater, with a primary focus on the role of law and formal institutions. The aim is to identify key functions that the formal institutional framework must provide for in the kind of integrated, adaptive and multi-level governance systems the WFD represents. For this purpose, legal and governance literature has been examined, with an emphasis on studies in environmental law and governance as pursued within the social sciences. Particular attention has been devoted to literature specifically addressing integrated and adaptive water law and governance.

As previously stated, the main responsibility for implementing EU framework directives, such as the WFD, lies with the Member States. Considering this, it is crucial to compile knowledge of the role of law in environmental governance of natural resources to achieve the main purpose of this thesis: to determine whether the Swedish formal institutional framework can be considered sufficient to fully implement the system for governing freshwater, provided by the WFD, and ultimately achieve the prescribed environmental results. A fundamental idea in the directive is that the natural flow of water should be the starting point for governance and administrative arrangements. In other words, the WFD prescribes a hydrological, or ecosystem-based, governance system, with river basin districts as the main units of governance.

Challenges to sustainable governance of complex, non-linear natural resources, such as freshwater in large-scale river basins, have long informed the theoretical discussion of environmental research within the social sciences, including legal studies.⁸⁸ Since all natural resources are part of complex and dynamic social-ecological systems, a fundamental aspect of the theoretical development within this discourse focuses on linking social and ecological systems. In that context, an important task is to examine how such

⁸⁸ See e.g. Dietz et al, 'The Struggle to Govern the Commons', 2003, pp. 1907-1908; Ostrom, *Understanding Institutional Diversity*, 2005; Folke, 'Resilience: The emergence of a perspective for social-ecological systems analyses', 2006; Ostrom, 'The Challenge of Common-Pool Resources', 2008; Ebbesson, 'The rule of law in governance of complex socio-ecological changes, 2010; Huitema et al, 'Adaptive Water Governance', 2009; DeCaro et al, 'Legal and institutional foundations of adaptive environmental governance', 2017.

complex systems can be made more resilient in terms of securing long-term ecosystem services, and ensure the capacity to adapt to changing environmental conditions.⁸⁹ As explained by Arnold and Gunderson: “Rapid and often nonlinear transformations in ecosystems and social systems (...) require social institutions – including legal institutions – that are flexible and adaptive to these types of change.”⁹⁰

Different theoretical concepts and approaches have been developed in the environmental governance literature in this regard, where resilience research⁹¹ and adaptive environmental governance⁹² are the major orientations, albeit closely related. As described by DeCaro et al, an important starting point for environmental governance theory is the idea that governance systems can, theoretically, be designed to facilitate and embrace adaptation, commonly referred to as ‘adaptive capacity’.⁹³ Important features of such adaptive environmental governance arrangements identified in the literature are that they should be ecosystem-based; polycentric (often with emphasis on decentralisation and subsidiarity); promote incremental change through experimentation and learning (often conducted in cycles); and have wide elements of public and stakeholder involvement.⁹⁴ These key features serve as a basis for this chapter, since the adaptive and integrated system for freshwater governance prescribed by the WFD promotes the same ideals.⁹⁵

With the aim of identifying the role of law in environmental governance, I will initially explain the wider theoretical developments regarding

⁸⁹ Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, p. 442; and Walker & Salt, *Resilience Thinking: Sustaining Ecosystems and People in A Changing World*, 2006, pp. 1-2.

⁹⁰ Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10427.

⁹¹ See e.g. Carpenter, Westley & Turner, ‘Surrogates for resilience of social-ecological systems’, 2005; Folke, ‘Resilience: The emergence of a perspective for social-ecological systems analyses’, 2006; Walker & Salt, *Resilience thinking: Sustaining Ecosystems and People in A Changing World*, 2006; Gunderson et al, ‘Water RATs (Resilience, Adaptability and Transformability)’, 2006; Gunderson, Allen & Holling, *Foundations of Ecological Resilience*, 2009; and Ostrom, ‘A General Framework for Analyzing Sustainability of Social-Ecological Systems’, 2009.

⁹² Chaffin, Gosnell & Cosens, ‘A decade of adaptive governance scholarship: synthesis and future directions’, 2014; DeCaro et al, ‘Legal and institutional foundations of adaptive environmental governance’, 2017; Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013; Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005; Huitema et al, ‘Adaptive Water Governance’, 2009; and Gupta et al, ‘The Adaptive Capacity Wheel’, 2010.

⁹³ DeCaro et al, ‘Legal and institutional foundations of adaptive environmental governance’, 2017. See also Gupta et al, ‘The Adaptive Capacity Wheel’, 2010, p. 461, where adaptive capacity is defined as “the inherent characteristics of institutions that empower social actors to respond to short and long-term impacts either through planned measures or through allowing and encouraging creative responses from society both ex ante and ex post”.

⁹⁴ See e.g. Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005; Huitema et al, ‘Adaptive Water Governance’, 2009; Gupta et al, ‘The Adaptive Capacity Wheel’, 2010, p. 461; Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10433; and Chaffin, Gosnell & Cosens, ‘A decade of adaptive governance scholarship: synthesis and future directions’, 2014.

⁹⁵ See further chapter 3 where the governance model of the WFD is more closely discussed.

environmental governance of social-ecological systems. I then turn to exploring the role of formal institutions in complex, environmental governance systems, where power is distributed across several actors and scales, referred to as multi-level governance or ‘polycentricity’, rather than being centred in one central government. I conclude with an overview of the key legal functions identified as essential to facilitating adaptation towards a set of environmental objectives, and providing conditions enabling integrated and nested cooperation between several actors and authoritative levels. These key functions are inherently relevant to the final analysis in chapter5.

2.2 From adaptive management to resilience and adaptive governance of social-ecological systems

Resilience is a key concept in environmental research in both the natural and social sciences. The concept of resilience was originally developed in ecology where it was used to explain ecological systems’ ability to absorb disturbance while still maintaining their basic ecosystem services and functions.⁹⁶ By adding the social factor, Folke et al expanded the ecological concept of resilience to “the extent to which a system can absorb recurrent natural and human perturbations and continue to regenerate without slowly degrading or even unexpectedly flipping into less desirable states”.⁹⁷ The term ‘social-ecological’ is thus used within resilience theory to emphasise “the integrated concept of humans in nature and to stress that the delineation between social and ecological systems is artificial and arbitrary.”⁹⁸

A main undertaking in resilience theory is to examine how social-ecological systems can be made more resilient in terms of securing long-term ecosystem services, by studying how these systems respond and are able to adapt to changing conditions in the environment.⁹⁹ An important task identified in this regard is to provide governance frameworks suited to more adaptive and ecosystem-based forms of management, where the complexity and uncertainty of social-ecological systems are taken into account.¹⁰⁰

⁹⁶ Walker & Salt, *Resilience thinking: Sustaining Ecosystems and People in A Changing World*, 2006 pp. 1-2.

⁹⁷ Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, pp. 442-443.

⁹⁸ Ibid, p. 443.

⁹⁹ Ibid, p. 442; and Walker & Salt, *Resilience thinking: Sustaining Ecosystems and People in A Changing World*, 2006 pp. 1-2.

¹⁰⁰ Ostrom, ‘A General Framework for Analyzing Sustainability of Social-Ecological Systems’, 2009, p. 419; Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, pp. 441-443; and Walker & Salt, *Resilience thinking: Sustaining Ecosystems and People in A Changing World*, 2006.

‘Adaptive management’ of natural resources is a key element of resilience theory. The concept was originally developed by Hollings et al, to cope with the inherent uncertainty of ecological systems stemming from factors such as non-linearity, threshold effects and spatial redistributions of ecological systems.¹⁰¹ Adaptive management integrates ecological information, environmental considerations, assessments and planning processes into the criteria for adjusting management strategies. Accordingly, adaptive management requires a reflective learning process, through monitoring ecosystem response and incrementally adjusting management strategies and actions based on what is learned from the monitoring.¹⁰² Instead of trying to predict or control the environment, focus lies on incrementally improving the ability to respond to environmental change and disturbance.¹⁰³ The approach thus relies on iterative cycles of determining goals, taking appropriate action where experimentation is advocated,¹⁰⁴ monitoring outcome, and evaluating the performance in light of monitoring results.¹⁰⁵ The main argument behind adaptive management is that since ecosystem disturbance, such as natural disasters or the effects of climate change, cannot be completely avoided, institutions must be designed to better cope with such disturbance.¹⁰⁶

The concept of adaptive governance was originally used to expand the focus from adaptive management of natural resources into ecosystem-based management of social-ecological systems.¹⁰⁷ Hence, governance includes both *formal institutions*, such as laws and legally binding policies, decision-making procedures, distribution of power and authority and enforcement mechanisms, as well as *informal institutions*, such as informal rules, power relations, practices and societal rules for decision-making developed within, for example, an organisation or governance regime.¹⁰⁸ The focus of adaptive governance is to create institutions and rules for societal decision-making and power distribution between governance bodies involved in a multi-level governance structure.¹⁰⁹ A main task in this regard is to identify and develop

¹⁰¹ Holling (ed.), *Adaptive environmental assessment and management*, 1978, p. 137.

¹⁰² Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10440; and Cosens et al, ‘The role of law in adaptive governance’, 2017.

¹⁰³ Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, p. 447.

¹⁰⁴ Experimentation primarily encourages ‘trial-and-error’ at the local level or, generally, as close to the resource to be managed as possible. In other words, bottom-up strategies are premised rather than top-down steering and control.

¹⁰⁵ Craig & Ruhl, ‘Designing Administrative Law for Adaptive Management’, 2014, p. 17.

¹⁰⁶ Holling, *Adaptive environmental assessment and management*, 1978, pp. 137-139.

¹⁰⁷ Dietz et al, ‘The struggle to govern the commons’, 2003, note 28; Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, p. 444.

¹⁰⁸ Huitema et al, ‘Adaptive Water Governance’, 2009; and Folke et al, ‘Adaptive Governance of Social-Ecological Systems’, 2005, p. 444.

¹⁰⁹ Cosens & Stow, ‘Resilience and Water Governance’, 2014, p. 164.

key design principles and processes for the full and effective implementation of adaptive ecosystem-based management.¹¹⁰

One of the key principles identified in previous research is that, to be effective in terms of achieving desired environmental results, environmental governance systems should be organised in a polycentric structure.¹¹¹ The basic idea of a polycentric structure is that governance systems of larger-scale natural resources shall divide political and administrative powers between multiple authorities on different scales, rather than being concentrated to one particular central authority ('monocentrism') such as a national government.¹¹² The various units on different scales should also be independent, flexible and contain overlapping jurisdictions, rather than being strictly divided and hierarchically organised.¹¹³

Such diverse, polycentric, or multi-level governance arrangements are considered to be more resilient and hence better prepared to cope with change and uncertainty than would monocentric government solutions.¹¹⁴ As Huitema et al explain, the reason is at least threefold: *first*, polycentricism implies that problems can be managed on different scales; *second*, overlapping jurisdiction and redundancy within an administration makes it less vulnerable since the different units can cover for each other; and *third*, multiple units make experimentation easier and encourage learning between units within the organisation.¹¹⁵ In addition, Arnold and Gunderson argue that a polycentric structure can be better matched to the scales, scope and speed of the problem the legal and governance institutions must address.¹¹⁶

Adaptive governance of environmental resources has also been defined as "a range of interactions between actors, networks, organisations, and institutions emerging in pursuit of a desired state for social-ecological systems".¹¹⁷ In other words, while water *management* activities are focused on improving water quality by, for example, implementing measures, monitoring, and evaluating progress in a specific river basin or water body,

¹¹⁰ Ibid, p. 164.

¹¹¹ Hooghe & Marks, 'Unraveling the Central State, but How? Types of Multi-level Governance', 2003, p. 234-241; Ostrom, *Understanding Institutional Diversity*, 2005, pp. 281-288; Huitema et al, 'Adaptive Water Governance', 2009; and van Rijswijk et al, 'Ten building blocks for sustainable water governance', 2014, p. 725.

¹¹² Ostrom, *Understanding Institutional Diversity*, 2005, p. 281; and Huitema et al, 'Adaptive Water Governance', 2009.

¹¹³ Hooghe & Marks, 'Unraveling the Central State, but How? Types of Multi-level Governance', 2003, p. 238; and Ostrom, *Understanding Institutional Diversity*, 2005, p. 283.

¹¹⁴ Ibid, pp. 281-288; Huitema et al, 'Adaptive Water Governance', 2009; and Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10433.

¹¹⁵ Huitema et al, 'Adaptive Water Governance', 2009.

¹¹⁶ Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10433.

¹¹⁷ Chaffin, Gosnell & Cosens, 'A decade of adaptive governance scholarship: synthesis and future directions', 2014.

governance sets the rules for management activities by providing structures and processes for power distribution and decision-making at several levels and scales.¹¹⁸ The design of the formal institutional framework is essential in this process. As DeCaro et al explain: “law and institutional structures fundamentally shape opportunities for adaptive governance of environmental resources at multiple ecological and societal scales.”¹¹⁹ In the following sections, the role of law and key legal functions in multi-level governance systems of complex natural resources are explored.

2.3 The role of formal institutions in multi-level and adaptive environmental governance

2.3.1 Law as a formal institution of governance

The point of departure for the theoretical discussion of law in adaptive environmental governance is the legal system’s fundamental functions: to foster stability, predictability and slow and incremental change. While the legal system generally supports the *status quo* and legal processes often are understood as linear, adaptive environmental governance rather promotes flexibility, adaptation and rapid change.¹²⁰ As a result, the law has, on the one hand, been seen as posing barriers to flexible and adaptive governance solutions, as it often conflicts with the more complex reality that characterises the law-society-nature interrelationship.¹²¹

On the other hand, the law can be an important factor in driving developments in a certain direction, such as towards adaptive environmental governance regimes. As Cosens et al argue, legal systems can be a vehicle to introduce new approaches, since they are “inherently adaptable and have throughout history responded to new challenges.”¹²² For the law to have that driving effect, however, changes in the legal and institutional framework are often necessary, for example in laws, regulations, authority and procedures for decision-making. For these reasons, it is important to stress the legal

¹¹⁸ Pahl-Wostl et al, ‘From applying panaceas to mastering complexity’, 2012, p. 25.

¹¹⁹ DeCaro et al, ‘Legal and institutional foundations for adaptive environmental governance’, 2017.

¹²⁰ See e.g. Cosens et al, ‘The role of law in adaptive governance’, 2017; Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10426; and Green et al, ‘Barriers and bridges to the integration of social-ecological resilience and law’, 2015, p. 333.

¹²¹ Cosens et al, ‘The role of law in adaptive governance’, 2017; Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10438; and Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, pp. 42-45, and 379.

¹²² Cosens, Gunderson & Chaffin, ‘The adaptive water governance project’, 2014, p. 5. See also Green et al, ‘Barriers and bridges to the integration of social-ecological resilience and law’, 2015, p. 332.

perspective in environmental governance research and examine, for example, how legal solutions can facilitate a transition towards more adaptive governance regimes.

As a growing literature suggests in this context, the law must be designed in a way that allows for adaptation, learning and flexibility in decision-making, without jeopardising traditional legal values such as stability and predictability.¹²³ Bohman, for example, argues that adaptive legal structures generally are open-ended or framework based, so as to create space for flexibility as a means of change.¹²⁴ It has also been argued that emerging adaptive governance regimes can be facilitated through legislative changes that provide adequate funding, authority and necessary legitimacy to “formally reconfigure the system towards adaptive governance.”¹²⁵ Without such formal support, however, existing laws and policies are likely to present barriers to change and keep the *status quo* of the former system.¹²⁶ This phenomenon is commonly referred to as ‘legal inertia’ or institutional ‘path dependence’.¹²⁷

As Gupta et al explain, institutions, such as systems of rules and decision-making procedures, are inherently conservative and carry the bias of previous interactions, views and power relations,¹²⁸ with the legal system, as the core of the institutional framework, often reflecting choices already made.¹²⁹ The outcome is a slowly evolving system, resistant to change and where transformation or development is difficult.¹³⁰ This inherent inertia moreover means that change or transformation is particularly difficult in situations where there is an existing regime or system with an institutional and legal framework already in place.¹³¹ In such situations, a considerable effort must be made in order to coerce change, for example, through changes in the legal framework. As McDonald and Styles argue, the biggest challenge for adaptive

¹²³ See e.g. Ebbesson, ‘The rule of law in governance of complex socio-ecological systems’, 2009, p. 415; Green et al, ‘EU Water Governance: Striking the right balance between Regulatory Flexibility and Enforcement?’, 2013; van Rijswijk et al, ‘Ten building blocks for sustainable water governance’, 2014, p. 735; Craig et al, ‘Balancing stability and flexibility in adaptive governance’, 2017; and Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10436.

¹²⁴ Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, p. 104.

¹²⁵ Cosens, Gunderson & Chaffin, ‘The adaptive water governance project’, 2014, p. 16.

¹²⁶ Ibid, p. 16. See also Gupta et al, ‘The Adaptive Capacity Wheel’, 2010, pp. 459-60; Ebbesson & Hey, ‘Introduction: Where is law in Social-Ecological Resilience?’, 2013.

¹²⁷ See e.g. Mahony & Thelen, ‘A Theory of Gradual Institutional Change’, 2010; North, ‘Institutions, institutional change and economic performance’, 1990; Posner, *Frontiers of legal theory*, 2001; Hathaway, ‘Path Dependence in the Law’, 2003; and Greener, ‘The Potential of Path Dependence in Political Studies’, 2005.

¹²⁸ Gupta et al, ‘The Adaptive Capacity Wheel’, 2010, p. 460.

¹²⁹ See e.g. Pettersson, ‘Path dependence in the legal system’, 2011, p. 37; and North, ‘Institutions, institutional change and economic performance’, 1990, pp. 87-91.

¹³⁰ Gupta et al, ‘The Adaptive Capacity Wheel’, 2010, p. 460.

¹³¹ Pettersson, ‘Path dependence in the legal system’, 2011, p. 43.

approaches may lie in changing the institutional culture of agencies responsible for their implementation.¹³²

According to Posner, legal practice is the most historically oriented of the professions when it comes to dependence on the past, as it is suspicious of innovation and rather honours notions of tradition, precedent, custom and methods of interpretation.¹³³ However, as argued by Ebbesson, despite the general acclaim for legal certainty and predictability within the law, there is always room for different interpretations when considering legal texts, for example in the light of new values and principles.¹³⁴ Arnold and Gunderson emphasise on a similar note that an adaptive legal regime must recognise and embrace iterative processes with feedback loops among multiple participants.¹³⁵ It should also favour “incremental and gradual changes that transition experimentally to new (...) standards or arrangements, while monitoring, assessing, and adjusting these changes and their effects.”¹³⁶

Intervention from a hierarchically higher governance scale (preferably the government and/or parliament) is seen as both fuelling necessary growth in the existing system beyond its current capacity, while providing necessary stability and resources for a smooth transition into an adaptive governance regime.¹³⁷ In their synthesis, informed by studies of water governance frameworks and administrations in several large river basins in the US, Cosens et al conclude that:

Adaptive governance alone, at least as conceived here, will not navigate regime shift. It must be coupled with changes in the law that allow for cross-sector and cross-scale integrated water management. It must be coupled with leadership and funding from outside the basin. It must be coupled with the political and personal will to transform water-based economies to new livelihoods.¹³⁸

To round off, changes in the formal institutional frameworks are essential in order to steer regime shift towards more adaptive forms of environmental and

¹³² McDonald & Styles, ‘Legal Strategies for Adaptive Management under Climate Change’, 2014, pp. 28 and 43.

¹³³ Posner, *Frontiers of legal theory*, 2001, p. 145. Even though Posner primarily discusses the common-law system, the general feature of legal inertia and incremental change within legal practice can be regarded a common feature of legal systems and the legal practice in general.

¹³⁴ Ebbesson, ‘The rule of law in governance of complex socio-ecological changes’, 2010, p. 415.

¹³⁵ Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10438.

¹³⁶ *Ibid.*, p. 10438.

¹³⁷ Cosens, Gunderson & Chaffin, ‘The adaptive water governance project’, 2014, p. 16.

¹³⁸ Cosens, Gunderson & Chaffin, ‘The adaptive water governance project’, 2014, pp. 26-27.

water governance. However, even significant changes in the formal institutional framework cannot be expected to result in rapid regime shift. The important thing, in light of the examined literature, is that the design of the formal institutions at least supports incremental change towards a certain desired goal. It is also crucial to introduce the “right” type of change in the formal institutional framework; that is, change that can facilitate a transition towards adaptive forms of environmental governance. The following sections are therefore devoted to exploring primarily the law and governance literature with a view to detecting key structures and functions the formal institutional framework must provide to support such a transition.

2.3.2 The importance of formal direction and institutional support

This section stresses the responsibility of traditional centres of authority, primarily national governments and parliaments, to provide direction and an appropriate administrative structure when introducing new regimes or modes of governance. As I argue in paper I of this thesis, several strands of the law and governance literature similarly hold that traditional centres of authority must provide direction (such as scope and objectives) and an administrative structure that coordinates the work of different actors and levels when organised in a polycentric structure.¹³⁹ Previous studies have also shown that polycentric and decentralised systems without such coordination and support from the formal institutional framework often result in uncertainty, fragmentation and conflicts between involved actors and levels.¹⁴⁰

Direction, or ‘definitional guidance’, for a polycentric structure primarily means to provide the administration with clarity of scope, objectives and anticipated outcomes.¹⁴¹ A clear direction, as Meadowcroft explains, increases

¹³⁹ See e.g. DeCaro et al, ‘Legal and institutional foundations for adaptive environmental governance’, 2017; Gunningham, ‘Environmental law, Regulation and Governance: Shifting Architectures’, 2009, pp. 207-208; Pahl-Wostl et al, ‘From applying panaceas to mastering complexity’, 2012, p. 29; Ebbesson & Hey, ‘Introduction: Where is law in Social-Ecological Resilience?’, 2013; van Rijswijk et al, ‘Ten building blocks for sustainable water governance’, 2014, p. 727; Lundqvist, ‘Integrating Swedish Water Resource Management: a multi-level governance trilemma’, 2004, pp. 414, and 421-422; and Duit, Galaz & Löf, ‘Fragmenterad förvirring eller kreativ arena’, 2009, p. 142. See also paper I, p. 523.

¹⁴⁰ Ostrom, ‘The Challenge of Common-Pool Resources’, 2008, p. 18; Dietz, Ostrom & Stern, ‘The Struggle to Govern the Commons’, 2003, p. 1909; Pahl-Wostl et al, ‘From applying panaceas to mastering complexity’, 2012, p. 29; and Duit, Galaz & Löf, ‘Fragmenterad förvirring eller kreativ arena’, 2009, pp. 128-132, and 141-142. See also paper IV, pp. 21-26.

¹⁴¹ Gunningham, ‘Environmental law, Regulation and Governance: Shifting Architectures’, 2009, pp. 207-208.

the likelihood that the system will evolve in a certain desired direction.¹⁴² He also argues that one way of providing such guidance in environmental regimes is by establishing environmental objectives combined with an overarching plan or vision of how they can be achieved in a specific context.¹⁴³ On a similar note, the establishment of specific goals, Craig and Ruhl argue, followed by an action plan and monitoring programme, are crucial when initiating an adaptive governance strategy.¹⁴⁴ In the environmental legal literature, the concept of ‘adaptive environmental planning’ is commonly used to describe how environmental objectives can be reached through a model for planning and implementation that is supported by the legal framework.¹⁴⁵ A basic idea in this model is that a chain is never stronger than its weakest link.

The basis for adaptive environmental planning is a system of planning within the limits of the biosphere, referred to as ‘environmental related limit rules’.¹⁴⁶ The objective and fundamental limits are thus drawn up from the top, based on the ecological conditions and anchored in the legal framework.¹⁴⁷ Besides providing a clear direction through legally binding environmental objectives, the legal framework shall clearly define the scope of action of governing bodies involved.¹⁴⁸ All planning and subsequent decision-making must take place within the given limits provided by plans issued from higher hierarchical levels. This entails, for example, that it should never be possible for a local authority to allow for local plans or activities that contradict a plan developed at a hierarchically higher planning level. In other words, what is requested is a kind of vertical integration of the different hierarchical levels involved.¹⁴⁹ This creates room for initiatives and flexibility in decision-making at lower levels, but always within the framework

¹⁴² Meadowcroft, ‘Who is in Charge here?’, 2007, p. 308-309. See also McDonald & Styles, ‘Legal Strategies for Adaptive Management under Climate Change’, 2014, p. 41.

¹⁴³ Meadowcroft, ‘Who is in Charge here?’, 2007, p. 309. See also McDonald & Styles, ‘Legal Strategies for Adaptive Management under Climate Change’, 2014, p. 41, who argue that changing the statutory objects and decision-making principles in environmental regulatory regimes can provide guidance to decision-makers and the courts about, for example, the importance of flexibility.

¹⁴⁴ Craig & Ruhl, ‘Designing Administrative Law for Adaptive Management’, 2014, p. 52. In this context, McDonald & Styles add that authorities must find ways to translate the overarching goals into concrete, measurable and specific objectives in implementation. See McDonald & Styles, ‘Legal Strategies for Adaptive Management under Climate Change’, 2014, p. 42.

¹⁴⁵ See e.g. Westerlund, Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, pp. 95 ff; Carlman, ‘Adaptiv miljöplanering nästa’, 2003, p. 292; Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p.p. 230-231; and Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, pp. 87-100. See also Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10437.

¹⁴⁶ Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 225.

¹⁴⁷ Carlman, ‘Adaptiv miljöplanering nästa’, 2003, pp. 292-294, and 299; and Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 225.

¹⁴⁸ Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, pp. 107-119; and Carlman, ‘Adaptiv miljöplanering nästa’, 2003, p. 293.

¹⁴⁹ Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, p. 323.

established by the higher hierarchical level of planning.¹⁵⁰ In the words of Westerlund:

The model that has now been outlined implies a very clear top-down control of the limits but leaves open for bottom-up decisions about *how* the development space be utilised. This also means that the question *whether* a region shall be used sustainably or not is a top-down issue, while the question *how* the region shall be used sustainably can be made a bottom-up issue.¹⁵¹

Moreover, the importance of promoting acceptance for environmental objectives across all government bodies is emphasised in this model.¹⁵² In this respect, the desired state of the environment must be translated into concrete, actionable rules which public authorities can implement, primarily targeting those whose actions affect the environment ('impactors'). This process is generally described as the 'legal operationalisation' of set environmental objectives.¹⁵³ In other words, a system for implementation of the environmental objectives is needed. That system should clearly show who is responsible for what, and what requirements can be imposed on other actors within the administration, as well as on individual impactors. As is also argued in paper I of this thesis, by providing a multi-level governance or polycentric structure with a proper formal institutional framework that includes clear delineation and delegation of responsibilities and authoritative mandates, the chances of achieving designated goals are likely to increase.¹⁵⁴

As described above in section 2.1, a high level of decentralisation and subsidiarity is generally recommended in environmental governance, foremost in order to promote local knowledge, experimentation and stakeholder involvement in management strategies. However, as indicated above, legal scholars emphasise the need to integrate decision-making by lower-level authorities within higher, stabilising authoritative levels in the formal institutional framework.¹⁵⁵ The legal framework must simply provide

¹⁵⁰ Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 230-232.

¹⁵¹ Ibid, p. 232.

¹⁵² Ibid, pp. 226-227.

¹⁵³ Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, pp. 101 ff; Gipperth, *Miljökvalitetsnormer*, 1999, pp. 39 ff; and Carlman, 'Adaptiv miljöplanering nästa', 2003, p. 299.

¹⁵⁴ Paper I, p. 522. See also Pahl-Wostl et al, 'From applying panaceas to mastering complexity', 2012, pp. 24 and 32; Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10441; and Cosens et al, 'The role of law in adaptive governance', 2017.

¹⁵⁵ See e.g. Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 230-232; Meadowcroft, 'Who is in Charge here?', 2007, p. 310; Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10441; van

the limits of flexibility in decision-making at all levels of governance, through sufficient guidance and control.¹⁵⁶

For example, according to Duit, Galez and Löf, decentralised governance arrangements paradoxically place higher demands on governmental steering than would centralised systems; the State must simultaneously act as coordinator, judge, controller, prodder, and informant.¹⁵⁷ This implies that traditional modes of governmental steering, where higher level authorities are able to control and require lower-level officials to implement decisions, must underpin subsidiarity and decentralised governance arrangements. This includes providing forums and procedures for conflict resolution, as well as sufficient control and enforcement mechanisms for both higher levels of authority and private actors through participatory incentives and access to justice.¹⁵⁸

As van Rijswijk et al argue, a lack of enforcement is likely to slow the effectiveness of governance and may eventually lead to conflicts and decreasing legitimacy of the system.¹⁵⁹ Instead, clear substantive rules and standards for the allocation of responsibilities and resources generally are useful in order to increase enforceability in environmental governance.¹⁶⁰ Conflicts between involved actors can be prevented, they conclude, by clear rules, standards and agreements, which can also be enforced.¹⁶¹ Not least in order to enhance the credibility and legitimacy of decided actions, the legal framework must include ways in which regulations and agreements can also be enforced.¹⁶²

Legitimacy aspects are generally emphasised in discussions about the role of law in adaptive environmental governance systems. As described by van Holten and van Rijswijk, the concept of legitimacy has both a legal and a political dimension, where the latter mainly refers to whether the public experience State behaviour as legitimate.¹⁶³ Legitimacy in a legal context,

Rijswijk et al, 'Ten building blocks for sustainable water governance, 2014, p. 737-738; and Cosens et al, 'The role of law in adaptive governance', 2017.

¹⁵⁶ The importance of guidance and control is further discussed in section 2.3.3 below.

¹⁵⁷ Duit, Galaz & Löf, 'Fragmenterad förvirring eller kreativ arena', 2009, p. 142. See also Meadowcroft, 'Who is in Charge here?', 2007, p. 310.

¹⁵⁸ van Rijswijk et al, 'Ten building blocks for sustainable water governance, 2014, p. 737-738; and Cosens et al, 'The role of law in adaptive governance', 2017, who argue that higher level authorities also should have mandate to make final, legally binding decision on for example trade-offs when resources are scarce.

¹⁵⁹ van Rijswijk et al, 'Ten building blocks for sustainable water governance, 2014, p. 736. See also Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 28.

¹⁶⁰ van Rijswijk et al, 'Ten building blocks for sustainable water governance, 2014, p. 737.

¹⁶¹ Ibid, p. 738.

¹⁶² Ibid, pp. 736-737.

¹⁶³ van Holten & van Rijswijk, 'The consequences of a governance approach in European Environmental directives for flexibility, effectiveness and legitimacy', 2014, pp. 21-22.

however, is primarily associated with the principle of legality and the rule of law, for example through the notion of legal certainty in the form of predictability, equality and access to justice.¹⁶⁴ Legal legitimacy thus requires all State power, including the powers of decision-making of authorities and the national courts, is exercised in compliance with the law and that each decision has a legal basis.¹⁶⁵ Crucial for legitimacy are also transparency and accountability in decision-making, and the possibility of having access to courts in order to ensure effective legal protection and enforce equal treatment of environmental rights.¹⁶⁶

In the context of adaptive environmental governance, legal legitimacy concerns, for example, how decisions are made and who participates in and actually influences those procedures.¹⁶⁷ It is also important that the means of participation are able to facilitate learning, problem-solving, innovation and broad collaboration with interested stakeholders to enhance the content of decisions.¹⁶⁸ Hence, in order to increase legitimacy as well as the possibility of making informed decisions, the legal framework must provide means of stakeholder and public participation in decision-making, as well as the means to enforce individual rights.

To sum up, as Pahl-Wostl et al conclude, polycentric governance structures characterised by a clear distribution of power, responsibility and authority, in combination with an effective coordination structure between levels and actors, are more likely to succeed in terms of performing environmental results.¹⁶⁹ Scholars in several areas have argued that adaptive governance structures capable of innovation, experimentation and flexibility in decision-making at the local scale, are only likely to function in stable and predictable governmental regimes, which combine room and resources for

¹⁶⁴ Ibid, pp. 21-22. See also Ebbesson, 'The rule of law in governance of complex socio-ecological changes, 2010, pp. 415-416; and Mattson, 'Domarnas makt – domarrollen i ett nytt rättsligt landskap', 2014, p. 591 who discusses the need for legitimacy of national courts' decisions.

¹⁶⁵ This principle of legality forms the basis of the Swedish legal system, as stated in the Instrument of Government (1974:152) Ch. 1, s. 1, para 3.

¹⁶⁶ The international UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ('Aarhus Convention'), to which both Sweden and EU are parties, primarily aims at protecting these aspects of legitimacy.

¹⁶⁷ Ebbesson & Hey, 'Introduction: Where is law in Social-Ecological Resilience?', 2013; 2017; Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, p. 261-263; and Cosens et al, 'The role of law in adaptive governance', 2017.

¹⁶⁸ van Rijswijk et al, 'Ten building blocks for sustainable water governance, 2014, pp. 731-732; Cosens et al, 'The role of law in adaptive governance', 2017; Ebbesson & Hey, 'Introduction: Where is law in Social-Ecological Resilience?', 2013; and Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, p. 252-263.

¹⁶⁹ Pahl-Wostl et al, 'From applying panaceas to mastering complexity', 2012, p. 24 and 32.

local initiatives, along with sufficient means of control and enforcement.¹⁷⁰ As Arnold and Gunderson hold, the law must require meaningful feedback loops and hold decision-makers accountable for making use of these feedback loops in, for example, planning, management, and regulatory activities.¹⁷¹

In conclusion, besides providing an environmental administration with a clear scope and anticipated outcomes anchored in law, the formal institutional framework needs to distribute roles, responsibilities, authoritative mandates, control and enforcement mechanisms, as well as procedures enabling participation and access to justice. Moreover, in light of adaptive management theory, implementation measures should always aim at a certain goal through a process of experimentation, evaluation and learning. The system must thus also include sufficient monitoring and feedback loops, and allow for adjustment of measures and strategies as a result of monitoring feedback. The law therefore needs to be open to such adjustments, generally referred to as adaptive capacity of the law or adaptive functions within the legal framework. This is the central topic of the next section (2.3.3).

2.3.3 The need to strike a balance between flexibility, guidance and control

The previous section stressed the need for a supporting formal institutional framework to underpin a decentralised system involving several authoritative levels and actors. This section addresses the need to strike a balance between regulatory flexibility and control with respect to the legal framework. The discussion primarily concerns the need for combining flexible or adaptable rules with sufficient guidance for administrative decision-makers and subsequent control, to avoid arbitrariness in interpretations and applications of the law, as well as passivity by governing authorities.

As explained in section 2.1, a central aspect of environmental governance are the ability to learn and adapt to change (adaptive capacity). Subsidiarity, including stakeholder and public involvement in decision-making, is another. In light of this, overly rigid rules, legal structures, concepts and institutions are likely to hamper flexibility and constrain the adaptive capacity of an

¹⁷⁰ Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10440; Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, p. 346; and Cosens et al, 'The role of law in adaptive governance', 2017.

¹⁷¹ Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10440.

environmental administration.¹⁷² The overall challenge from a legal perspective is thus to design a formal institutional framework that facilitates adaptation, learning and local experimentation in the measures put in place to achieve environmental objectives, but within the limits imposed by the rule of law.¹⁷³ This requires the legal framework to be less rigid and able to be adjusted as new knowledge is obtained, while the legal framework governs the decision-makers such that the application of the law does not become arbitrary and unpredictable.¹⁷⁴

A crucial aspect of the law in relation to adaptive environmental governance is thus to find the balance between adaptive capacity and flexibility, on the one hand, and values related to the rule of law, primarily legal certainty, stability and predictability, on the other.¹⁷⁵ As Ebbesson and Hey explain, legal certainty ultimately serves to address arbitrary exercise of public power.¹⁷⁶ As a result, it is important that the legal framework provides sufficient mechanisms both for ensuring effective operationalisation and monitoring, and for limiting the discretion of public authorities. The latter in particular, as Westerlund emphasises, when the legislators have chosen to leave most of the effort of the balancing of interests, or making ‘trade-offs’, to the individual decision-making authority to decide on a case-to-case basis.¹⁷⁷ ‘Balancing’ or making trade-offs in this regard is understood as a process resulting in a decision, which includes identification of relevant factors and options, assessing their relative weight, comparing pros and cons and finally making a choice that is materialised in a decision.¹⁷⁸ Thus, both general decisions about for example steps or plans, as well as decisions in relation to individuals in different contexts, are included.

In decision-making situations that require interests to be balanced, Westerlund argues that the legislator must exercise sufficient control

¹⁷² Ebbesson & Hey, ‘Introduction: Where is law in Social-Ecological Resilience?’, 2013; McDonald & Styles, ‘Legal Strategies for adaptive Management under Climate Change’, 2014, p. x; DeCaro et al, ‘Legal and institutional foundations for adaptive environmental governance’, 2017.

¹⁷³ Ebbesson & Hey, ‘Introduction: Where is law in Social-Ecological Resilience?’, 2013. As Bohman concludes, the development of environmental law, in particular on the international and EU levels, has promoted flexible and adaptive features in law, where the design allows authorities to respond to environmental variations. See Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, p. 380.

¹⁷⁴ Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10431; Ebbesson & Hey, ‘Introduction: Where is law in Social-Ecological Resilience?’, 2013; and McDonald & Styles, ‘Legal Strategies for adaptive Management under Climate Change’, 2014, p. 39.

¹⁷⁵ Ebbesson, ‘The rule of law in governance of complex socio-ecological systems’, 2010, p. 415; Green et al, ‘EU Water Governance: Striking the right balance between Regulatory Flexibility and Enforcement?’, 2013, and van Rijswijk et al, ‘Ten building blocks for sustainable water governance’, 2014, p. 735.

¹⁷⁶ Ebbesson & Hey, ‘Introduction: Where is law in Social-Ecological Resilience?’, 2013. See also Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 27.

¹⁷⁷ Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, pp. 118, and 460.

¹⁷⁸ Ibid, p. 455.

(“putting a leash on the decision-maker”) by supplementing the adaptable rules with rules or ‘legal standards’ that guide *how* interests are to be balanced in individual situations.¹⁷⁹ Such legal standards can appear in different forms, such as in legislation or through precedent, but a growing literature suggests that they primarily should be developed in the form of rules, criteria, legal definitions and principles prescribed in law.¹⁸⁰ Arnold and Gunderson, for example, argue that even though discretion in the rules relating to environmental matters often is needed, discretion must be governed by formal standards so that decision-makers can be held accountable and the risks of human and environmental harm reduced.¹⁸¹ Neuhaus expressed a similar viewpoint eloquently some decades ago in relation to decisions against individuals, holding that:

In a democratic and pluralistic society, the standards for judgement cannot be purely personal or irrational; the judge must be guided by generally recognised standards capable of rational cognition. This is the essential difference between a democratic legal order and a so-called Khadi justice which decides individual cases in accordance with the judge’s sense of equity and without reliance on any objective standards.¹⁸²

An effectively construed law in this regard, is therefore one that allows decision-makers to recognise how their own subjective values are constrained, as a result of the clear guidance received through expressions of the will of the legislator.¹⁸³

Standards to guide and control the decision-makers can also be developed as administrative procedural requirements, such as rules demanding compliance with substantive statutory requirements (in particular with respect to management goals); rules demanding compliance with prior or superior management plans; or rules demanding an evaluation of a decision

¹⁷⁹ Ibid, p. 118. See also Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10436;

¹⁸⁰ See e.g. Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 461; Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, pp. 340-344; Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10436; Craig & Ruhl, ‘Designing Administrative Law for Adaptive Management’, 2014, p. 45.

¹⁸¹ Arnold & Gunderson, ‘Adaptive Law and Resilience’, 2013, p. 10436.

¹⁸² Neuhaus, ‘Legal Certainty versus Equity in the Conflict of Laws’, 1963, p. 802. The term ‘Khadi justice’ was originally used by Max Weber to describe personalised *ad hoc* adjudication. See Rheinstein, *Max Weber on law in economy and society*, 1954, p. 351.

¹⁸³ Westerlund, *Miljörättsliga grundfrågor 2.0*, 2003, p. 353.

in light of, for example, monitored results and set management objectives.¹⁸⁴ By combining such procedural requirements with, for example, review requirements and possibilities for appeal, necessary control can be exercised, passivity on the part of the authorities counteracted, and decisions incompatible with the set objectives repealed. As Craig and Ruhl argue, in situations where a public authority simply fails to do what it is supposed to be doing, there must exist legal means to intervene, for example in the form of judicial injunctions from hierarchically superior authorities.¹⁸⁵

On a similar note, McDonald and Styles hold that a legal framework designed for adaptive management must provide feedback-loop processes, such as legal requirements on monitoring, evaluation and reporting.¹⁸⁶ This primarily because, “decision-making cannot be adaptive if there is no understanding of the success or failure of past decisions.”¹⁸⁷

Hence, to ascertain legal certainty and predictability in the exercise of public authority, it is crucial to combine flexible and adaptable rules with guidance for and control of decision-makers. In democratic nations, it cannot be left entirely to the discretion of a single decision-maker to determine what the law is, how it should be interpreted and/or whether it should be applied in individual situations. In essence, it is about providing principles, standards and values to guide decision-making when the rules are not absolute or unambiguous. The legal framework must provide conditions for control of the exercise of public power, so as to ensure that decisions are reasonably predictable and, ultimately, perceived as legitimate. As described above in section 2.3.1, the legal dimension of legitimacy in adaptive environmental governance can namely be addressed through clear and transparent processes that, for example, limit the exercise of discretion and ensures accountability in decision-making and implementing measures.¹⁸⁸

The middle way between rigid rules and no rules, is a path consisting of rules that provide for specified solutions for different types of case and which

¹⁸⁴ The examples were inspired by the exemplifications provided in Craig & Ruhl when describing existing standards for administrative judicial review in the US legal system. See Craig & Ruhl, ‘Designing Administrative Law for Adaptive Management’, 2014, p. 44.

¹⁸⁵ Craig & Ruhl, ‘Designing Administrative Law for Adaptive Management’, 2014, p. 45. See also Christiernsson, *Rättens förhållande till komplexa och dynamiska ekosystem*, 2011, p. 324; and Bohman, *Transboundary Law for Social-Ecological Resilience?*, 2017, p. 388-391, who similarly emphasises the need for effective operationalisation, monitoring, compliance and enforcement as some of the key legal mechanisms in environmental governance.

¹⁸⁶ McDonald & Styles, ‘Legal Strategies for adaptive Management under Climate Change’, 2014, p. 42-43, and 51.

¹⁸⁷ Ibid, p. 42.

¹⁸⁸ In addition, to increase legitimacy in adaptive environmental governance regimes, avenues for broad and inclusive input as well as access to national remedies to enforce equal treatment and environmental rights are essential.

allow for adjustments to the circumstances at hand. The legal provisions shall thus not be static or rigid, but rather flexible and adaptive.¹⁸⁹ In order to increase the adaptive capacity of the legal system, Arnold and Gunderson suggest, for example, that regulatory permits should contain conditions and time-limits that allow for renewal, requirements for regular and self-monitoring, and enforcement mechanisms, making it possible for the authorities to help permit holders to effectively adapt to changing conditions.¹⁹⁰

To sum up, environmental governance of changing and non-linear natural resources calls for adaptability in the law and how it is interpreted and applied in different situations. However, it follows that it is both possible and necessary to combine flexibility in the legal rules that allow for incremental adaptation of strategies and measures, with sufficient formal guidance and control to guarantee that adaptation takes place and that the values under the rule of law are respected. In essence, the legal system must hold people and entities accountable for and to the limits of their actions.¹⁹¹ Nilsson and Bohman capture here the central role of law in adaptive environmental governance:

The role and function of law, in comparison to other manners of governance, is to establish necessary institutional structure and to provide normative steering and authoritative control. The instruments and structures must display clarity and foreseeability, and clear prescription of regulatory powers, including sanctions and compliance control, in order to function appropriately in a legal context.¹⁹²

¹⁸⁹ Flexible and adaptable rules oriented towards a certain goal are sometimes described as 'reflexive law' in the legal literature. The term reflexive law was proposed by Gunter Teubner to describe the evolution of the legal norms from substantive law to a focus on procedural norms that are goal-oriented and flexible rather than rule-oriented and static. These norms are focused on aiding societal systems to achieve a democratic and legitimate self-organisation and foster mechanisms that systematically further structures of reflection within other social subsystems. See Teubner, 'Substantive and Reflexive Elements in Modern Law', 1983, pp. 274-276. See also Hydén, *Rättssociologi som rättsvetenskap*, 2002, pp. 158-163, and 191 ff; and DeCaro et al, 'Legal and institutional foundations of adaptive environmental governance', 2017.

¹⁹⁰ Arnold & Gunderson, 'Adaptive Law and Resilience', 2013, p. 10441.

¹⁹¹ Ibid, p. 10441.

¹⁹² Nilsson & Bohman, 'Legal prerequisites for ecosystem-based management in the Baltic Sea area', 2015, p. 371.

2.4 Key formal functions to support adaptive environmental governance regimes

By drawing from an extensive body of literature documenting the transition from adaptive management to resilience and adaptive governance of social-ecological systems, the role of law in adaptive environmental governance has been explored. This section summarises the key functions the formal institutional framework needs to deliver in such adaptive and multi-level environmental governance regimes the WFD represents. The functions identified and discussed here are such that can support adaptation of management strategies with a view to achieving a particular objective, as well as promoting integrated cooperation between the levels and actors involved, including stakeholders and the public.

It follows from the chapter's foregoing sections that the design of both specific legislation and the formal institutional framework in general is of significance in governance of natural resources, such as freshwater. It should also be noted that integrated, adaptive and polycentric governance regimes require a relatively high degree of formal steering and control, combined with subsidiarity in decision-making and flexible, adaptable rules. This applies in particular in situations when seeking to move from an old regime or governance system to a new one, due to the inherent inertia or path dependence of formal institutions that generally make them resistant to rapid change.

At the same time, incremental change is a natural element of both the judicial system and adaptive environmental governance. The law, if properly designed, can therefore be used to smoothen the transition to an adaptive and integrated governance system that is ecosystem-based, polycentric, and provides avenues for broad and inclusive input, without compromising opportunities to guide, control and enforce. I have identified four key functions the formal institutional framework must deliver in this regard: 1) overall objective and direction; administrative structure; adaptive capacity; and control and enforcement mechanisms. The key functions are summarised in figure 1, followed by an explanation of their fundamentals.

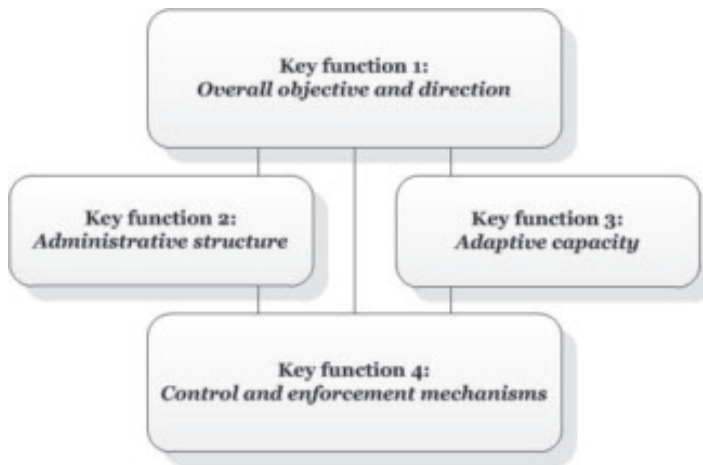


Figure 1.

(1) Overall objective and direction: The formal institutional framework needs to provide clear and legally binding objectives to give guidance and direction to the competent authorities within a pluralistic and adaptive environmental governance regime. Such objectives should be decided at the highest possible authoritative level and clearly established both within the legal framework as well as with all levels of governance and actors involved. By providing clear direction with the help of legally binding and overarching objectives, the levels and actors within an environmental administration are more likely to move in the same direction and towards the same overarching goal.

(2) Administrative structure: The formal institutional framework needs to provide a clear structure for the governance bodies involved, in which roles, responsibilities and authoritative mandates are clearly distributed. The legal framework must also prevent potential conflicts between governance bodies, while providing tools for their resolution, for example, by ruling who decides in cases of conflict, and to what extent decisions of lower-level authorities and decisive organs can be reviewed and appealed. Even though the responsibilities should overlap when arranged in a polycentric structure, it is crucial that the formal institutional framework provides a clear division of the main responsibilities and establishes a certain degree of hierarchy, for example through a clear mandate for higher authorities to decide in cases of conflict. In essence, the formal institutional framework must deliver answers to how decisions are made and can be controlled, reviewed and appealed; how conflicts between actors and policies are resolved; how resources (including time and knowledge) should be distributed amongst actors; and how

information is made available to those affected by the decisions and the public. This key function is thus closely aligned to the need for sufficient control and enforcement mechanisms, discussed below.

(3) Adaptive capacity: From a legal point of view, adaptive capacity primarily requires an adaptable legal framework, while simultaneously limiting the discretion of decision-makers to prevent the application of the law from becoming arbitrary or unreasonably unpredictable. Adaptive capacity also relates to ‘administrative structure’ and subsidiarity, since decisions on *what* measures to adopt should be taken at the lowest appropriate level, where there is room for local knowledge, experimentation, learning and adaptation in response to feedback. At the same time, the legal framework must ensure that sufficient measures, follow-up actions and adaptation take place in response to feedback, by, for example, requiring lower levels to report to higher-level authorities. In other words, the formal institutional framework must provide both regulatory flexibility and sufficient guidance, control and enforcement to ensure accountability and legitimacy within the governance system.

(4) Control and enforcement mechanisms: This function is closely related to all the previous three. However, seeing that control and enforcement mechanisms are so essential from a legal perspective, I have chosen to regard them as a separate function. In polycentric, decentralised and adaptive environmental governance systems, the formal institutional framework must crucially provide mechanisms to ensure that all actors and levels of authority actually do what is required of them. Legal rules and instruments are necessary to counteract passivity (by barring lower-level authorities from taking a certain measure); control decisions at different levels (by means of, for example, stipulating review procedures or making it possible to appeal decisions); and enforcement requirements (by, for example, imposing sanctioned reporting or evaluating requirements). Rules enabling participation and consultation, access to justice for stakeholders and NGOs, and for holding decision-makers accountable are also a crucial part of the control and enforcement function. Without these mechanisms, the legal system simply does not meet the basic conditions for legitimacy.

To conclude, although the identified functions discussed here cannot be seen as providing a universal solution to the design of the formal institutional framework for environmental governance regimes,¹⁹³ they are well-founded

¹⁹³ As Ostrom suggested in her early treatise on institutional design principles in 1990, there is no single panacea or ‘one size fits all’ approach to governing complex and large-scale natural resources. Rather, each

in existing literature, which in many cases is based on empirical studies devised and undertaken in interdisciplinary contexts. The functions listed above can thus be used as guidance in the design of the formal institutional framework in adaptive environmental governance regimes, while bearing in mind the need to tailor solutions to specific environmental governance situations and legal contexts. The key functions are inherently relevant for this study, and will be reflected primarily in chapter 5 in the final analysis of the Swedish implementation of the freshwater governance system of the WFD.

problem or resource requires solutions to be designed to fit the circumstances. See Ostrom, *Governing the commons*, 1990, pp. 14-15; and Ostrom, 'The Challenge of Common-Pool Resources', 2008, p. 16.

3. Setting the Scene: Freshwater Law and Policy in the EU and in Sweden

In this chapter, water law and policy within the EU and in Sweden are examined and discussed. The focus is placed on the integrated planning and adaptive governance approach of the WFD and the legal and administrative challenges that this approach has created for the long-standing, conventional system of governing freshwater resources in Sweden.

3.1 Introduction

Rules and regulations concerning water quality and human exploitation of water resources have been in existence for quite some time, in the EU at large as well as in Sweden.¹⁹⁴ As Howarth explains, legislation concerning water quality “has been amongst the most precocious and progressive” in the history of Union law.¹⁹⁵ In general, each of the early EU water directives was adopted in reaction to identified environmental quality problems, and they all represented a typical ‘command-and-control’ approach to environmental legislation.¹⁹⁶

In 2000, and against the background of increasing pressures on the water environment and a fragmented water legislation within the Union, the EU adopted the WFD. With the overall aims of maintaining and improving water quality and securing water quantity for current and future generations,¹⁹⁷ the WFD has been described as “the most substantial and ambitious piece of EU environmental legislation to date.”¹⁹⁸ The directive replaced several of the previous EU water directives, while some directives continued to be in effect also after the WFD implementation.¹⁹⁹ Important daughter directives on

¹⁹⁴ Examples of early water legislation from the EU are Council Directive 75/440/EEC of June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States, and Council Directive 80/778/EEC of 15 July 1980 relating to the quality intended for human consumption. As explained later, the earliest water regulations in Sweden date back as far as to the 1300s.

¹⁹⁵ Howarth, ‘The progression towards ecological quality standards’, 2006, p. 5.

¹⁹⁶ Ibid.

¹⁹⁷ Directive 2000/60/EC, rec. 19.

¹⁹⁸ Voulvoulis, Arpon, & Giakoumis, ‘The EU Water Framework Directive: From great expectations to problems with implementation’, 2017, p. 358.

¹⁹⁹ Examples of the latter category are: Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources, OJ L375, 31.12.91 (‘Nitrates Directive’); Council Directive 91/271/EEC concerning urban waste-water treatment, OJ L135, 30.5.91 (‘Urban Waste Water Treatment Directive’); Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption (‘Drinking Water Directive’); Directive 2006/7/EC of the European Parliament and of the

groundwater²⁰⁰ and priority substances²⁰¹ supplement the WFD, and subsequently, the Floods Directive²⁰² and the Marine Strategy Framework Directive ('MSFD')²⁰³ have expanded EU water policy to include the prevention and control of flood risks and management of marine ecosystems, respectively. The implementation of the Floods Directive is especially closely coordinated with the WFD.²⁰⁴ However, because the focus of this thesis is freshwater governance, the emphasis hereinafter is placed on the WFD and its daughter directives, which, together, provide the key framework for freshwater governance within the EU. Also the Common Implementation Strategy (CIS), an informal network providing guidance documents on implementation of the WFD, is significant for national implementation.²⁰⁵

As noted in section 1.1, the WFD represented a new approach to governing freshwater resources within the Union, aimed at facilitating a shift from fragmented and sectoral water policies to a more holistic, integrated and adaptive governance system at the hydrological level of river basins.²⁰⁶ All in all, the historical development of EU water law has been described as a representative example of the progression from "a reactive approach to perceived environmental quality problems to a purposive approach directed towards securing defined objectives" within EU environmental legislation.²⁰⁷ This latter approach entails a focus on what positive environmental goals and legal solutions can actually facilitate, rather than strictly focusing on what the

Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC ('Bathing Water Directive').

²⁰⁰ Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration, OJ L372, 27.12.06 ('Groundwater Directive').

²⁰¹ Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council ('EQSD'), including the Proposal for a Directive amending the WFD and the EQSD with a revised list of priority substances, see EU Commission, COM(2011) 876 and Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy [2013] OJ L 226/1.

²⁰² Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks ('Floods Directive').

²⁰³ Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy ('MSFD').

²⁰⁴ In particular, flood risk management plans and river basin management plans are to be coordinated and reporting deadlines synchronised. See e.g. EU Commission, 'The Water Framework Directive and the Floods Directive: Action towards the "good status" of EU water and to reduce flood risks, COM(2015) 120 final.

²⁰⁵ See http://ec.europa.eu/environment/water/water-framework/objectives/implementation_en.htm (18-10-26).

²⁰⁶ See e.g. Voulvoulis, Arpon, & Giakoumis, 'The EU Water Framework Directive: From great expectations to problems with implementation', 2017; and Howarth, 'The progression towards ecological quality standards', 2006.

²⁰⁷ Howarth, 'The progression towards ecological quality standards', 2006, p. 5.

use of positive law can prevent through primarily performance-based rules and authorisation procedures.²⁰⁸

As further explained in section 3.3, the implementation of the WFD has however proven to be a challenge to the conventional, long-standing freshwater governance systems in several Member States, including Sweden. In Sweden, early regulations regarding water rights date as far back as the 1300s,²⁰⁹ with the first comprehensive water legislation, the Water Act, adopted in 1918.²¹⁰ The 1918 Water Act was clearly oriented towards exploitation of water resources, mainly for the purpose of hydropower production for societal benefits and also for economic reasons.²¹¹ As explained by Jakobsson, previous water regulations had promoted the natural flow of waters by prohibiting alterations of the water flow, protecting also the interests of riparian landowners.²¹² The industrialisation of rivers, however, demanded a change in legislation that, instead, promoted the right to regulate and alter water flow - as long as the benefits, from public and private viewpoint, were greater than the damages caused.²¹³

In the subsequent Swedish Water Act of 1983,²¹⁴ the legislator of Sweden maintained a strong purpose of exploitation for hydropower purposes, whilst simultaneously making an effort to safeguard other public interests such as planning, fishery and nature conservation.²¹⁵ However, as also discussed in paper II, the corresponding substantive and procedural rules did not change enough to truly achieve a conceptual, normative or methodological alteration in the interpretation and application of the law. For example, certain special

²⁰⁸ Ibid, p. 6.

²⁰⁹ To regulate the right to water was the main purpose of the water right regulation from 1880, see Government Official Report (SOU) 1977:27, 'Revision av vattenlagen', pp. 126-38; and Government Bill (prop.) 1981/82:130, 'Med förslag till ny vattenlag m.m.', 64-94, for historical overviews of Swedish water legislation.

²¹⁰ (1918:523).

²¹¹ Eventually, however, the Act was amended with certain protective measures, primarily regarding discharges of sewage so as to protect water from contamination. See Government Official Report (SOU) 1977:27, 'Revision av vattenlagen', p. 124; and Government Bill (prop.) 1981/82:130, 'Med förslag till ny vattenlag m.m.', p. 65.

²¹² Jakobsson, 'Industrialization of Rivers: A Water System Approach to Hydropower Development', 2002, pp. 40-53.

²¹³ This so-called 'beneficial clause' (båtnadsregeln) in which the benefits must be greater than the damages caused if undertaking a water operation, is a long-standing and (for the time being) still valid rule in Swedish water law; it has been of significant importance from an environmental perspective for its function of preventing water operations that would have only minor or moderate public or private benefits. The rule will be abolished from January 1 2019, which means that the level of protection for the water environment is soon to be lowered; the benefits will no longer need to be greater than the damages in order for a water operation to be undertaken. See further section 3.3.2.3, where the legislative changes adopted by the Swedish Parliament in June 2018 are discussed in more detail.

²¹⁴ (1983:291).

²¹⁵ Government Bill (prop.) 1981/82:130, 'Med förslag till ny vattenlag m.m.', pp. 66-67.

features of water law compared to the context of environmentally-hazardous activities were maintained in the Water Act of 1983.²¹⁶

When the Environmental Code was adopted in 1998, the Water Act of 1983 was partially integrated into the Code, maintaining, for the most part, the same substantive and procedural provisions.²¹⁷ Consequently, certain special and partially-outdated rules, as well as earlier preparatory works and case law for water operations, continued to apply after the 1998 Environmental Code entered into force.²¹⁸ This situation has, in turn, hampered the impact of more recent environmental requirements and principles in the area of water law, such as those imposed by the WFD, for example as regards facilities for the production of hydropower in Sweden.²¹⁹ The EU Commission²²⁰ and Swedish government have both observed this problem, and important legal changes were adopted by the Swedish Parliament in June 2018²²¹ after several years of official inquiries and legal and political debate.²²² The adopted legislative changes, which are further described and analysed in section 3.3.2.3 below, will enter into force on January 1 2019. Before discussing the Swedish implementation process further, however, I will first describe and discuss the essential obligations resting with the Member States in implementation of the WFD.

²¹⁶ For example, one such feature was the long-standing separation between permissibility rules and rules of consideration in authorisation procedures for water operations, see Michanek, *Den svenska miljörättens uppbyggnad*, 1985, pp. 78-79, 107 and 112; Michanek argues that this feature was unjustified. See also Swedish Government Official Report (SOU) 2014:35, 'I vått och torrt – förslag till ändrade vattenrättsliga regler'.

²¹⁷ Bengtsson et al, 'Legislative Commentaries to the Environmental Code' (Zetec 2017).

²¹⁸ The adoption of the Code was generally criticised for being somewhat of a scribble and not meet the quality requirements that should apply to a legal Code. The criticism concerned, not least, the partial integration of the Water Act into the Environmental Code, wherein the Council on Legislation specifically pointed to the lack of sufficient analysis regarding the legal consequences of transferring older substantive rules from the Water Act into a modern environmental legislation. See Government Bill (Prop.) 1997/98:45, 'Miljöbalk', part 1, s 4.16 and part II, app I, pp. 446-47, 478 and 518; and Spangenberg, 'De Bärande Balkarna', 2013, p. 476.

²¹⁹ See further paper II of this thesis. See also e.g. Darpo, 'Tradition och förnyelse på vattenrättens område', 2014, p. 102-105; Pettersson and Goytia, 'The Role of the Precautionary Principle and Property Rights', 2016, p. 116; Olsen Lundh, 'Norm är norm – om flytande normprövning och implementeringen av ramdirektivet för vatten', 2016.

²²⁰ EU Commission, Infringement procedure 2007/2239. The EU Commission has primarily criticised how certain parts of the WFD originally were transposed in Sweden, and submitted a reasoned opinion on the matter on January 25 2018 (dnr UD2018/01748/RS).

²²¹ See Government Bill (Prop.) 2017/18:243, 'Vattenmiljö och vattenkraft' and Act (2018:1407) amending the Environmental Code.

²²² See e.g. Government Official Report (SOU) 2012:89, '4 kap. 6 § miljöbalken'; Government Official Report (SOU) 2013:69, 'Ny tid ny prövning – förslag till ändrade vattenrättsliga regler'; Government Official Report (SOU) 2014:35, 'I vått och torrt – förslag till ändrade vattenrättsliga regler'; and Government Official Report (SOU) 2017:2, 'Kraftsamling för framtidens energi'.

3.2 Presenting the WFD: objectives, system and implementation requirements

In this section, the general scope, objectives, and the freshwater governance system of the WFD are all explained in more detail. In the context of the overall purpose of this thesis, a particular focus is placed on those aspects of the WFD prescribing the environmental objectives, integrated planning and adaptive governance, as well as the participatory approach in implementation. Also, because this is a study concerning the role that law and legal framework plays in the Swedish implementation of the WFD, the legal requirements for the Member States, and particularly as interpreted by the CJEU, constitute a central part of the discussion.

The general scope of the WFD is to promote sustainable water use and long-term protection of water resources.²²³ Through its broad focus, the WFD provides a holistic and strategic framework for protecting all freshwater bodies within the Union - inland surface waters (rivers and lakes), transitional waters (surface waters in transition zones between freshwater and coastal waters), coastal waters (surface water at a distance of one nautical mile from the coast) and groundwater (all water below the surface of the ground).²²⁴ The directive sets out to achieve ambitious environmental objectives, primarily good water status, and it relies on an integrated planning and adaptive governance system to guide the way to achieve them.²²⁵ The water planning and governance system is conducted in six-year cycles, and it is based on integrated planning at the level of river basins (meaning, it is ecosystem/hydrologically based). For that purpose, and as the initial step of implementation, EU Member States must identify the existing river basins within their national territory, including subsystems and sub-river basins, and assign them to proper individual river basin districts.²²⁶ Member States are also obliged to establish appropriate administrative arrangements to coordinate implementation of the WFD for each of the assigned river basin districts.²²⁷

The environmental objectives in article 4 of the WFD set two main obligations for EU Member States. *First*, Member States are obliged to implement the necessary measures to prevent deterioration of the status of all

²²³ Directive 2000/60/EC, rec 33 and art 1.

²²⁴ Directive 2000/60/EC, arts 1 and 2(1) - (7).

²²⁵ Directive 2000/60/EC, arts 3, 4, 8, 11, 13 and 15. See also EU Commission, 'The Fitness Check of EU Freshwater Policy', SWD(2012) 393, p. 5.

²²⁶ Directive 2000/60/EC, art 3(1).

²²⁷ Directive 2000/60/EC, art 3(2)-(9).

surface and groundwater bodies within the Union ('non-deterioration principle').²²⁸ Second, Member States are obliged to protect, enhance and restore all water bodies to, ultimately, achieve good water status. This status was originally to be achieved by the end of 2015,²²⁹ with full implementation by 2027 for those waters that qualify for extended time-limits.²³⁰ The overall objective of good water status is defined as 'good ecological and chemical status' of natural surface water,²³¹ 'good ecological potential' and 'good chemical status' of artificial and heavily modified surface water,²³² and 'good quantitative and chemical status' of groundwater.²³³

To attain good water status in a river basin district, a Member State must adopt specific environmental objectives for each surface water and groundwater body. An analysis of the characteristics of each district, including a review of the impacts of human activity and an economic analysis of water use, are to serve as basis for assessing current status and setting individual objectives.²³⁴ Annex V to the directive specifies normative definitions for the biological, hydrological, chemical and physio-chemical quality elements with which Member States are to assess both the ecological quality of surface water and the quantitative status of groundwater.²³⁵ Common limit values in the form of EQSs are prescribed for chemical substances in both surface and groundwater.²³⁶ In addition to the possibilities for extended time-limits and assigning surface water bodies as artificial or heavily-modified, Member States may prescribe less stringent environmental objectives for specific water bodies that either are affected by human activity or whose natural conditions

²²⁸ Directive 2000/60/EC, arts 4(1)(a)(i), and 4(1)(b)(i); and Case C-461/13, *Weser*, para 39.

²²⁹ Directive 2000/60/EC, arts 4(1)(a)(ii)-(iii), and 4(1)(b)(ii).

²³⁰ Directive 2000/60/EC, art 4(4). The principle of non-deterioration applies also to these water bodies, and for the exemption to apply it must be either technically infeasible, disproportionately expensive, or, due to the natural conditions, impossible to achieve the environmental objectives within the original timeframe. However, in cases where the natural conditions are such that the objectives cannot be achieved within this period, the timeframe can be extended indefinitely, according to art 4(4)(c).

²³¹ Directive 2000/60/EC, art 2(18).

²³² Directive 2000/60/EC, art 2(23)-(24). According to art 4(3) of the WFD, Member States can designate a water body as artificial or heavily-modified when the changes necessary for achieving good water status would have significant effects on, for example, shipping, water regulation, flood protection, or activities for which purposes water is stored, such as drinking water supply or power generation. An additional condition in this context is that it would be technically infeasible or disproportionately expensive to achieve good ecological status in these water courses.

²³³ Directive 2000/60/EC, art 2(20).

²³⁴ Directive 2000/60/EC, art 5(1).

²³⁵ See also Josefsson, *Good Ecological Status. Advancing the Ecology of Law*, 2015, p. 52.

²³⁶ Directive 2000/60/EC, art 16(7); Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC regarding priority substances in the field of water policy [2013] OJ L 226/1; Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration [2006] OJ L372/19. In addition, all other EQSs laid down in Union legislation must be met, in particular the directives listed in Annex IX of the WFD.

are such that it would be infeasible or disproportionately expensive to meet the general objectives stipulated in article 4(1) of the WFD.²³⁷ For these water bodies, the reasons for exemption must be specifically explained in the corresponding river basin management plan, and as a rule, no further deterioration is allowed.²³⁸

While the exemptions contained within article 4 described so far all deal with the current state of the environment due to past or existing impacts and/or activities, the derogation regime of article 4(7) of the WFD exclusively targets *new* activities and modifications that risk affecting the water environment negatively. Thus, article 4(7) provides important flexibility in the implementation of the WFD, as it allows Member States to make way for new physical modifications or sustainable human development projects, *even if* such projects cause deterioration or jeopardise the attainment of the environmental objectives, provided that all conditions of article 4(7) are met. Important to note is that article 4(7) is, essentially, the only possibility for the EU Member States to allow for new or extended projects leading to adverse effects in the water environment under the WFD.²³⁹ All other exemptions postulate maintenance of the basic non-deterioration principle, in that no activities or measures involving deterioration of the water status are allowed.²⁴⁰

The derogation regime of article 4(7) applies in two situations. In the first situation, failure to prevent deterioration or to achieve good groundwater status, good ecological status, or good ecological potential, is due to either new modifications to the physical characteristics of a surface water body²⁴¹ or alterations to the level of groundwater bodies. Such modifications or

²³⁷ Directive 2000/60/EC, art 4(5).

²³⁸ Directive 2000/60/EC, art 4(4)(a)-(d). However, it is possible to motivate projects under the derogation regime in article 4(7) of the WFD in these water courses.

²³⁹ See Case C-43/10 *Nomarchiaki Aftodioikisi Aitolokarnanias and Others v Ipourgos Perivallontor, Chrotaxias kai Dimosion ergon and Others* ('Acheloos') [2012] EU:C:2012:560; Case C-461/13, *Weser*, paras 44-47, and further section 3.2.3.2 below. However, it is not considered a breach of the obligations under the WFD to allow for projects that are *not* expected to cause deterioration or jeopardise the attainment of the quality objectives due to the application of mitigation measures, as an element for authorisation. Following a precautionary approach, the authorities must be certain that the mitigating measures are sufficient to ensure that no deterioration or jeopardising occurs. See CIS Guidance Document No. 36, p. 16, and 19.

²⁴⁰ The CJEU has interpreted the concept of deterioration with reference to single quality elements for ecological status and single substances for chemical status. More specifically, the CJEU held that there is deterioration of the status of a body of water as soon as the status of at least one quality element within the meaning of Annex V to the directive falls by one class. If that quality element is already in the lowest class, any deterioration of that element constitutes a deterioration of the water status. See case C-461/13, *Weser*, paras 66-69 and further section 3.2.3.2.

²⁴¹ This foremost entails modifications of the hydro-morphological characteristics of a water body, i.e. 'hydrological regime'; 'river continuity'; 'morphological conditions'; and 'tidal regime', which might have direct and/or indirect effects on the biological quality elements of surface waters and/or on the chemical status of the water.

alterations can, for example, be dredging, water drainage or water regulation for activities such as shipping, construction works or hydropower production. Failure to prevent deterioration of the water status is, in this context, broader in scope than the failure to achieve the quality objectives, and it applies both to the chemical and ecological status of surface water as well as to the quantitative and chemical status of groundwater.²⁴² Important to remember, however, is that only physical alterations to aquatic environments are relevant, and not deteriorations that are a result of increased direct emissions of pollutants.²⁴³

In the second situation, “failure to prevent deterioration from high status to good status of a body of surface water” is stipulated within the context of allowing for new “sustainable human development activities”.²⁴⁴ The WFD does not define or exemplify such activities; it puts forward, instead, that the assessment of whether a project falls within the scope of the provision will depend on aspects such as time, scale and available information.²⁴⁵ In general, sustainability includes economic, social and environmental factors. The possibility to allow for new sustainable development projects however applies only to surface waters of very high ecological quality, and the corresponding new ecological status must still be at least *good*. Due to the direct reference to water status (and not potential), heavily-modified or artificial waters are not considered to be covered by this indent.²⁴⁶ Similarly, this specific derogation does not concern the chemical status of surface water, since the classifications for chemical status only covers ‘good’ or ‘failing to achieve good’.²⁴⁷

In addition to the assessment of applicability of the derogation regime, the cumulative conditions outlined in article 4(7)(a)-(d) must be met for a project to be allowed despite its adverse effects on the water environment. These include that the particular project is of overriding public interest and/or that the benefits for sustainable development, human health, or maintenance of human safety outweigh the benefits of achieving the prescribed environmental objectives. Moreover, the benefits of allowing the project must not be achievable by other means that constitute a better environmental

²⁴² Directive 2000/60/EC, art 4(7) first indent.

²⁴³ Notwithstanding this, alterations to the physical characteristics of the water environment that cause a negative impact on the chemical status of the water are likely to fall within the provision. Such a situation could, for example, occur if polluted sediments risk spreading to the water environment due to alterations in terms of dredging for purposes such as the construction of a port or increased shipping activity. See CIS Guidance Document No. 36, p. 20.

²⁴⁴ Directive 2000/60/EC, art 4(7) second indent.

²⁴⁵ CIS Guidance Document No. 36, p. 20.

²⁴⁶ *Ibid*, p. 21.

²⁴⁷ Directive 2000/60/EC, Annex V, s 1.4.3; CIS Guidance Document No. 36, p. 21.

option, due to reasons of technical feasibility or disproportionate costs.²⁴⁸ Lastly, all practicable steps to mitigate any adverse effects must be taken, and the reasons for allowing the project must be explained in the specific RBMP.²⁴⁹

Important to note is also that the use of any of the exemptions under the WFD, including article 4(7), only is allowed as long as the possibilities to achieve the environmental objectives for other water bodies in the district are not permanently compromised. Likewise, in order to apply an exemption, the same level of protection as required under existing EU legislation must be guaranteed for the body of water under review for a project.²⁵⁰ Examples of such other EU legislation that must be complied with are the Habitats Directive²⁵¹, the EIA directive²⁵² and the SEA directive,²⁵³ and relevant EU water legislation.²⁵⁴ I will return to discussing the possibilities to use exemptions under the WFD in section 3.2.2, in particular the use of the derogation regime in article 4(7) of the directive.

3.2.1 The integrated and adaptive freshwater governance system of the WFD

A core concept within the WFD is that the governance of freshwater must be ecosystem/hydrologically based, with identified river basin districts as the primary units of management. The ecosystem perspective is also reflected in the fact that administrative arrangements under the WFD must be based on

²⁴⁸ Alternative means refer both to the project level (regarding, for example, alternative locations or processes), and to the strategic planning level, where alternative ways to reach the desirable goal can be considered from a holistic perspective.

²⁴⁹ According to CIS Guidance Doc. No. 36, p. 52, mitigating measures in this context refers primarily to the conditions of the specific project, such as in regarding the design of the facilities, maintenance and operation conditions, and restoration and creation of habitats. Such measures aim at minimising the adverse effects and should be an integral part of each project. For example, to allow for a new hydropower plant under art 4(7), mitigating measures normally include the construction of functional fish migration aids and the establishment of ecological flow. However, as discussed in paper III and as will be further explained in section 3.2.1, as a result of the integrated planning approach under the WFD, other measures to enhance the quality of the water can, in a subsequent step, be adopted in the PoM and explained in the RBMP within the review for the next six-year cycle. This is also an important motive for requiring a specific explanation for allowing the project in the RBMP.

²⁵⁰ Directive 2000/60/EC, art 4(8)-(9).

²⁵¹ Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora [1992] OJ L 206 ('Habitats directive').

²⁵² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.

²⁵³ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

²⁵⁴ Above section 3.1.

the natural boundaries and flows of water,²⁵⁵ rather than on prior administrative boundaries, such as earlier hierarchical levels of authority, or geographical boundaries between counties and/or municipalities. The integrated river basin planning approach also enables the coordination of measures of surface waters and groundwater belonging to the same ecological, hydrological and hydrogeological systems.²⁵⁶ The idea is thus to take the circumstances of each district into account and, in turn, develop customised measures and strategies for each individual river basin district. In other words, decisions should be taken “as close as possible to the locations where water is affected and used”, and strategies and measures that are adopted to achieve the environmental objectives are to be adjusted to the regional and local conditions.²⁵⁷

Another core idea within the WFD is the adaptive management approach, which is to be carried out in six-year cycles. As explained in section 2.2, adaptive management is an approach to natural resource management that integrates ecological information, environmental considerations, and assessment and planning processes into the criteria for adaptation of management strategies.²⁵⁸ Adaptive management thus requires a learning process, whereby ecosystem responses are monitored and management strategies incrementally adjusted based on what is learned from that monitoring. Under the WFD, adaptive and integrated governance is realised through River Basin Management Plans (RBMPs) and Programmes of Measures (PoMs), which both serve as key instruments for achieving the prescribed environmental objectives. The WFD promotes learning through monitoring, evaluation,²⁵⁹ and deliberative decision-making processes,²⁶⁰ which include different authorities and stakeholders (such as administrative authorities, municipalities, non-governmental organisations and the public), in each review of the RBMPs and the PoMs. In summary, the key steps in each six-year water cycle of the WFD are to:

- 1) Characterise/classify current water quality (status);²⁶¹
- 2) Establish specific environmental objectives (such as EQSs) for each individual water body in a district;

²⁵⁵ Directive 2000/60/EC, art 3.

²⁵⁶ Directive 2000/60/EC, rec 33.

²⁵⁷ Directive 2000/60/EC, rec 13.

²⁵⁸ Holling (ed.), *Adaptive environmental assessment and management*, 1978, pp. 137-139.

²⁵⁹ Directive 2000/60/EC, art 8.

²⁶⁰ Directive 2000/60/EC, art 14.

²⁶¹ Directive 2000/60/EC, Annex V.

- 3) Develop a customised PoM and RBMP for each individual district;
- 4) Make the PoMs operational by implementing identified measures;
- 5) Monitor progress in order to evaluate the effectiveness of chosen measures for the next cycle; and
- 6) Report to the responsible national authority and to the EU commission.²⁶²

The directive specifies in a rather detailed way what the PoMs should include, both in terms of 'basic measures', as minimum requirements, and 'supplementary measures', where necessary, for achieving the environmental objectives.²⁶³ It is also clear from the provisions of the WFD that one of the ambitions is to reduce and eventually eliminate the pollution of water, and, in particular, pollution by hazardous substances and priority hazardous substances, that would otherwise prevent Member States from achieving the environmental objectives.²⁶⁴ As a result of this, the basic measures of PoMs include a variety of measures that control, and occasionally even prohibit, discharge of pollutants from both point and diffuse sources; such measures comprise, for example, mandatory authorisation procedures and emission limit values for related activities.²⁶⁵ Supplementary measures are primarily required when monitoring results indicate that the basic measures are not sufficient to achieve the environmental objectives within article 4 of the WFD; annex VI contains a non-exhaustive list of such supplementary measures.

The RBMPs are the master documents for describing the implementation process in each district. In these plans, information about all stages of implementation shall be included and presented in an easily accessible and transparent manner. Carried out properly, the RBMPs should serve as a communication tool for all who are involved in water management or who have an interest in how water is managed in a particular district.²⁶⁶ The requirements regarding the content of the RBMPs are quite substantial. As specified in article 13 and Annex VII of the WFD, an RBMP must include the following: a general description of the characteristics of a district; a summary

²⁶² Directive 2000/60/EC, arts 4, 8, 11, 13 and 15.

²⁶³ Directive 2000/60/EC, art 11. The basic measures include, for example, measures to promote an efficient and sustainable water use in the aim of achieving the environmental objectives, measures to safeguard water quality for the production of drinking water long-term, and measures to control the abstraction of fresh surface water and groundwater, including necessary registers for such protection and control, see Directive 2000/60/EC, art 11(3)(a)-(f).

²⁶⁴ Directive 2000/60/EC, rec 45 and arts 11(3)(k), 11(6), 16, and 17. Art 11(6) stipulates for example that the measures taken under the PoMs on no account may lead to increased pollution of surface waters, neither directly nor indirectly.

²⁶⁵ Directive 2000/60/EC, art 11(3)(g)-(l).

²⁶⁶ Directive 2000/60/EC, Annex VII.

of the significant pressures and impacts of human activity on waters; an identification of protected areas; and the results of the monitoring programmes (presented in map form).²⁶⁷ The RBMP must also include a list of the environmental objectives, a summary of planned and taken measures, and, most significantly, a report on the identification and progress of those waters that are at risk for not achieving the set objectives.²⁶⁸ Important to note is that the RBMPs can be supplemented by more detailed programmes or management plans for sub-basins, sectors, and issues or water types, if there is a need to address particular aspects of water governance.²⁶⁹ Through such specified plans or programmes, particular problems in a specific river basin, sub-basin or water body can be addressed, preferably by highlighting local perspectives and stakeholder involvement via the participatory approach of the WFD.

Article 14 stipulates a general requirement to “encourage the active involvement of all interested parties in the implementation of this directive”, particularly regarding the production, review and updating of the RBMPs. This general public participation requirement constitutes a key component of the WFD implementation process. For example, the core rationale behind the obligation to specifically set out and explain derogations under article 4(7) in the RBMP is to encourage public participation and to “ensure that the use of exemptions are made transparent and traceable, allowing for public scrutiny”.²⁷⁰ Therefore, under article 14, Member States are obliged to publish and make documents such as a draft of the RBMP and the identification of significant water management issues in a district publicly available for written comments for at least six months of each review process of those same documents.²⁷¹ The requirements under article 14 of the WFD should also be viewed in the context of general obligations regarding environmental rights under EU law; such EU obligations were adopted to implement the Aarhus Convention on access to information, public participation in decision-making and access to justice in environmental matters.²⁷²

²⁶⁷ Directive 2000/60/EC, art 13(4) and Annex VII.

²⁶⁸ Ibid. Annex VII.

²⁶⁹ Directive 2000/60/EC, art 13(5).

²⁷⁰ CIS Guidance Document No. 36, p. 63. See also Case C-664/15, *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation v Bezirkschauptmannschaft Gmünd* (*Protect*) [2017] EU:C:2017:987, para 71, where the CJEU held that a procedure for granting a permit that may cause deterioration of the water status of a body of water must be construed as “implementation” within the meaning of art 14 of the WFD.

²⁷¹ Directive 2000/60/EC art 14(1)-(3).

²⁷² The international UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters was approved on behalf of the European Community by Council Decision 2005/370/EC of 17 February 2005, OJ 2005 L 124. Requirements of the Aarhus Convention have been implemented into several EU directives, such as the EIA-directive.

In the *Protect* case²⁷³ from 2017, for example, the CJEU ruled that environmental NGOs must have access to justice in water law proceedings under the WFD; this ruling interpreted the directive and its environmental objectives in light of both the Aarhus Convention and the Charter of Fundamental rights of the European Union ('the Charter')^{274, 275} The Court also discussed the general benefits of the active participation of environmental NGOs in the WFD process, highlighting their important role in the protection of common environmental interests such as water quality.²⁷⁶ In relation to article 14 of the WFD, the Court held that:

[...] the combined provisions of Article 9(3) of the Aarhus Convention, Article 47 of the Charter and Article 14(1) of Directive 2000/60 must be interpreted as *precluding* national procedural rules that deprive (...) environmental organisations *of the right to participate*, as a party to the procedure, in a permit procedure that is intended to implement Directive 2000/60 and limit the right to bring proceedings contesting decisions resulting from such procedure solely to persons who do have that status.²⁷⁷ (emphasis added).

The *Protect* case illustrates the manner in which the CJEU has limited the procedural autonomy of EU Member States in order to ensure the protection of environmental provisions under EU law. In this regard, the CJEU has held that Article 9(3) of the Aarhus Convention, read in conjunction with Article 47 of the Charter, "imposes on Member States an obligation to ensure effective judicial protection of the rights conferred by EU law, in particular the provisions of environmental law."²⁷⁸ I will return to this issue in section 3.2.3.3, when further discussing the legal requirements imposed on Member States in the *Protect* case.

²⁷³ Case C-664/15, *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation v Bezirkschauptmannschaft Gmünd* ('*Protect*') [2017] EU:C:2017:987.

²⁷⁴ Charter of Fundamental Rights of the European Union, [2000] OJ C 346/1.

²⁷⁵ Case C-664/15, *Protect*, in particular paras 39 and 58.

²⁷⁶ *Ibid*, paras 47, 62, 73-75, and 79.

²⁷⁷ *Ibid*, para 81. As will be further elaborated in section 3.2.3.3, in *Protect* the CJEU also interpreted art 4 of the WFD to be sufficiently clear and precise to have direct effect.

²⁷⁸ Case C-664/15, *Protect*, para 45. See also Case C-240/09 *Lesoochranské zoskupenie VLK v Ministerstvo životného prostredia Slovenskej republiky* ('*Brown Bear I*') [2011] ECR I-1285, paras 45 and 51.

3.2.2 Flexibility in implementation and previous critique of the WFD

As a framework directive adopted under article 192 (previously 175) of the TFEU, the WFD provides substantial flexibility in national implementation. It also follows from the very nature of EU directives that Member States have a certain degree of discretion when transposing them into national law. At the same time, Member States are obliged to achieve the prescribed results,²⁷⁹ primarily the aim and environmental objectives of the WFD, through sufficient transposition into their national legal systems.

The CJEU emphasised early on in *Commission v Luxembourg*²⁸⁰ that the WFD does not seek to harmonise the water legislations between EU Member States.²⁸¹ Rather, the WFD imposes different kinds of obligations, most of which require Member States to take “all the necessary measures” to ensure that the prescribed objectives are attained, whilst leaving some discretion to Member States as to the nature of the measures to be taken.²⁸² As concluded in paper III of this thesis, under the integrated and adaptive governance approach of the WFD and reflecting the general principle of subsidiarity, Member States have the most discretion in regards to measures to be adopted within the individual river basin districts and specific water bodies at the local level.²⁸³ As Jacobsen, Tegner Anker and Baaner explain: “Flexibility in WFD implementation is, thus, not the same as relying on soft or voluntary measures. Rather, it is necessary to adopt adequate measures that are suitable for a flexible application at local level.”²⁸⁴

Some level of flexibility in implementation is crucial when adopting integrated and adaptive water governance at the river basin level, as discussed in chapter 2. Only then can local conditions seriously be weighed in and measures be adapted to the identified problems in each specific water body or river basin, in consultation with stakeholders and the public. On a similar note, it has been argued that too much centralisation in decision-making

²⁷⁹ This follows from the general principle of sincere cooperation in art 4(3) TEU in conjunction with art 288 TFEU.

²⁸⁰ Case C-32/05, *Commission v. Grand Duchy of Luxembourg*, [2006] ECR I-11323.

²⁸¹ Ibid, para 41. See also Case C-525/12, *Commission v. Germany* [2014] ECLI:EU:C:2014:2202, para 50.

²⁸² Case C-32/05, *Commission v. Grand Duchy of Luxembourg*, [2006] ECR I-11323, paras 32, 42-43. When interpreting the closer meaning of ‘all necessary measures’ in relation to how the WFD had been implemented in Luxembourg, the CJEU found that Luxembourg had failed to transpose arts 2, 4 and 7(2) properly into national law “with the binding force required”, see in particular paras 65, and 74-76.

²⁸³ See also Boeve and van den Broek, ‘The Programmatic Approach; a Flexible and Complex Tool to Achieve Environmental Quality Standards’, 2012, p. 76.

²⁸⁴ Jacobsen, Tegner Anker & Baaner, ‘Implementing the water framework directive in Denmark’, 2017, p. 104.

might make local implementation more difficult.²⁸⁵ In this respect, I agree with Jacobsen, Tegner Anker and Baaner, who hold that:

If environmental objectives are to be achieved by mandatory requirements, it is necessary that targeted measures are sufficiently underpinned by knowledge of local conditions, and the more interfering measures the more certainty about the (local) environmental effects is needed.²⁸⁶

Flexibility at the local level is, thus, important to allow for tailor-made measures; measures based on a mixture of expertise and local knowledge with engaged participation. Such adaptive and flexible management is also one of the very cornerstones of WFD implementation.²⁸⁷ However, as also put forward in paper I of this thesis, I view it as crucial, under the governance approach of the WFD, that EU Member States aim to specify Union framework legislation through clear national rules, for example by providing adequate formal arrangements to steer efforts towards good water status.

On the topic of discretion in the transposition of the environmental objectives of article 4 of the WFD into national law, van Holten and van Rijswijk argue that the non-deterioration obligation is absolute and, consequently, does not leave Member States any discretion in implementation.²⁸⁸ Similarly, the EQSs related to the chemical status of water do not leave any discretion to Member States, since the standards are clear and set at the Union level.²⁸⁹ Member States are thus obliged to prevent deterioration of water status and ensure that the common EQSs for chemical substances are not exceeded in waters within their territories. In assessing the ecological quality of surface water, however, Member States have some discretion when translating and assessing the normative definitions of Annex V (biological, hydromorphological, and chemical and physico-chemical

²⁸⁵ Ibid, p. 104.

²⁸⁶ Ibid, p. 104.

²⁸⁷ The study of Kochskämper et al, 'Participation for effective environmental governance?' 2016, p. 746, supports this.

²⁸⁸ van Holten & van Rijswijk, 'The consequences of a governance approach in European Environmental directives for flexibility, effectiveness and legitimacy', 2014, p. 31. As explained in section 3.2.3.2, their view was later confirmed by the CJEU in *Weser*.

²⁸⁹ van Holten & van Rijswijk, 'The consequences of a governance approach in European Environmental directives for flexibility, effectiveness and legitimacy', 2014, p. 33. Directive 2000/60/EC, art 16(7) states that the common limit values must be met by Member States, even though the timeframe may vary slightly. See also case C-361/88 *Commission v Germany* [1991] ECR I-2567, para 16; Case C-58/89 *Commission v Germany* [1991] ECR I-4983 ('*TA Luft I*'), para 14; and Case C-237/07, *Janecek v Freistaat Bayern* [2008] ECR I-6221 ('*Janecek*'), paras 39-42, in which the CJEU obliged Member States to take action to ensure compliance with limit values.

quality elements).²⁹⁰ Nevertheless, as van Kempen argues, when Member States have fully implemented the directive and set the environmental objectives for the ecological status of water, these objectives too consist of “specific, detailed and precise results which should be achieved.”²⁹¹ This view was later confirmed by the CJEU in the *Weser* case in 2015, as discussed in section 3.2.3.2 below.

It follows from the foregoing, as well as generally under the governance or multi-level governance approach of the WFD,²⁹² that the main responsibility for achieving the prescribed environmental results lies with the Member States. The discretion given to the Member States must still, as van Holten and van Rijswijk emphasise, be combined with at least a minimum level of environmental protection, for example by setting minimum standards, requiring reports and evaluations on implementation, and prescribing clear monitoring obligations.²⁹³ In the case of the WFD, however, even though the environmental objectives and the procedural requirements on Member States are quite substantial, implementation has not worked fully satisfactory, which, in turn, has caused criticism towards the directive.

For example, in their discussion of the need for finding the right balance between regulatory flexibility and enforcement in relation to the WFD, Green et al conclude that the WFD seem to provide *too* much flexibility in implementation, feedback functions and enforcement.²⁹⁴ In their view, an extensive use of exemptions, along with a lack of incentive to adapt in relation to monitoring feedback, risk to entrench institutional inertia and prohibit adaptation of measures.²⁹⁵ Keessen et al similarly argue that the flexibility and discretion left to Member States regarding the implementation of the WFD have led to substantial differences in the level of ambition and willingness to achieve the environmental objectives.²⁹⁶ On a similar note, Voulvoulis, Arpon and Giakoumis claim that the primary cause of unattained environmental

²⁹⁰ However, the values for the boundary between different classes must be established through an intercalibration exercise, to ensure that the class boundaries are established as consistent to the normative definitions and comparable between Member States. See also e.g. van Holten & van Rijswijk, ‘The consequences of a governance approach in European Environmental directives for flexibility, effectiveness and legitimacy’, 2014, p. 34.

²⁹¹ Van Kempen, ‘Countering the Obscurity of Obligations in European Environmental Law’, 2012, p.525.

²⁹² Above section 1.1. See also Kesitalo & Pettersson, ‘Implementing Multi-level Governance? The Legal Basis and Implementation of the EU Water Framework Directive’, 2012.

²⁹³ van Holten & van Rijswijk, ‘The governance approach in European Union Environmental Directives and its consequences for flexibility, effectiveness and legitimacy’, 2014, p. 21.

²⁹⁴ Green et al, ‘EU Water Governance: Striking the right balance between Regulatory Flexibility and Enforcement?’, 2013.

²⁹⁵ *Ibid*.

²⁹⁶ Keessen et al, ‘European River Basin Districts: Are they swimming in the same implementation pool?’, 2010, pp. 219-221.

results by Member States is a lack of a paradigm shift towards the systems-thinking of the WFD.²⁹⁷ In combination with the ‘better regulation’ agenda²⁹⁸ and strategies such as ‘no-gold-plating’ in implementation,²⁹⁹ it can thus be argued that flexibility in implementation of an EU directive is just as likely to fail environmental results as it is to promote ambitious adaptive environmental governance.³⁰⁰

In addition to criticism regarding flexibility in implementation, also the timeframes of the adaptive governance system of the WFD have been criticised. For example, Green et al argue that the six-year cycle is too long for constituting a relevant timeframe to ensure necessary monitoring and adaptation; meaning, the feedback loop needs to occur more frequently to encourage true adaptive management.³⁰¹ Josefsson is, instead, critical of the original, overarching timeframes set for achieving the rather ambitious environmental objectives of the WFD – timeframes set at 15, 21 or 27 years. He argues that a more realistic and appropriate timeframe for the rehabilitation of river basins would be closer to around 100 years, as this would provide enough time for the re-establishment of biological communities from an ecological perspective.³⁰²

Finally, when it comes to the ability of the directive to efficiently assess and manage chemical contamination of surface water, Brack et al conclude that the WFD leaves considerable room for improvements.³⁰³ For example, they argue that EQSs are insufficient to protect the water environment against mixture effects, since the absence of toxic stress cannot be monitored on a per-

²⁹⁷ Voulvoulis, Arpon, & Giakoumis, ‘The EU Water Framework Directive: From great expectations to problems with implementation’, 2017, p. 358. See also paper I, p. 523, where a similar conclusion is drawn in the context of analysing the Swedish implementation of the WFD.

²⁹⁸ The better regulation agenda essentially aims to find more effective ways of designing and enforcing EU legislation, but without placing unnecessary burdens on those who are regulated. It is intended to deliver better rules for better results by opening up policy-making and interacting with those who implement and benefit from EU legislation. See the EU Commission, ‘Better regulation for better results - An EU agenda’, COM(2015) 215 final. See also Kellet, ‘Is the better regulation agenda producing better regulation?’, 2008.

²⁹⁹ The no-gold-plating principle means that an EU Member State does not go beyond the minimum requirements of EU legislation when implementing it into the national legal system. See e.g. Jans et al, “‘Gold-plating’ of European Environmental Measures?”, 2009; Tegner Anker et al, ‘Coping with EU Environmental Legislation - Transposition Principles and Practices’, 2015, p. 18;

³⁰⁰ As further explained in section 3.3.2.3, Sweden provides an illustrative example of a decreased level of ambition in WFD implementation. In the legislative changes adopted in Sweden in June 2018, the no-gold-plating principle is expressed in the way that the possibilities for using exemptions, including the derogation regime of article 4(7) of the WFD, and for identifying waters as artificial and/or heavily modified, should be fully utilised when implementing the directive. See Government Bill 2017/18:243, pp. 76, and 148-157; and Appropriation Directions addressed to the County Administrative Boards, 2018, direction no 31.

³⁰¹ Green et al, ‘EU Water Governance: Striking the right balance between Regulatory Flexibility and Enforcement?’, 2013.

³⁰² Josefsson, ‘Achieving Ecological Objectives’, 2012, pp. 53-57.

³⁰³ Brack et al, ‘Towards the review of the European Union Water Framework Directive’, 2017, p. 721-722.

chemical basis.³⁰⁴ Similarly, Solheim et al have identified that monitoring of the chemical status is insufficient and inadequate in many Member States, due to the fact that not all priority substances are being monitored and, also, that the number of water bodies being monitored is very limited.³⁰⁵ In light of these and related problems, Brack et al present several recommendations for the improvement of monitoring and for a more integrated strategy for the prioritisation of chemical contaminants.³⁰⁶ One of these recommendations is to consider all relevant chemicals (priority substances and other identified river-basin-specific pollutants) and then, in turn, use a graded system to assess the chemical status of surface water, rather than using the current, two-grade scale of *good* or *not good* chemical status of the WFD.³⁰⁷

It remains to be seen if the criticism of and ideas for improving the WFD will be considered in the forthcoming revision of the directive planned to begin in 2019,³⁰⁸ but I will not further immerse myself in the discussion of possible and future improvements of the directive here. Instead, the discussion in the following, as well as in this thesis at large, presupposes that the Member States must implement the requirements currently stipulated by the directive - advantageously by clear rules on the national level.

3.2.3 CJEU interpretations of obligations under the WFD

3.2.3.1 Introduction

In this section, some of the most important cases concerning interpretation of the obligations under the WFD are analysed and discussed. The main purpose here is to illustrate how the procedural autonomy of EU Member States has been limited by the case law developed by the CJEU, in particular by the Court's interpretation of the environmental objectives of the WFD as legally-binding in national proceedings (section 3.2.3.1) and as sufficiently clear and precise enough to have direct effect (section 3.2.3.2).

Under the 'judicial implementation' obligation, Member State national courts, and to a certain extent administrative authorities, are obliged to give primacy to EU law in situations where national law is found to be in conflict

³⁰⁴ Ibid. p. 722-723.

³⁰⁵ Solheim et al, *Ecological and chemical status and pressures in European waters*, 2012, p. 8.

³⁰⁶ Brack et al, 'Towards the review of the European Union Water Framework Directive', 2017, p. 723 ff.

³⁰⁷ Ibid. p. 723.

³⁰⁸ Ibid p. 721; and http://deltongo.userpage.fu-berlin.de/documents/2016-11-18_00_WRRL-Forum_Vortrag-Rodriguez-Romero-The-2019-review-of-the-Water-Framework-Directive.pdf (18-10-26).

with EU provisions.³⁰⁹ Under the procedural autonomy, it is almost entirely left to the national body to decide whether to interpret national law in consistency with EU law, or to set conflicting national rules aside, or, finally, to apply sufficiently clear and unconditional provisions of EU law directly and in lieu of national law.³¹⁰ According to the CJEU, the key factor to consider is, ultimately, that the result of a directive is ensured by the measures chosen, so that the full effect of the provisions can be enforced in each and every situation.³¹¹

However, it must also be observed that the procedural autonomy of national courts in such situations is not absolute. Klamert argues, for example, that primacy must be given to interpretations in light of a directive in lieu of all possible interpretations of national law, which, in turn, affects national procedural law, as the obligation includes national methods of interpretation and construction.³¹² Similarly, Prechal argues that there generally “are no grounds for denying an interpretation in conformity with a directive”, as long as general legal principles, such as legal certainty, are observed and “national law can bear the meaning construed with the aid of the directive”.³¹³ The CJEU also acknowledged in *Kolpinghuis* that general legal principles, such as legal certainty and non-retroactivity (as in criminal proceedings), ultimately place the limits on the obligation to interpret national law in consistency with a directive.³¹⁴

Additionally, the case law developed by the CJEU on access to justice in environmental matters supports the view that national courts are under a general obligation to interpret national procedural rules to the fullest extent possible in ways that will enable environmental NGOs to challenge, before a national court, an administrative decision that is likely to be in conflict with

³⁰⁹ The judicial implementation obligation stems, ultimately, from the principle of sincere cooperation in TEU art 4(3), in conjunction with the obligation to achieve the prescribed result of a directive in TFEU art 288, under which the doctrines of primacy, direct effect and consistent interpretation of EU law have been developed by the CJEU.

³¹⁰ However, it should be borne in mind that the obligation to interpret in consistency with the provisions of a directive is considered a milder incursion into the national legal system than negating national law and/or applying EU provisions directly in national proceedings. As a result, the obligation to interpret in consistency with EU law is also wider than the instrument of direct effect, and it falls on all State authorities. Moreover, the obligation includes interpretations delivered by the CJEU as the supreme interpreter of EU law. See e.g. de Witte, ‘Direct Effect, Primacy and the Nature of the Legal Order’, 2011, pp. 323-362.

³¹¹ This is implied by the CJEU in Case 222/84, *Marguerite Johnston v. Chief Constable* [1986], ECR 1651, paras 53-59, when noting that both consistent interpretation and direct effect can be used by the national court to ensure individuals their rights under EU law. However, individuals must always be able to directly rely on sufficiently-precise and unconditional provisions to be able to enforce their rights before a national court.

³¹² Klamert, ‘Judicial implementation of directives and anticipatory indirect effect’, 2006, p. 1274. See also Klamert, *The principle of loyalty in EU law*, 2014, p. 109.

³¹³ Prechal, *Directives in EC Law*, 2005, p. 215.

³¹⁴ Case 80/86, *Kolpinghuis Nijmegen BV* [1987] ECR 3969, para 13.

EU law.³¹⁵ As also reflected by the *Protect* case, this specific case law has, to a large extent, been developed in line with obligations under the Aarhus Convention.³¹⁶ In this context, the EU Commission has recently acknowledged that, while the legislative framework is created at the EU level, it is at the level of the Member States and, in particular, through national courts, that the access to justice provisions acquire practical reality and meaning.³¹⁷

At the same time, the CJEU has developed the doctrine of direct effect beyond the initial invocation of clear individual rights before national courts, into a possibility to enforce the obligations of Member States under EU law, for a wide variety of purposes; this is particularly evident in cases that concern environmental protection.³¹⁸ For example, in *Kraaijeveld*, the CJEU accepted that individuals can invoke general procedural obligations in a directive addressed to the Member States.³¹⁹ Similarly, in *Waddenzee*, the CJEU confirmed that the legal review in national courts has a broader scope and that directly effective provisions may be taken into account when determining whether a national authority has kept within the limits of the discretion set by the provision in question.³²⁰ In cases such as *Delena Wells*³²¹ and the more recent *Brown Bear II*,³²² the CJEU has also confirmed that provisions of a directive that are unconditional and sufficiently precise, may be relied upon by an individual before a national court, despite not clearly conferring rights onto individuals.³²³

It follows from the case law developed by the CJEU, that national courts are obliged to interpret national law in the context of the provisions of the WFD and, especially, to ensure compliance with the directive's obligations. As a subsequent step, conflicting provisions of national law might have to be set

³¹⁵ Case C-240/09, *Brown Bear I*, para 51. See also e.g. Case C-263/08 *Djurgården –Lilla Värtans Miljöskyddsförening v Stockhoms kommun genom dess marknämnd* [2009] ECR I – 09967, ('*Djurgården-Lilla Värtan*'), para 45; and Darpö, 'On the Bright Side (of the EU's Janus Face)', 2017, pp. 375 ff.

³¹⁶ Above section 3.2.1. The case is also further described in section 3.2.3.3 below.

³¹⁷ EU Commission, 'Notice on access to justice in environmental matters' [2017] OJ C 275/1, p. 7.

³¹⁸ See Prechal, *Directives in EC Law*, 2005, pp. 231 and 238; and Darpö, 'On the Bright Side (of the EU's Janus Face)', 2017, p. 389.

³¹⁹ Case C-72/95, *Aannemersbedrijf P.K. Kraaijeveld BV and others v. Gedeputeerde Staten van Zuid-Holland* [1996] ECR I-5403. In the particular case, it was the obligation to produce an environmental impact assessment under the initial environmental impact assessment Directive (83/189) that was enforced.

³²⁰ Case C-127/02, *Landelijke Vereniging to Behoud van de Waddenzee* [2004] ECR I-7405, paras 69-70.

³²¹ Case C-201/02, *Delena Wells v Secretary of State for Transport, Local Government and Regions* [2004] ECR I-748, ('*Delena Wells*'), paras 64-66.

³²² Case C-243/15, *Lesoochranárske zoskupenie VLK v Obvodný úrad Trenčín* [2016] ECR I-838, ('*Brown Bear II*'), para 44.

³²³ In *Brown Bear II*, the CJEU specifically held that article 6(3) of the Habitats directive (92/43/EEC) was sufficiently clear and precise enough to have direct effect, see Case C-243/15, *Brown Bear II*, para 44. See also Case C-237/07, *Janecek*, paras 35-36; and Case C-404/13, *ClientEarth v The secretary of State for the Environment, Food and Rural Affairs* [2015] ECLI:EU:C:2014:2382, ('*ClientEarth*'), paras 54-56.

aside, and, if the conditions of direct effect are met, the provisions of the WFD applied directly, so as to ensure full effectiveness (*'effet utile'*) of EU law.³²⁴ Against this backdrop, I will now turn to analysing key CJEU cases that address interpretation and application of the WFD.

3.2.3.2 The *Weser*, *Schwarze Sulm* and *Acheloos* cases

Before 2015, the majority of the WFD infringement cases initiated by the EU Commission concerned formalities and breaches of the procedural requirements.³²⁵ For example, according to a study of Korkea-aho in 2014, only one out of 18 cases involved concept litigation.³²⁶ Likewise, at this point, Member State national courts had not yet consulted the CJEU much through the preliminary reference procedure. Hence, harmonised understanding of key concepts within the WFD had not yet been decided on by the CJEU.³²⁷ This lack of judicial guidance led to uncertainties and differing opinions regarding interpretations of obligations under the directive.³²⁸

In 2015, however, through the landmark *Weser* case³²⁹ the CJEU delivered important interpretative guidance on the legal status of the environmental objectives within article 4 of the WFD, including the obligation to prevent deterioration. The *Weser* case was a preliminary reference procedure initiated by the *Bundesverwaltungsgericht* (Federal Administrative Court) in Germany. The case attracted much attention among and within the Member States, and plays a central role in the analysis of this study due to its important legal implications, not least for Sweden. *Weser* concerned an extensive dredging project in the river Weser, one of the largest rivers in Germany, where various parts of the river had to be deepened to enable larger container vessels to reach three different German ports. The project was expected to cause negative hydrological and morphological consequences and, as a result, negatively affect the ecological status of the

³²⁴ See e.g. Sadl, 'The role of *effet utile* in preserving the continuity and authority of European Union law: Evidence from the citation web of the pre-accession case law of the Court of Justice of the EU', 2015.

³²⁵ See Olsen Lundh, *Panta rei – Om miljö kvalitetsnormer och miljö kvalitetskrav*, 2016, pp. 266 ff, for an overview of the CJEU case law concerning the WFD.

³²⁶ Korkea-aho, 'Watering down the Court of Justice?', 2014, p. 664.

³²⁷ See further paper I, pp. 516-517, for a discussion of the role that the guidance provided by the informal CIS network might have played in the lack of judicial guidance.

³²⁸ See e.g. Case C-461/13, *Weser*, Opinion of AG Jääskinen, paras 29 and 33-35, where completely opposing views of several national governments are presented; and Keessen et al, 'European River Basin Districts: Are they swimming in the same implementation pool?', 2010.

³²⁹ Case C-461/13, *Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland* [2015] ECR I-433, ('*Weser*').

river. The German court asked the CJEU for guidance on, for example, whether article 4(1)(a)(iii) of the WFD should be interpreted to mean that Member States are required, unless a derogation is granted, to refuse authorisation for a project that may cause deterioration or jeopardise attaining the environmental objectives of the WFD.

The CJEU answered that the environmental objectives in article 4 of the directive are legally binding and impose obligations onto Member States to achieve certain results within prescribed timeframes. More specifically, the Court held that the environmental objectives, including the obligation to prevent deterioration, must be complied with during every stage of WFD implementation.³³⁰ In light of this, EU Member States are required to refuse authorisation for projects that can be expected to result in deterioration of water status or to jeopardise the attainment of set environmental objectives of the WFD, unless the project can be motivated under the derogation regime of article 4(7) of the directive.³³¹ The CJEU also established in the *Weser* case that deterioration occurs as soon as the status of at least one of the quality elements in Annex V of the WFD is assessed at an ecological status downgrade by one class, even if that specific deterioration does not result in a downgrade in the classification for the body of water as a whole.³³² Additionally, if the quality element concerned is already in the lowest class, any deterioration of that element constitutes a deterioration of the status of that body of water, within the meaning of Annex V.³³³

As a result of the *Weser* case, a crucial component in effective implementation of the WFD is to ensure that the environmental objectives are taken into consideration in each and every subsequent decision-making situation (such as licensing or planning), that might result in adverse effects on the aquatic environment.³³⁴ In *Weser*, the CJEU also emphasised the systematics of the main rules and exemptions of the WFD, wherein exemptions are to be given a restrictive interpretation and application and, in particular, where no further grounds for exemption can be accepted than the ones already listed in the directive.³³⁵ Furthermore, the CJEU elucidated a

³³⁰ Ibid, para 50.

³³¹ Ibid, para 50.

³³² Ibid, para 69.

³³³ Ibid, para 69. For example, if a hydropower project is expected to negatively affect the hydromorphological quality elements, which are already in the lowest class due to an existing dam, the project should be considered to deteriorate the ecological status of that body of water and thus trigger an article 4(7) test.

³³⁴ See e.g. Michanek, 'Tillstånd får inte ges om aktuell ytvattenstatus försämras eller uppnåendet av god ytvattenstatus äventyras', 2015, p. 4; van Rijswijk and Backes, 'Ground Breaking Landmark Case on Environmental Quality Standards?', 2015, p. 375; Paloniitty, 'The Weser Case: Case C-461/13 *Bund v Germany*', 2016, p. 154. See also paper II, pp. 6-7; and paper III, pp. 3 and 7.

³³⁵ Case C-461/13, *Weser*, paras 44-48, 50, and 68.

crucial difference between the obligation to prevent deterioration and the grounds of derogation laid down in article 4(7) of the WFD; only the latter involve some balancing of interests, such as adverse effects on the water environment against water-related economic interests.³³⁶

In the subsequent *Schwarze Sulm* case,³³⁷ the CJEU shed additional light on the application of the derogation regime of article 4(7) of the WFD, in terms of the possibility to allow for new projects despite their negative impact on the aquatic environment. Like *Weser*, *Schwarze Sulm* plays an important role in this study's analysis of WFD implementation in Sweden.

Schwarze Sulm was an infringement procedure against the Republic of Austria, where the main issue was whether or not a decision to authorise the construction of a new hydropower plant in the Schwarze Sulm river had been adopted in compliance with the requirements under the derogation regime of article 4(7) of the WFD. The Court first held, in general terms, that Member States must be allowed "a certain margin of discretion" in the assessment of, for example, what constitutes an overriding public interest under article 4(7). Under this margin of discretion, the Court alleged that the Republic of Austria had been entitled to motivate the project under the derogation regime, emphasising that all of the conditions had seemingly been carefully examined in the determination of the basis for the decision.³³⁸ Not least, the reasons behind the project had been specifically set out and explained in the RBMP, and measures to mitigate the project's negative impact had been planned.³³⁹ On those grounds, the action of the Commission against the Republic of Austria was dismissed.

Following the lead of the *Schwarze Sulm* decision, I argue in paper III that EU Member States are not prevented from adopting a flexible integrated planning approach when implementing the WFD in situations where the adverse effects of new modifications or projects can be balanced by other measures in the river basin or river basin district as a whole, as long as the new modification or project can be motivated under the derogation regime of article 4(7). Important to note, however, is that each new modification or project must be assessed according to its specific impact on the relevant environmental objectives, and not merely in the context of the planning provided by the RBMPs and the PoMs.³⁴⁰ In situations of adverse effects that

³³⁶ Case C-461/13, *Weser*, para 68.

³³⁷ Case C-346/14 *Commission v Republic of Austria* [2016] ECR I-322, ('*Schwarze Sulm*').

³³⁸ *Ibid.* paras 74, and 80-81.

³³⁹ *Ibid.* paras 68 and 77.

³⁴⁰ Case C-461/13, *Weser*, para 43.

may not be mitigated as an integral part of the project,³⁴¹ the project can only be allowed when motivated under the derogation regime of article 4(7). Following the *Schwarze Sulm* decision, EU Member States are allowed a certain amount of discretion in the assessment of derogation, as long as all conditions are satisfied and well-documented in the grounds for reasoning of the decision.

That Member States are allowed their own discretion when applying the derogation regime is also supported by the CJEU's reasoning in the earlier *Acheloos* case of 2012.³⁴² *Acheloos* was a preliminary reference procedure initiated by a Greek court concerning a project to partially divide the upper waters of the river Acheloos. The national court primarily wanted to know whether the timeframe for drawing up RBMPs in article 13(6) of the WFD includes time-limits for transposing the obligations under article 4 into national law. The CJEU initially held that EU Member States have to refrain from any measure likely to seriously compromise the results prescribed by article 4 of the WFD, already prior to the transposition deadline.³⁴³ However, similar to the argumentation in the subsequent *Schwarze Sulm* case, the CJEU emphasised in *Acheloos* the flexibility and discretion entrusted to Member States; specifically, the CJEU limited the effects of the passive refrainment obligation, with reference to the flexibility and discretion entrusted to the Member States under the derogation regime in article 4(7) of the WFD.³⁴⁴ Acknowledging that it is impossible for Member States to meet their needs for water ecosystem services without making changes to the water environment, the Court concluded that such projects may be allowed, as long as the conditions of the derogation regime, which are to be applied by analogy, are met.³⁴⁵

In consideration of these decisions of the CJEU, I share the opinion of van Rijswijk and Backes that the Court has balanced the need for flexibility with the need for improving water quality in WFD implementation, combining strictly-binding environmental obligations with a rather large amount of policy discretion regarding implementation.³⁴⁶ Like van Rijswijk and Backes,

³⁴¹ In other words, the project cannot, at this point, be motivated due to a plan of compensatory measures in the same and/or in another river basin.

³⁴² Case C-43/10 *Nomarchiaki Aftodioikisi Aitolokarnanias and Others v Ipourgos Perivallontor, Chrotaxias kai Dimosion ergon and Others* [2012] EU:C:2012:560, ('*Acheloos*')

³⁴³ *Ibid*, paras 57 and 60. In other words, the CJEU used the refrainment doctrine developed in Case C-129/96, *Inter-Environnement Wallonie ASBL v. Region Wallonie* [1997] ECR 7411, para 45, to impose obligations on Member States, already prior to the transposition deadline of the WFD.

³⁴⁴ Case C-43/10, *Acheloos*, paras 64-65, and 67.

³⁴⁵ *Ibid*, paras 68-69.

³⁴⁶ van Rijswijk & Backes, 'Ground Breaking Landmark Case on Environmental Quality Standards?', 2015, p. 16.

I believe that this balance is a feasible way to allow for the systematic approach of the WFD to reach its full potential.³⁴⁷

The interpretations by the CJEU in *Weser* have also been questioned, however, as they are liable to result in unreasonable consequences, due to reduced possibilities to allow for projects that cause increased emissions of, for example, nutrients or hazardous substances, when considering the narrow design of the derogation regime in article 4(7) in this regard.³⁴⁸ As such increased emissions are included in the non-deterioration obligation as interpreted by the CJEU,³⁴⁹ in situations where such increased emissions cannot be motivated under article 4(7) of the WFD, the only way for the project to still be viable is to prescribe sufficient conditions of precaution that eliminate the risk of deterioration. In this light, I am of the opinion that the interpretations of the WFD provided by the CJEU, overall, mean that a fair balance between exploitation and protection can be achieved.³⁵⁰ In relation to this, it is also important to keep in mind that, as the CJEU held in *Weser* and has also emphasised when interpreting other environmental directives, the individual provisions of an environmental framework directive, such as the WFD, cannot be properly understood in isolation. Rather, directive provisions must be interpreted within the context of the directive as a whole, including its overall purpose and more general objectives.³⁵¹ Considering also that the WFD is a framework directive adopted under article 192 of the TFEU; as Jans and Vedder argue, legislation based on the environmental provisions of the Treaties should be interpreted in accordance with the environmental objectives and principles therein.³⁵² Such principles include ‘sustainable

³⁴⁷ See van Rijswijk & Backes, ‘Ground Breaking Landmark Case on Environmental Quality Standards?’, 2015, p.16; and Voulvoulis, Arpon, & Giakoumis, ‘The EU Water Framework Directive: From great expectations to problems with implementation’, 2017, p. 363. See also further paper III, pp. 8-12.

³⁴⁸ Bjällås, Fröberg & Sundelin, ‘Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas?’, 2015, pp. 29-31.

³⁴⁹ My position is based on the argumentation of the CJEU in *Weser* and on that the non-deterioration obligation is of fundamental importance in the directive, combined with the fact that one of the ambitions of the WFD is to reduce and eventually eliminate pollution of water, in particular by hazardous substances and priority hazardous substances, but also by other substances that otherwise prevent Member States from achieving the environmental objectives. See WFD rec 45 and arts 11(3)(k), 11(6), 16, and 17; and *Weser* (n x) paras 47-48, 50, 55, 66-67 and 69. Cf. Bjällås, Fröberg & Sundelin, ‘Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas?’, 2015, p. 30. Furthermore, as Westerlund argue, a non-degradation principle should be a basic cornerstone in environmental law and policy. See Westerlund, *Fundamentals of Environmental Law Methodology*, 2007, p. 54.

³⁵⁰ See also paper III, pp. 8-12.

³⁵¹ Case C-461/13, *Weser*, in particular paras 34-37, 42, 54 and 63. See also e.g. Case C-201/02, *Delena Wells*, para 37; Case C-106/89, *Marleasing SA v La Comercial Internacional de Alimentacion SA* [1990] ECR I-4135, para 8; Case C-237/07, *Janecek*, para 36; Case C-243/15, *Brown Bear II*, para 43; and Case C-664/15, *Protect*, para 33, in which the CJEU similarly emphasises the more general objective of the directive to ensure a high level of environmental protection within the EU.

³⁵² See Jans & Vedder, *European Environmental Law – After Lisbon*, 2012, p. 27. See also Langlet & Mahmoudi, *EU:s miljö rätt*, 2011, pp. 62-63. The CJEU has also, on occasion, emphasised that provisions of EU

development’; a ‘high level of environmental protection’; ‘the precautionary principle’; ‘the prevention principle’; and ‘the polluter pays principle’.³⁵³

This analysis, then, puts forward that individual WFD provisions, including the derogation regime in article 4(7), should be interpreted primarily in light of the directive’s overall purpose, which is to protect and enhance water quality, to develop structures for a sustainable use of water within the EU, as well as to ensure a high level of protection and precaution.³⁵⁴ This view of a system-based perspective in interpretation, while reflecting the overall ambition of a high level of protection along with a precautionary approach, is also prompted in the *Protect* case, which I will discuss more closely in the next sections.

3.2.3.3 The Protect case and adjoining case law on judicial implementation

In the *Protect* case,³⁵⁵ the CJEU interpreted the environmental objectives within article 4 of the WFD to be sufficiently clear and unconditional enough to have direct effect, emphasising their key function in attaining the overall purpose of the directive.³⁵⁶ In other words, through *Protect*, the Court further specified the judicial implementation obligation under the WFD for national courts, and limited the procedural autonomy of the Member States in a way that should have significant implications for national judiciaries. Due to its legal implications for WFD implementation, the *Protect* case plays a central role for the analysis in this thesis.

Protect was a preliminary reference procedure requested by the *Verwaltungsgerichtshof* (Supreme Administrative Court) of Austria. The case concerned, primarily, an interpretation of article 9(3) of the Aarhus Convention in combination with articles 4 and 14 of the WFD. The national court had asked for CJEU guidance on the legal standing of an environmental NGO, in the context of an application for a permit to abstract water from a river for the purpose of producing snow for a ski resort. The NGO had objected to the authorisation decision, primarily on the grounds that the ecological

law cannot be interpreted in such a way “as to give rise to results which are incompatible with the general principles of Community law and in particular with fundamental rights.” See Joined Cases 97/87, 98/87 and 99/87, *Dow Chemical Ibérica, SA, and others v Commission of the European Communities* [1989] ECR I-3165, para 9.

³⁵³ TFEU art 191 and TEU art 3(3).

³⁵⁴ Directive 2000/60/EC, in particular recs 3, 5, 12, 19, 25, and art 1.

³⁵⁵ Case C-664/15, *Protect*.

³⁵⁶ *Ibid.*, paras 33-34.

status of the relevant water had deteriorated as a result of the existing snow-production facility.

The CJEU established in *Protect* that the provisions of article 4 are sufficiently clear and precise enough to have direct effect. In other words, concerned individuals and/or environmental NGOs must be able to rely directly on the environmental objectives before national courts, regardless of whether those provisions have been properly transposed into the national legal system or not. The Court specifically held that:

It would be incompatible with the binding effect conferred by Article 288 TFEU on a directive to exclude, in principle, the possibility that the obligations which it imposes *may be relied on by the persons concerned*. The effectiveness of Directive 2000/60 and its aim of protecting the environment, (...), require that individuals or, where appropriate, a duly constituted environmental organisation *are able to rely on it in legal proceedings*, and that the national courts *be able to take that directive into consideration* as an element of EU law in order, inter alia, to review whether a national authority that has granted a permit for a project that may have an effect on the water status *has complied with its obligations under Article 4 of the directive*, in particular preventing the deterioration of bodies of water, and has *thus kept within the limits of the discretion granted* to the competent authorities by that provision.³⁵⁷ (emphasis added).

The context of the case and the wordings of the CJEU in the quote above imply that the environmental objectives of article 4 can be considered sufficiently clear and precise enough to have direct effect both in general terms (“that national courts be able to take that directive into consideration”) and in relation to the authorisation of individual projects. As held by the Court, concerned individuals and environmental NGOs must be able to question, before a national court, whether a national authority has applied the WFD environmental objectives correctly in individual authorisation procedures. As a result, other situations are also likely to fall under such a review process, for example situations such as planning decisions or inspections.³⁵⁸

³⁵⁷ Ibid, para 34.

³⁵⁸ In previous case law concerning the possibilities for environmental NGOs to invoke EQSs before national courts, the CJEU has emphasised the obligation of Member States to establish PoMs in order to meet the EQS, while leaving discretion to the Member States on the identification of such measures, see Case C-237/07, *Janecek*, paras 43-47. Groothuijse & Uylenberg argue that this discretion has limited the legal possibilities for interested parties to enforce implementation of specific environmental improvement measures, see Groothuijse

As also argued in paper II of this thesis, the last part of the above-quoted section of the CJEU *Protect* decision, “... thus kept within the limits of the discretion granted (...) by that provision”, may be interpreted so as to include the derogation regime in article 4(7) under the notion of direct effect.³⁵⁹ In my view, there are no obvious reasons for excluding derogative provisions, such as article 4(7) of the WFD, from the general possibility for national courts to ex officio apply EU provisions directly under the general legal principle of *jura novit curia* (that the court knows the law).³⁶⁰ The crucial thing is that the same level of protection provided for by article 4 of the WFD as a whole, thus including the possibility to grant a derogation, is ensured in each individual case.³⁶¹ This view is also supported by the Court’s reasoning in the abovementioned *Acheloos* case,³⁶² wherein the CJEU held the derogation regime to be applicable by analogy, and even before the transposition deadline, provided that all conditions were clearly examined and satisfied. The motivation prompted by the CJEU in *Acheloos* was that it would be unreasonable to require Member States to ensure a higher level of protection than that required under article 4 as a whole, including the possibility to apply the derogation regime in article 4(7) of the WFD.³⁶³

Generally, arguments related to legal certainty are the most frequently used against the direct effect of EU provisions in situations where a Member State has failed to properly implement a directive, especially where individuals or third parties are at risk of being negatively affected by such

& Uylenberg, ‘Everything according to plan?’, 2014, p. 140. However, at least under the WFD these parties are now entitled to legally question authorisation of specific projects that they consider not to be in compliance with art 4 of the WFD. Similarly, for example regarding spatial plans or building permits, it should be possible for concerned individuals and environmental NGOs to put forward legal questioning, in light of the *Protect* case.

³⁵⁹ Paper II, note 134. As also indicated in the paper, the Court’s reasoning in Case C-346/14, *Schwarze Sulm*, in which the discretion of Member States when applying the derogation regime was the key contested issue, supports this interpretation.

³⁶⁰ However, as further developed below in this section, the derogation regime does not have direct effect in the sense that it may not be *invoked* by an individual applicant to be granted a permit.

³⁶¹ Regarding the derogation regime of the WFD, it may be a question of granting a permit in compliance with article 4 of the WFD or not. As described in paper II, the derogation regime in article 4(7) of the WFD was not correctly transposed into Swedish law, making it inapplicable in individual authorisation processes. In light of this, an argument brought forward in the paper is that it would have been advantageous in several of the cases reviewed if the Swedish courts, rather than granting the permits without applying the derogation regime, at least would have discussed the possibility to apply the derogation regime directly or set national procedural rules aside, interpreting them in light of the *Weser* and *Schwarze Sulm* cases. See also Bjällås, Fröberg & Sundelin, ‘Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas?’, 2015, p. 23, who similarly argue in this context that an interpretation where only the obligation to prevent deterioration but not the possibility to apply a derogation as directly applicable under national law would have unreasonable consequences, not least from the perspective of the individual.

³⁶² Case C-43/10, *Acheloos*, described in section 3.2.3.2.

³⁶³ *Ibid*, paras 64-65, and 68-69.

applications.³⁶⁴ However, the practical implications of an ex officio application of EU provisions differ significantly, depending on both the type of procedure and the instrument used to enforce the primacy of EU law. In general, as the CJEU held in *van Schijndel*, ex officio application of EU provisions can be motivated to safeguard individual rights, as long as important principles of national procedural law are not infringed upon, such as the principle of parties' freedom of disposition.³⁶⁵ In other words, the practical effect (for individuals) would usually be more significant in actions amenable to out-of-court settlements, rather than in actions not amenable to out-of-court settlements or administrative judicial procedures (such as licensing procedures).³⁶⁶ As also indicated by the CJEU in *Peterbroeck*,³⁶⁷ national courts can even be *obliged* to set national procedural rules aside ex officio, in certain situations:

The answer (...) must therefore be that Community law precludes application of a domestic procedural rule whose effect (...) is to prevent the national court (...) from considering *of its own motion* whether a measure of domestic law is compatible with a provision of Community law when the latter provision has not been invoked by the litigant within a certain period.³⁶⁸ (emphasis added).

On a similar note, Bernitz argues that the obligation to consider EU law by, for example, requesting a preliminary ruling from the CJEU, cannot be made dependent on such a request being *invoked* by an individual, since the national court, under the principle *jura novit curia*, shall ex officio examine whether a preliminary ruling shall be requested or not.³⁶⁹ Moreover, according to the Swedish Supreme Court, the opinions of the parties are not

³⁶⁴ See e.g. Case 152/84, *M.H. Marshall v. Southampton and South-West Hampshire Area Health Authority* [1986] ECR 723, para 48.

³⁶⁵ Joined Cases C-430/93 and C-431/93, *Jeroen van Schijndel and others* [1995] ECR I-4728, paras 13-15, and 20-22.

³⁶⁶ See e.g. Bernitz & Kjellgren, *Europarättens grunder*, 2014, p. 102.

³⁶⁷ Case C-312/93, *Peterbroeck, Van Campenhout & Cie SCS v. Belgian State* [1995] ECR I-4599, ('*Peterbroeck*').

³⁶⁸ *Ibid*, para 21.

³⁶⁹ Bernitz, 'Förhandsavgöranden av EU-domstolen', 2016, p. 26. See also Bernitz, *Europarättens genomslag*, 2011, p. 100, where he argues that the wording of s 1 para 1 in the Swedish Act with certain provisions on preliminary rulings from the CJEU (2006:502) is too narrow in this regard and incorrectly implies that such a request must be invoked by an individual.

the determining factor in that regard.³⁷⁰ The CJEU clearly expressed the same general opinion in *Salonia*.³⁷¹

Another matter, however, is the question of in which situations individuals and/or environmental NGOs *can* invoke the derogation regime of article 4(7) of the WFD before national courts. As implied by the foregoing, the wording and conditions of the derogation regime must be considered sufficiently clear and unconditional enough to have direct effect, especially given the clarifications by the CJEU in *Protect*. That a provision contains discretion has generally not prevented it from having direct effect.³⁷² Hence, in examining both *Protect* and *Brown Bear II*, it can be understood that concerned individuals and NGOs must, at the very least, be able to question whether a national authority has applied a derogation correctly and kept within the limits of the discretion granted by the provision. However, it is highly unlikely that an individual can *force* a national authority to apply the derogation regime in a specific situation, as the use of derogations generally is considered to fall under the discretion of the Member States.³⁷³ It is thus unlikely that a national authority can be forced to make use of a derogation, even if the conditions for derogation are met in a specific case.³⁷⁴

To conclude, regardless of whether an individual can directly invoke an EU provision in all situations or not, national courts are generally not prohibited from applying provisions of a directive directly, as long as the minimum level of environmental protection derived from EU law is ensured. Such a possibility to ex officio consider provisions of EU law may ultimately

³⁷⁰ Swedish Supreme Court, NJA 2004, s. 735, p. 741.

³⁷¹ Case 126/80, *Maria Salonia v Giorgio Poidomani and Franca Baglieri* [1981] ECR 136, para 7. The Court held: “[T]he fact that the parties to the main action failed to raise a point of Community law before the national court does not preclude the latter from bringing the matter before the Court of Justice. In providing that reference for a preliminary ruling may be submitted to the Court where ‘a question is raised before any court or tribunal of a Member State’, the second and third paragraphs of Article [267] of the Treaty are not intended to restrict this procedure exclusively to cases where one or other of the parties to the main action has taken the initiative of raising a point concerning the interpretation or the validity of Community law, but also extend to cases where a question of this kind is raised by the national court or tribunal itself which considers that a decision thereon by the Court of Justice is ‘necessary to enable it to give judgement’”.

³⁷² See e.g. case C-243/15, *Brown Bear II*, para 44, where art 6(3) of the Habitats directive (92/43/EEC), which stipulates possibilities for exemptions from the general prohibition in allowing negative impact on a Natura 2000 site, similarly were interpreted to have direct effect.

³⁷³ See van Holten & van Rijswijk, ‘The governance approach in European Union Environmental Directives and its consequences for flexibility, effectiveness and legitimacy’ p. 39. See also Michanek, ‘Tillstånd får inte ges om aktuell ytvattenstatus försämrats eller uppnåendet av god ytvattenstatus äventyras’, 2015, p. 5, who similarly argues that the derogation regime cannot be considered to create such a right for the individual applicant that it can in turn be directly invoked before a national court.

³⁷⁴ Even though the CJEU has developed the doctrine of direct effect not to include merely the invocation of clear individual (subjective) rights before national courts, but rather as a way to enforce EU law for a wide variety of purposes, it is highly unlikely that situations like these are comprised by the right to invoke. The CJEU has primarily evolved the doctrine so as to safeguard and protect environmental interests, such as in *Kraaijeveld*, *Waddenzee* and *Wells* (above section 3.2.3.1), however not as a way to create rights for individual applicants to be granted authorisation in certain situations.

be justified, based on the *jura novit curia* principle. Arguably, this principle also includes EU law and the case law of the CJEU, as far as national courts of the Member States are concerned. For example, as the CJEU held in *Verholen*, and as was also implied in *Protect*,³⁷⁵ national courts may of its own motion apply provisions of an EU directive directly, even if those provisions have not been invoked by an individual in the specific case. In the words of the Court:

... Community law does not preclude a national court from examining *of its own motion* whether national rules are in conformity with the precise and unconditional provisions of a directive, the period for whose implementation has elapsed, where the individual has not relied on that directive before the national court.”³⁷⁶ (emphasis added).

It thus follows from the primacy doctrine and the obligation to judicially implement directives, that national courts shall always, at the very least, interpret national rules in the context of the underlying EU provisions. This obligation applies especially in situations where the national rules are adopted specifically to implement, for example, an EU directive such as the WFD, and the CJEU has delivered clarifying interpretations regarding the practical application of a directive. In addition, national provisions and procedural rules can be set aside to ensure primacy of EU law and, in situations where an EU provision is considered clear, precise and unconditional, a national court can, as a general rule, choose to apply it directly under the principle of *jura novit curia*.

3.3 Sweden in the context of EU water law and policy

In this section, the Swedish process of implementing the WFD is described, with a focus on the main implementation obstacles identified and discussed in previous studies. Overall, implementation of the freshwater governance system of the WFD has proven to be a challenge for Sweden; the primary, overarching themes of the WFD - a holistic view and long-term perspective, integrated planning at river-basin level, and adaptive management of water resources - differ from how Sweden has conventionally governed water. This conventional legislative approach, in which water was mainly viewed as a

³⁷⁵ Case C-664/15, *Protect*, para 34, quoted in total above.

³⁷⁶ Joined Cases C-87/90, C-88/90, and C-89/90, *A. Verholen and others v. Sociale Verzekeringsbank Amsterdam* [1991] ECR I-3757, para 16.

resource to exploit for different human needs and identified problems in water quality were addressed individually as they arose, meant that a holistic approach and long-term protection of water resources were largely missing in Swedish freshwater governance at the time for implementing of the WFD.

The conventional freshwater governance system in Sweden is initially described in section 3.3.1. Thereafter, the main difficulties in implementing the WFD in Sweden are described and analysed in section 3.3.2, concluding with a discussion of the newly adopted changes in Swedish water law, analysed in view of the general requirements stipulated in the directive.

3.3.1 Conventional Swedish freshwater governance prior to WFD implementation

Prior to implementing the WFD, the Swedish water governance system was deemed quite successful at reducing the environmental effects of known point sources. At the same time, the system was largely insufficient at addressing issues of diffuse impact, not least due to lack of experience in working with environmental quality requirements and EQSs through strategic and integrated planning.³⁷⁷ At the initial stage of implementing the WFD, the system for governing freshwater in Sweden was even described as conflicting with the governance model of the directive. This is primarily because the Swedish system was founded on regulatory instruments; locally-based without consideration of the hydrological scale or natural flow of waters; and dived among several actors and levels without any formal demands regarding cooperation between different municipalities and regional actors located on the same lake or river, river basin or sub-basin areas.³⁷⁸ Prior to WFD implementation, Sweden had neither systematic water monitoring nor authoritative control of the state of aquatic environments; such work was, instead, primarily carried out by voluntary river basin entities ('Vattenvårdsförbund'), which were associations of persons who had an interest in a particular water body or river basin.³⁷⁹ Additionally, the WFD's procedural requirements, including participation of stakeholders and the public, meant that Sweden had to formalise such procedures in freshwater

³⁷⁷ Swedish Government Official Report (SOU) 2002:105, 'Klart som vatten', pp. 57-58; Government Bill (prop.) 2003/04:2, 'Förvaltning av kvaliteten på vattenmiljön', p. 12.

³⁷⁸ Hedelin & Gustafsson, 'Swedish water management – A comparison of some municipal master plans and the requests of the Water Framework Directive', 2003, p. 76.

³⁷⁹ See e.g. Gustafsson, 'Organisationer för samordnad mark- och vattenförvaltning', 1994, pp. 161-165. Many of these river basin entities are now active as 'Water Councils' (Vattenråd), and, as such, they are involved in the implementation of the WFD.

governance. This because up to the time for implementation of the directive there were no such explicit requirements in Swedish freshwater governance,³⁸⁰ even though the Swedish system generally provides for transparency and good opportunities for participation in decision-making procedures, especially in licensing procedures and through EIA procedures prior to authorisation. Environmental NGOs as well as concerned individuals also have possibilities to appeal, for example, licensing decisions under the Environmental Code.³⁸¹

Characteristic of freshwater conditions in Sweden are the many large lakes, rivers, streams and coastal areas throughout the country. Water law in Sweden is originally built upon a private law approach, or ‘riparianism’, in which landowners also own the right to control the water within their properties;³⁸² this right encompasses both surface water and groundwater within the property.³⁸³ Another important aspect is that, historically, abstraction of water for different purposes has not been a problem in Sweden, since typically there has been no scarcity of water. In recent years, however, large areas of Sweden have experienced sinking groundwater levels, causing local restrictions on water and placing water scarcity issues onto the political agenda.³⁸⁴ The normally good access to both surface and groundwater of presumably good quality³⁸⁵ also serves as a probable explanation for the lack of long-term protection of, for example, groundwater, natural springs and drinking water catchments in Sweden.³⁸⁶

A signature feature of Swedish governance culture is a high degree of decentralisation with strong, and to a large extent independent, local

³⁸⁰ Under Swedish law at the time, the key existing requirements in this regard were connected to the EIA procedure, as part of the authorisation of new activities or operations under the Environmental Code.

³⁸¹ See the Environmental Code Ch 16 ss 12-13.

³⁸² Jakobsson, ‘Industrialization of Rivers’, 2002, p. 48.

³⁸³ Government Bill (prop.) 1981/82:130, ‘Med förslag till ny vattenlag m.m.’, p. 78.

³⁸⁴ See e.g. Geological Survey of Sweden (SGU), Report 2017:09, ‘Grundvattenbildning och grundvattentillgång i Sverige’, commissioned on behalf of the Swedish Government in September 2017.

³⁸⁵ See e.g. Government Bill (prop.) 2003/04:2, ‘Förvaltning av kvaliteten på vattenmiljön’, p. 12. As stated in the Bill, the general perception in Sweden at the time for transposing the WFD into Swedish law was that the water in Sweden was generally of good quality. Because of this, an important benefit of implementing the WFD in Sweden has been that the knowledge of the actual state of Sweden’s waters has increased significantly. For example, there was previously no awareness regarding the extensive acidification of largely pristine mountain lakes, as identified in a recent report from the SwAM. See Swedish Agency for Marine and Water Management, ‘Sötvatten 2017’, pp. 27-29.

³⁸⁶ See Swedish Agency for Marine and Water Management, ‘Sötvatten 2017’, pp. 8-11, where insufficient monitoring of groundwater and inadequate protection of natural springs are acknowledged as current problems in Sweden. As shown in paper IV, storm water pollution is another significant environmental problem that lacks sufficient acknowledgement and appropriate precautionary measures in Swedish water governance, although some increased awareness can be seen in recent years.

authorities (municipalities and county councils),³⁸⁷ along with somewhat independent administrative authorities³⁸⁸ answering to the Swedish government.³⁸⁹ Following this practice, Swedish water and environmental governance was, and continues to be, quite sectorised and primarily based on administrative and geographical boundaries, divided between the local, regional and national levels. While the national level, mainly State Agencies, is primarily responsible for developing guidance and detailed regulations on water and other environmental issues, the operational work is divided between the local and regional levels. The regional level consists, foremost, of twenty-one County Administrative Boards; these boards are primarily responsible for work with national interests and environmental objectives at the regional level. The County Administrative Boards are also responsible for other work, such as permit procedures, the supervision of environmentally hazardous activities and water operations, and the supervision and control of municipal planning activities.

In relation to water issues, the local municipal level has almost exclusive responsibility for land- and water-use planning within their respective municipal territories, generally referred to as ‘the municipal planning monopoly’. The municipalities are also responsible for the expansion and maintenance of water supply and sewage treatment, along with supervision of compulsory registrations and non-permissible environmentally hazardous activities. As further explained in section 3.3.2 below, this administrative structure, along with the existing legislative framework, was essentially kept intact even after the implementation of the WFD, which has hampered the WFD implementation process in Sweden. For example, and as also discussed in paper III of this thesis, the integrated river basin planning of the WFD instructs that water issues need to be significantly more prioritised in municipal planning activities of land and water use. Studies also indicate that, under the current legislative framework, there exists a dual system of water

³⁸⁷ The local authorities are both responsible for and enjoy independence on local and regional matters of public interest in accordance with the principle of local self-government (Instrument of Government Ch 1 s 1 para 2 and Ch 14 s 2). The Instrument of Government Ch 14 s 3 also states that restrictions to the principle of local self-government should not exceed that which is necessary with regard to the purpose of the restriction.

³⁸⁸ These include State Agencies and other administrative authorities, as well as the twenty-one regional County Administrative Boards.

³⁸⁹ Under the Swedish Constitution, the Government of Sweden governs the Realm (Instrument of Government Ch 1 s 6), which means that all administrative authorities ultimately answer to the national Swedish Government (Instrument of Government Ch 12 s 1). When it comes to the application of law and administrative decision-making, however, all administrative authorities are guaranteed independence, both regarding how to decide particular cases relating to the exercising of public authority vis-à-vis an individual or a local authority, as well as regarding how to apply the law in individual matters (Instrument of Government Ch 12 s 2). In section 3.3.2.3 below, this administrative independence is discussed in relation to the increased governmental steering in Swedish water governance that is provided for in the newly-adopted Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’.

planning in Sweden; one system of supra-national Water District Authorities planning at the river basin and river basin district levels, and another of municipalities planning the land and water use at the local level.³⁹⁰ The municipal-level system, however, does not seem to take water issues into account as much as desired and required under the WFD.³⁹¹

Furthermore, as explained in section 2.3.1, existing legal structures can prevent implementation of adaptive freshwater governance, due to, primarily, institutional path dependence. A key challenge, in this regard, is that adaptive governance requires a legal framework that leaves room for adaptation when monitoring results indicate that measures carried out so far have been insufficient to achieve set environmental quality objectives. One example of an existing legal structure that may hamper the effectiveness of an adaptive approach is the legal effect of previously announced licenses. In the current Swedish system, it is not a norm to have time limits on permits. Instead, an existing permit is typically valid indefinitely, until either the operator applies for a new or expanded permit, or until an environmental authority applies for a review or revocation of the existing permit. Because of this, and as discussed in more detail in paper II, it has been difficult to enforce modern environmental requirements, such as those within the WFD, in the context of existing permits, including those concerning water operations for hydropower purposes.³⁹²

As will be further elaborated in the next section, several of the challenges described so far are still very much present in the current Swedish system for freshwater governance, and, as a result, the process of WFD implementation is obstructed.

3.3.2 WFD implementation difficulties in Sweden

In this section, focus is placed on three different problems for WFD implementation in Sweden identified in previous studies, including the four papers that this thesis builds upon. The identified implementation problems

³⁹⁰ Andersson, Peterson and Jarsjö, 'Impact of the European Water Framework Directive on local-level water management', 2012, p. 80; and Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, p. 83.

³⁹¹ Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, p. 83.

³⁹² This specific issue has been the subject of a long inquiry process and legal discussion in Sweden during the last decade. After several Government Official Reports and extensive referral procedures on previously drafted Bills, the Swedish Parliament adopted legislative changes in June 2018, as proposed by the Swedish Government. The legislative changes that will enter into force on January 1 2019 are described and analysed in section 3.3.2.3.

that have characterised the Swedish debate on WFD implementation since the beginning of the twenty-first century include:

- 1) Weaknesses and uncertainties in the administrative structure for freshwater governance.³⁹³
- 2) Insufficient legal integration of and deficiencies in the Swedish legal framework for implementing EQSs and PoMs, causing uncertainties in interpretation, application and enforcement of the environmental objectives of the WFD.³⁹⁴
- 3) Necessary legislative changes to better transpose the WFD into Swedish law, and, especially, in order to impose up-to-date environmental requirements on the many pre-existing facilities for hydropower production.³⁹⁵

Each of these problems is more closely described in the individual subsections below. As will be elaborated upon, the minimal legislative and administrative structural changes undertaken to transpose the WFD into Swedish law can be said to have hampered the Swedish implementation of the directive. A primary reason for this is that the new Water District Authorities that were instated in effort to implement the WFD were placed within an already-existing governance structure, and without sufficient formal clarifications concerning their roles, mandates or responsibilities in relation to the pre-existing water and environmental administration. Reports from actors

³⁹³ See e.g. Government Official Reports (SOU) 2002:105, 'Klart som vatten'; Government Bill (prop.) 2008/09:170, 'En sammanhållen svensk havspolitik'; Government Bill (prop.) 2010/11:86, 'Havs- och vattenmyndigheten'; Government Committee Directions (Dir.) 2017:96, 'Översyn av vattenförvaltningens organisation'; Lundqvist, 'Integrating Swedish Water Resource Management', 2004, pp. 415-422 ; and Söderberg, 'Complex governance structures and incoherent policies', 2016, pp. 93-96. See also paper I, pp. 519-521; paper IV, pp. 21-24; and further section 3.3.2.1.

³⁹⁴ See e.g. Government Official Reports (SOU) 2002:107, 'Bestämmelser om miljö kvalitet'; Government Official Report (SOU) 2005:59, 'Miljöbalken; miljö kvalitetsnormer, miljöorganisationerna i miljöprocessen och avgifter'; Government Official Report (SOU) 2005:113, 'Åtgärdsprogram för miljö kvalitetsnormer'; Government Bill 2009/10:184, 'Åtgärdsprogram och tillämpningen av miljö kvalitetsnormer'; Fröberg & Bjällås, 'Är målen i EU-direktiven som rör vatten genomförda på ett juridiskt korrekt sätt i svensk rätt?', 2013; Olsen Lundh, 'Miljö kvalitetskrav eller miljö kvalitetsnormer?', 2014; Bjällås, Fröberg, & Sundelin, 'Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas?', 2015, pp. 22-25; Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016; and Olsen Lundh, 'Norm är norm – om flytande normprövning och implementeringen av ramdirektivet för vatten', 2017, p. 64 ff. See also paper II, pp. 11-13; paper III, pp. 12-23, paper IV, pp. 18-25; and further section 3.3.2.2.

³⁹⁵ See e.g. Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft'; Government Official Report (SOU) 2009:42, 'Vattenverksamhetsutredningen'; Government Official Report (SOU) 2012:89, '4 kap. 6 § miljöbalken'; Government Official Report (SOU) 2013:69, 'Ny tid ny prövning – förslag till ändrade vattenrättsliga regler'; Government Official Report (SOU) 2014:35, 'I vått och torrt – förslag till ändrade vattenrättsliga regler'; Olsen Lundh, 'Tvenne gånger tvenne ruttna gärdsgårdar – Om urminnes hävd och vattenkraft', 2013; Strömberg, 'Urminnes hävd och vattenrätten – några synpunkter', 2014; Darpö, 'Tradition och förnyelse på vattenrättens område' 2014; and Darpö, 'Så nära, och ändå så långt bort', 2016. See also paper II, pp. 8-11; and further section 3.3.2.3.

involved in Swedish freshwater governance,³⁹⁶ as well as the many inquiries initiated by the Swedish government, testify to the difficulties in getting the new freshwater governance system operational within the existing administrative structure.

3.3.2.1 Weaknesses in the administrative structure for freshwater governance in Sweden

In 2004, as a first step in implementation of the integrated and adaptive system of the WFD, Sweden was divided into five river basin districts. Five new Water District Authorities, one for each river basin district, were instated as special units within one of the regional County Administrative Boards located in each district.³⁹⁷ These new Water District Authorities were assigned the primary responsibilities for implementing the WFD in Sweden;³⁹⁸ however, these responsibilities were assigned without any specific mandate or authoritative power with which to enforce their decisions, for example regarding EQSs, PoMs and RBMPs, against other actors within Swedish freshwater governance. Moreover, only minor changes were made to existing legislation to transpose the governance system of the WFD into Swedish law.³⁹⁹ Even though the committee inquiring into a new administrative structure for water to implement the WFD in Sweden specifically underlined the importance of setting up a new Water Authority with clear mandate and responsibilities so as to avoid 'business as usual',⁴⁰⁰ a system with minimal

³⁹⁶ See e.g. the Water District Authorities, 'Sammanställning av kommuners och myndigheters rapportering av genomförda åtgärder 2017', 2018, pp. 4-6.

³⁹⁷ Following the hydrological flow of waters, some of the twenty-one County Administrative Boards are part of more than one river basin district.

³⁹⁸ According to the Water Quality and Management Ordinance (2004:660), the Water District Authorities are responsible for the classification of current water status, proposing environmental objectives, PoMs and RBMPs, monitoring progress and following up on decided measures, and reporting to the central Swedish Agency for Marine and Water Management (SwAM). The decisive organ of the Water District Authorities, the Water District Boards, make the decisions on environmental objectives and EQSs, PoMs and RBMPs, based on the proposals from the Water District Authorities that are developed in consultation with authorities, municipalities, stakeholders and the general public.

³⁹⁹ The WFD was primarily transposed through amendments to the Environmental Code (1998:808) Ch 5, and the Ordinance for County Administrative Boards (2007:825) now replaced by (2017:868), as well as the instatement of a Water Quality Management Ordinance (2004:660). See also Government Bill (prop.) 2003/04:2, 'Förvaltning av kvaliteten på vattenmiljön'; and Government Bill (prop.) 2003/04:57, 'Vattendistrikt och vattenmiljöförvaltning'.

⁴⁰⁰ Government Official Report (SOU) 2002:105, 'Klart som vatten', p. 101. For example, it was specifically expressed that "We cannot create an administration of water which solely means that a new level is superimposed onto the current administrative structure, where all current actors continue as before. Tasks must be moved between actors and levels." (my translation). In line with this, it was also expressed that, in conflicts between municipal land- and water-use planning issues and the water planning system of the WFD intended to reach environmental objectives for water, the water planning of the WFD must be given priority

administrative and legislative changes, instead, was put forward. The Swedish government deliberately chose to incorporate the freshwater governance system of the WFD into the existing environmental administrative system, emphasising that:

The current administrative structure addressing environmental issues is well-established and thus a natural starting point for the continued work of implementing the Water Framework Directive.⁴⁰¹ (my translation).

Even if the Swedish environmental administrative structure was well-established at the time of implementing the WFD, it is well known from existing literature that it is generally difficult to incorporate new institutions, working methods and governance models into a pre-existing administrative structure.⁴⁰² Such difficulty is especially present when the integration is fashioned without simultaneously providing a new administrative structure with clear distributions of power, authority and responsibilities, formal solutions to potential conflicts of interests or between policies, and an allocation of specific resources to the new tasks or system.⁴⁰³ In the case of the Swedish transposition of the WFD, all of these issues remained largely unresolved;⁴⁰⁴ implementation of the directive has instead been left to the national, regional and local authorities who, in turn, have had to prioritise between differing and partially-incoherent policies.⁴⁰⁵

Following the conventional, decentralised, but also hierarchical administrative structure in Sweden, the national level, primarily the SwAM but also the Geological Survey of Sweden, is responsible for coordination of implementing the WFD, developing guidance for freshwater governance, and reporting on the progress of the WFD implementation in Sweden to the EU Commission.⁴⁰⁶ The five regional Water District Authorities, in turn, have the primary responsibility for the practical implementation of the water

through necessary legislative changes, see Government Official report (SOU) 2002:105, 'Klart som vatten', p. 79; and Government Official Report (SOU) 2002:107, 'Bestämmelser om miljö kvalitet', p. 87.

⁴⁰¹ Government Bill (prop.) 2003/04:2, 'Förvaltning av kvaliteten på vattenmiljön', p. 27.

⁴⁰² Above section 2.3.1.

⁴⁰³ Ibid. See also paper I, pp. 521-524.

⁴⁰⁴ See further paper I, pp. 519-521.

⁴⁰⁵ Söderberg, 'Complex governance structures and incoherent policies', 2016, pp. 95-96; and Sevä & Sandström, 'Decisions on Street Level: Assessing and Explaining the Implementation of the European Water Framework Directive in Sweden', 2017, pp. 79-85.

⁴⁰⁶ For this purpose, the Swedish Government has, for example, authorised the SwAM to develop regulations and general guidance on surface water management, while the Geological Survey of Sweden has a corresponding authorisation for the management of groundwater.

management cycle of the WFD in their respective districts. The Water District Authorities are, for example, tasked with identifying the current status of the water bodies in their respective districts⁴⁰⁷ and proposing appropriate environmental objectives (transposed as EQSs in Sweden) for each body of water.⁴⁰⁸ They are also responsible for drafting PoMs⁴⁰⁹ and RBMPs, in consultation with other authorities, municipalities, the Water Councils, stakeholders and the general public.⁴¹⁰ In addition, the Water District Authorities are to develop monitoring programmes,⁴¹¹ follow up on decided measures, and report on progress to the SwAM.⁴¹²

Hence, as special units of the regional County Administrative Boards, the Water District Authorities are responsible for preparing the decisions on EQSs, PoMs and RBMPs in each district. Their decisive organ, the Water District Boards, make the decisions on EQSs, PoMs and RBMPs, based on the proposals from the Water District Authorities, while the operational work of implementing measures in accordance with the decided PoMs resides with administrative authorities at all levels and with the municipalities. Under Swedish law, decided EQSs and PoMs are binding only for public authorities and municipalities, which, accordingly, must ensure compliance with decided EQSs in their own subsequent decision-making while also taking action in accordance with the PoMs.⁴¹³

However, the Swedish conventional governance culture of the public administrative authorities at the national, regional and local levels was somewhat disturbed when instating river basin Water District Authorities and Water District Boards so as to implement the WFD. Specifically, the resulting structure entails that the decisive organ of the Water District Authorities – the Water District Boards, which are located at the same regional level as the Water District Authorities –⁴¹⁴ are responsible for making decisions that are binding not only on equal and lower-level authorities and municipalities, but also on hierarchically-superior national Agencies.

⁴⁰⁷ Water Quality and Management Ordinance (2004:660), Ch 3 ss 1-2.

⁴⁰⁸ Water Quality and Management Ordinance Ch 4, ss 1-6a.

⁴⁰⁹ Water Quality and Management Ordinance Ch 6, ss 1-4.

⁴¹⁰ Water Quality and Management Ordinance Ch 5 ss 1-6 and Ch 6 s 7.

⁴¹¹ Water Quality and Management Ordinance Ch 7 s. 1.

⁴¹² Water Quality and Management Ordinance Ch 9 s 2.

⁴¹³ Environmental Code Ch 5 ss 3 and 8. However, also following the Swedish long-standing decentralisation of administrative decision-making, there are no sanctions available for the Swedish Government or higher-level authorities to ensure neither compliance with decided EQSs nor actions under a PoM. I will return to this issue in section 3.3.2.2 below.

⁴¹⁴ Both of these institutions are organised into one of the County Administrative Boards in each of the five river basin districts.

In light of this, the Swedish water administration has suffered greatly from legitimacy issues, wherein the decision-making power of the regional Water District Boards, as well as the unclear role and mandate of the Water District Authorities, have been questioned and diligently debated for years.⁴¹⁵ In particular, the position of the Water District Authorities has been considered unclear, as they can be perceived as both independent authorities and, simultaneously, as operationally and organisationally assigned to the relevant County Administrative Boards.⁴¹⁶ To provide increased legitimacy, previous studies have argued for a centralisation of the decisions on EQSs, PoMs and RBMPs to a central Agency, for example to the SwAM;⁴¹⁷ with such a solution, the Water District Boards would be abolished. Other studies have suggested an abolishment of both the Water District Boards *and* the Water District Authorities, arguing for a centralisation of both the decisions and of the other responsibilities that currently reside with the Water District Authorities to the SwAM.⁴¹⁸ I am highly critical to this latter suggestion, in particular since the work with hydrologically based river basins risks being lost with such a centralisation, which, in turn, would mean that one of the basic conditions of the freshwater governance model of the WFD is at risk of being breached as well.

Because it reflects the hydrologically based river basin approach of the WFD, the current administrative structure in which the Water District Authorities are responsible for individual river basin districts is appropriate. Moreover, the Water District Authorities have had a primary responsibility for implementing the WFD in their individual districts since 2004, and, as a result, they have shown and built up invaluable knowledge and working methods for both the implementation of the WFD, on a general level, and regarding the water and water-related problems in their respective districts. Overall, this fact implies that the current water administration should primarily be retained, because, however unclear it may have been from the

⁴¹⁵ See e.g. Government Official Report (SOU) 2010:8, 'En myndighet för havs-och vattenmiljö', pp. 136-143; Government Official Report (SOU) 2014:50, 'Bättre samordning och struktur inom havs- och vattenmiljöområdet', pp. 296-298; Government Official Report (SOU) 2015:43, 'Vägar till ett effektivare miljöarbete', pp. 290-293, and 378-382; and Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, pp. 50-51. It was in light of this debate that the Swedish Government initiated an inquiry in September 2017 for a review of the Swedish freshwater administration, see Government Review Directions (Dir.) 2017:96, 'Översyn av vattenförvaltningens organisation', p. 5.

⁴¹⁶ See e.g. Government Official Report (SOU) 2008:48, 'En utvecklad havsmiljöförvaltning', pp. 236-243; and Government Official Report (SOU) 2015:43, 'Vägar till ett effektivare miljöarbete', pp. 290-293. See also paper IV pp. 23-24, where practical examples of the unclear role of the Water District Authorities are illustrated.

⁴¹⁷ See e.g. Government Official Report (SOU) 2010:8, 'En myndighet för havs-och vattenmiljö', pp. 136-143; and Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, pp. 50-51.

⁴¹⁸ Government Official Report (SOU) 2015:43, 'Vägar till ett effektivare miljöarbete', pp. 380-382.

outset, it has begun to settle.⁴¹⁹ Nevertheless, considering the abovementioned uncertainty and legitimacy issues, the current water administration in Sweden needs to be clarified, and the legitimacy of the decisions on EQSs, PoMs and RBMPs needs to be increased. In the final analysis in chapter 5, I will return to discussing how this current water administration in Sweden can be better supported by the legislative framework and institutional structure, for example through resolving conflicts of interest and developing clear roles and mandates for the authoritative bodies involved.

3.3.2.2 Ambiguities in the legal status and implementation of water-related EQSs

The PoMs are a key instrument for the achievement of the environmental objectives of article 4 in the WFD. If properly implemented, the PoMs provide a plan of crucial measures needed to prevent deterioration and protect and enhance the quality of water in each river basin district. As argued in paper III of this thesis, the RBMPs are likewise crucial in this regard. While the PoM provides a plan of measures to handle the most significant problems threatening water quality in a river basin district, the RBMP provides an important overview of the district's water and its current water status, constituting essential information to be taken into account during planning and subsequent decision-making at all levels.

As described in previous sections, the environmental objectives of article 4 of the WFD are primarily transposed as EQSs in Sweden. The definition of EQSs has a broad scope in Swedish legislation and includes 'limit values' that must not be exceeded; 'target values' that should not be exceeded; 'indicators' where occurrence of organisms are used as indicators of the environmental status; and 'other standards', comprising all other types of environmental quality requirements under EU law.⁴²⁰ The manner in which an (EU) environmental quality requirement is categorised also determinates its legal status and consequences under current legislation.⁴²¹ This fact has caused

⁴¹⁹ As the Water District Authorities conclude in the latest evaluation report of the progress of practical measures under the PoMs reported from the municipalities and other operational authorities, the water management concepts and materials developed by the Water District Authorities are now established and often referred to in the operational work. See the Water District Authorities, 'Sammanställning av kommuners och myndigheters rapportering av genomförda åtgärder 2017', 2018, pp. 4-6.

⁴²⁰ Environmental Code Ch 5 s 2, paras 1-4.

⁴²¹ As further described in paper II, pp. 11-12, as a rule, only environmental quality requirements categorised as limit values receive a legal status that can clearly affect authorisation decisions of new or expanded/modified

debate and divided opinions in the literature concerning the legal status of EQSs for water,⁴²² mainly because only the EQSs for chemical status of surface water and heavily-modified surface water currently are clearly categorised as limit values under Swedish law.⁴²³

As illustrated in paper II, the ambiguous legal status of EQSs for water, in combination with an incorrect transposition of the derogation regime in article 4(7) of the WFD into Swedish law (which made it difficult to apply in individual authorisation procedures),⁴²⁴ have also resulted in confusing interpretations and applications of EQSs for water by Swedish courts. Overall, the Swedish case law concerning interpretation and application of the environmental objectives of the WFD, can be viewed as representing an incremental, but also somewhat progressive, development towards full judicial implementation of the directive as interpreted by the CJEU. The case law reviewed in paper II show, for example, that, prior to the *Weser* case, the Swedish courts interpreted the national provisions adopted to transpose the WFD in line with their wording and guidance from national preparatory works in lieu of with the directive's provisions.⁴²⁵ The paper also show that, after the CJEU *Weser* case, the Swedish Land and Environment Court of Appeal have taken the landmark case into consideration, and, to a certain extent, interpreted Swedish law in light of statements made therein. However, also the case-law representing the period post *Weser* reviewed in the paper, raises criticism and legal concerns due to doubtful legal interpretations of the requirements under the WFD. The criticism in this regard primarily concerns

projects under the Environmental Code Ch 2 s 7 paras 2-3. However, as will be further discussed in section 3.3.2.3, this ratio is partly changed in regard to EQSs for water through the forthcoming legislative changes.

⁴²² See e.g. Fröberg & Bjällås, 'År målen i EU-direktiven som rör vatten genomförda på ett juridiskt korrekt sätt i svensk rätt?', 2013; and c.f. Olsen Lundh, 'Miljökvalitetskrav eller miljökvalitetsnormer?', 2014. As described by Michanek et al, the absence of a uniform conceptual structure for environmental requirements in the EU and in Sweden complicates communication and risks to cause legal uncertainty and reduced predictability in application, creating also conflicts between actors representing different interpretations of the obligations under EU law. See Michanek et al, *Genomförande av det svenska systemet för miljökvalitetsnormer*, 2016, pp. 28-36. For thorough discussions of this conceptual confusion, see Olsen Lundh, 'Miljökvalitetskrav eller miljökvalitetsnormer?', 2014; and Olsen Lundh, 'Four points on point four', 2014.

⁴²³ See Water Quality and Management Ordinance Ch 4 s 8b; and Government Bill (prop.) 2009/10:184, 'Åtgärdsprogram och tillämpningen av miljökvalitetsnormer', pp. 41-42.

⁴²⁴ Essentially, the derogation regime was transposed in a way that made it inapplicable for licensing authorities in situations where a project was found to cause deterioration or compromise the achievement of the environmental objectives, without using tools for giving primacy to EU law. This situation has now been addressed by the Swedish government and parliament, as discussed in section 3.3.2.3 below, and legislative changes will enter into force on January 1 2019.

⁴²⁵ An illustrative example regarding Sweden in relation to this is Case C-371/02, *Björnekulla Fruktindustrier AB v. Procordia Food AB* [2004] ECR I-5791, ('*Björnekulla*'). Here, the CJEU specifically held that the obligation to interpret national law "...as far as possible, in the light of the wording and purpose of the directive in order to achieve the result pursued (...) applies notwithstanding any contrary interpretation which may arise from the *travaux préparatoires* for the national rule." (para 13).

whether authorisation of the contested projects really should have been granted, without being motivated by use of the derogation regime.

For example, in the ‘*Lasele*’⁴²⁶ and ‘*Långbjörn*’⁴²⁷ cases, the Land and Environment Court of Appeal granted authorisation for increased water diversion for hydropower production at two existing plants in the Åsele river, without applying the derogation regime, even though the projects had been found to cause deterioration of the water status.⁴²⁸ The national court held *inter alia* that there must be a real impact on the biological quality elements in order for the deterioration prohibition to ensue.⁴²⁹ However, the national court later rectified this dubious interpretation of the non-deterioration requirement in the ‘*Stålloppet*’ case,⁴³⁰ decided in June 2018. Here, the court instead held that the *Weser* case cannot be interpreted in any other way than as to mean that deterioration of any quality element by at least one class is prohibited.⁴³¹ All quality elements, regardless of their category in assessing the ecological status of surface water, should thus be given equal importance in this respect – an interpretation which is significantly more in line with the *Weser* case. In the *Stålloppet* case, the Land and Environment Court of Appeal also applied the derogation regime of article 4(7) for the first time, thus clarifying how it can be applied by Swedish courts despite the incorrect transposition into Swedish law.⁴³² This case can thus be viewed as a conclusive step in an incremental progress towards fully honoring the judicial implementation of the directive by national courts in Sweden, striving to correct wrongs omitted by the Swedish legislator in transposition of the directive.

As argued in paper II, however, the Swedish courts could advantageously have referred questions to the CJEU under the preliminary reference procedure rather than interpreting unclear requirements under the WFD

⁴²⁶ Land and Environment Court of Appeal (MÖD), Case M-2649-16, (‘*Lasele*’), 2017-04-21.

⁴²⁷ Land and Environment Court of Appeal (MÖD), Case M 2650-16, (‘*Långbjörn*’), 2017-04-21.

⁴²⁸ Land and Environment Court of Appeal, *Lasele*, p. 17; and Land and Environment Court of Appeal, *Långbjörn*, p. 17.

⁴²⁹ *Ibid.*, p. 17. In this regard, it should be observed that the Åsele river had been classified as heavily modified with lower qualitative objectives due to the existing activity, and, moreover, that the quality element that would be deteriorated by the projects already was in the lowest class, meaning that no further deterioration was allowed.

⁴³⁰ Land and Environment Court of Appeal (MÖD), Case M 5186-17 (‘*Stålloppet*’), 2018-06-12.

⁴³¹ *Ibid.* p. 11.

⁴³² In this regard, the court held that the cost-benefit assessment of the Environmental Code Ch 2 s 7, due to its wide design, is adaptable enough to be interpreted in light of the requirements under the WFD article 4, including the derogation regime, therein. In the particular case, the court assessed that the public interest of flood protection could be considered to outweigh the need to achieve the environmental quality standards for water, and granted authorisation for the project.

themselves, in several of the cases reviewed.⁴³³ In view of other more general studies of Swedish courts' adherence to the judicial implementation obligation, however, it seems possible that this reluctance towards referring cases to the CJEU is part of a more general national pattern.⁴³⁴ One of the key issues in the Swedish debate has been whether Swedish courts really are supposed to create law and force legal principles in such a progressive way as the case law of the CJEU indicates, or if this "Europeanization" of justice is spinning out of control.⁴³⁵

In Sweden, the legal debate regarding the legal status of EQSs for water coincided with the general debate on the weaknesses in the system for implementing EQSs. Specifically, the legislation and current legal instruments have been criticised as too weak to truly achieve the desired state of the environment.⁴³⁶ Key issues of debate are the design and content of the PoMs for the river basin districts, as well as the programmes' legal status and to whom they are addressed. As mentioned in the previous section (3.3.2.1), under Swedish law decided EQSs and PoMs are binding only on public authorities and municipalities.⁴³⁷ These governance bodies must, accordingly,

⁴³³ The preliminary reference procedure has in general been a key factor in the EU integration project. Largely, the doctrines of primacy, direct effect and consistent interpretation were developed by the CJEU through questions asked by national courts. As Mayoral & Wind explains, the CJEU has through these doctrines created "tools and criteria for the national courts to assess whether EU law should be given primacy over national law and enforced directly." See Mayoral & Wind, 'Introduction. National courts vis-à-vis EU law: new issues, theories and methods', 2016, p. 2. See also de la Mare & Donnelly, 'Preliminary Rulings and EU Legal Integration: Evolution and Stasis', 2011, pp. 363-406.

⁴³⁴ In this respect, previous studies indicate that the judiciary in Sweden seems hesitant to challenge national transposition of EU law and is more prone to finding a "Swedish" solution to a problem at hand. Overall, the Swedish judiciary seems more loyal towards the national legislator than towards the supranational order of the EU, even though some progress can be seen in recent years. See e.g. Nergelius, 'Judicial Review in Swedish Law – A Critical Analysis', 2009; Bernitz, 'Preliminary References and the Swedish Courts', 2012; Wiklund, 'Om Högsta domstolens rättskapande verksamhet – löper domstolen amok?', 2014; Derlén & Lindholm, 'Festina lente' – europarättens genomslag i svensk rättspraxis 1995-2015', 2015; Bernitz, 'Förhandsavgöranden av EU-domstolen', 2016; Wind, 'The Nordics, the EU and the Reluctance Towards Supranational Judicial Review' 2010; and Derlén & Lindholm, 'Från Champagne till Ramlösa', 2017. Several authors have also argued for more transparency in how national courts apply and interpret EU law. See e.g. Bernitz, *Europarättens genomslag*, 2011, p. 108; Reichel, *Ansvarsutkrävande – Svensk förvaltning i EU*, 2010, p. 231; Reichel, 'European Legal Method from a Swedish Perspective', 2011, p. 274; and Mattson, 'Domarnas makt – domarrollen i ett nytt rättsligt landskap', 2014, p. 594.

⁴³⁵ See e.g. Wersäll, 'En offensiv Högsta domstol. Några reflektioner kring HD:s rättsbildning', 2014; Fura, 'En offensiv Högsta domstol – en kommentar', 2014; and Strömberg, 'HD och EU-forin – Vart är vi på väg?', 2014. Cf. Darpo, 'Direkt effekt och processuell autonomi', 2014; Mattson, 'Domarnas makt – domarrollen i ett nytt rättsligt landskap', 2014; Lundius, 'The Changing Role of National Courts', p. 768, who concludes that the pace chosen by the Supreme court is slow and evolutionary rather than revolutionary; Wiklund, 'Om Högsta domstolens rättskapande verksamhet – löper domstolen amok?', 2014; and Derlén & Lindholm, 'Judiciell aktivism eller prejudikatbildning? – En empirisk granskning av Högsta Domstolen', 2016.

⁴³⁶ See e.g. Government Official Report (SOU) 2005:113, 'Åtgärdsprogram för miljökvalitetsnormer'; Government Bill 2009/10:184, 'Åtgärdsprogram och tillämpningen av miljökvalitetsnormer'; Olsen Lundh, 'Miljökvalitetskrav eller miljökvalitetsnormer?', 2014; and Michanek et al, *Genomförande av det svenska systemet för miljökvalitetsnormer*, 2016. See also paper II, pp. 11-13; paper III, pp. 13, 20-23; and paper IV, pp. 18-25.

⁴³⁷ Environmental Code, Ch 5 ss 3 and 8.

ensure compliance with decided EQS in their subsequent decision-making, as well as take action in accordance with the PoMs. However, following the Swedish culture of decentralised management and local self-government, there are practically no sanctions available for the Swedish government or the central or regional State authorities to ensure either compliance with decided EQSs or that actions under a PoM are undertaken.

The primary WFD-related enforcement mechanism available under the current Swedish legislation is a possibility for the Swedish government to request that municipalities present how they intend to implement a PoM in their planning activities, or otherwise ensure compliance with EQSs, within municipal undertakings;⁴³⁸ the Water District Authorities have no mandate in this regard. Another primary control mechanism is the supervision of municipal planning decisions, exercised by the regional County Administrative Boards under the Planning and Building Act.⁴³⁹ Under the Act, municipal decisions to adopt, amend or repeal 'detailed plans' or 'area provisions' that are assumed to potentially result in non-compliance with an EQS may be repealed by the County Administrative Board;⁴⁴⁰ however, this control mechanism does not include the PoMs. Furthermore, the Water District Authorities also in this regard have no specific mandate or responsibility; they are not stated to be actively involved in such supervisory processes.⁴⁴¹

The lack of related sanctions and effective enforcement mechanisms in Sweden has been identified as an important implementation hurdle for achieving the EQSs for water in previous research,⁴⁴² and the research done for this thesis supports this understanding.⁴⁴³ As Lundin explains, the Swedish administrative system is not structured to handle situations in which an authority or municipality fails to execute what is imposed upon it.⁴⁴⁴ In addition, the RBMPs have not clearly been made mandatory to consider in subsequent decision-making at all levels and within all sectors, which, as argued in paper III of this thesis, can be considered to be an additional

⁴³⁸ Environmental Code Ch 5 s 13.

⁴³⁹ (2010:900).

⁴⁴⁰ Planning and Building Act Ch 11 ss 10-11.

⁴⁴¹ However, as described below in section 3.3.2.3, in the forthcoming legislative changes, the Water District Authorities will receive such a control function of certain authorisation decisions that risk to affect EQSs for water in Sweden, but not primarily as regards planning decisions under the Planning and Building Act. See also paper III, pp. 12-14, and 17.

⁴⁴² See e.g. Government Official Report (SOU) 2005:113, 'Åtgärdsprogram för miljö kvalitetsnormer', pp. 203-204; and Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, pp. 43-45.

⁴⁴³ See in particular paper I, pp. 519-521; paper III, pp. 20-25; and paper IV, pp. 18 ff.

⁴⁴⁴ Lundin, *Maktutövning under lagarna?*, 2015, pp. 116-119.

weakness of the Swedish transposition of the WFD, from a holistic and integrated planning perspective.⁴⁴⁵

To counter passivity in implementing measures, Michanek et al suggest that a central authority in Sweden, for example the SwAM, should be given mandate to command lower-level authorities and municipalities to act in accordance with a PoM.⁴⁴⁶ Another of their suggestions is that the SwAM be given the opportunity to bring an action before a court for a penalty fee against a passive authority or municipality. Even though there is large resistance to such ideas in Sweden, as these notions in part disrupt the conventional administrative culture and the principles of administrative and municipal self-government, I believe, like Michanek et al, that regulatory changes towards an increased control are necessary to ensure realisation of the environmental obligations of the WFD.⁴⁴⁷

Regarding the content and design of PoMs, a key criticism of Sweden by the EU Commission has been the lack of both precision and concrete operational measures for achieving the environmental objectives of the WFD in the current PoMs.⁴⁴⁸ The Commission's criticism stems from the fact that PoMs in Sweden are not legally-binding for individual impactors under Swedish law, and that, therefore, the PoMs by design may not be perceived as potentially controlling individual decision-making situations.⁴⁴⁹ In addition, as described in section 3.3.1, Swedish administrative authorities and municipalities are guaranteed independence in their own decision-making under the Swedish Constitution, which further complicates the possibilities of deciding on more precise PoMs on the river-basin district level. Reflecting this structure, the PoMs decided on at the river-basin district level are designed quite generally, leaving large responsibilities to the assigned authorities and municipalities to choose the appropriate, more specific measures to

⁴⁴⁵ The Swedish Environmental Code Ch 5 s 15, however, stipulates that authorities making decisions under the Code must ensure that decided PoMs and RBMPs are available as documentation for the decision. Similarly under the Environmental Code Ch 3 s 11, an authority or municipality who decides a matter under the Code is to ensure that the necessary planning documentation to assess issues of the management of land and water areas is available in the matter. The provision can be interpreted to include the RBMPs.

⁴⁴⁶ Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, p. 49. In other words, they suggest a similar legal construction as the current possibility for the government of Sweden to order a municipality to adopt, amend, or repeal a detailed development plan or area regulations (in essence a planning injunction) to satisfy the provisions concerning management of land and water areas in Ch. 3-4 in the Environmental Code. As further discussed in paper III, however, such an injunction is not possible to safeguard compliance with EQSS. See the Planning and Building Act Ch 11 s 15 and paper III, p. 17.

⁴⁴⁷ See also further paper III, in particular pp. 20-25, regarding the need for increased influence and control over municipal planning activities in this context.

⁴⁴⁸ See e.g. EU Commission, 'Commission Staff Working Document on the Implementation of the Water Framework Directive (2000/60/EC). Member State: Sweden', SWD(2012) 379 final, p. 4; and Michanek et al *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, pp. 40-41, and 45-48.

⁴⁴⁹ See e.g. Michanek et al, *Genomförande av det svenska systemet för miljö kvalitetsnormer*, 2016, p. 42.

undertake. In response to criticism concerning a lack of concrete measures, the most recently-decided PoMs have included appendixes providing examples of more specific measures.

For the enhancement of the implementation of PoMs in Sweden, Michanek et al discuss several alternative solutions.⁴⁵⁰ One of their solutions is to make the PoMs of an entire river basin district more precise regarding specific measures.⁴⁵¹ However, as implied by the foregoing it is currently difficult to achieve greater precision in PoMs covering an entire river basin district in Sweden without legislative changes. Such legislative changes could, for example, make PoMs directly binding on individual impactors, simultaneously making decisions on PoMs appealable by individuals, municipalities and authorities.⁴⁵² I do not, however, advocate such a solution. Rather, I believe that a more efficient strategy would be to complement overarching PoMs with more specific action programmes or management plans related to specific identified problems, problem areas, water bodies or river basins.⁴⁵³ I will return to this issue in the final analysis in chapter 5 below.

3.3.2.3 Analysing Government Bill 2017/18:243, 'Water environment and hydropower'

In this section, I analyse and discuss the recently-adopted legislative amendments in Swedish water law that will enter into force on January 1 2019.⁴⁵⁴ I focus on the aspects that are most crucial for the overall purpose of this thesis. This means that the emphasis resides on assessing whether the adopted legislative changes can be considered to improve the transposition of the WFD in Sweden and, in the longer term, facilitate implementation of the integrated and adaptive freshwater governance system that the WFD prescribes.

The new Bill was adopted against the background of several years of legal and political debate regarding insufficiencies in the legal transposition of the WFD in Sweden. In this regard, the Bill addresses some of the complaints that

⁴⁵⁰ Ibid, pp. 45-51.

⁴⁵¹ Ibid, p. 45.

⁴⁵² Ibid, p. 46.

⁴⁵³ Such an approach is partly supported by action 5 directed towards the County Administrative Boards in the Swedish PoMs for 2016-2021, available at <http://www.vattenmyndigheterna.se/Sv/publikationer/Pages/default.aspx?ptype=Beslutsdokument&year=2016>.

⁴⁵⁴ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft'; and Act (2018:1407).

the EU Commission has brought forward against Sweden within the infringement procedure concerning the implementation of the WFD.⁴⁵⁵ For example, the proposal includes changes aimed at more properly transposing the obligation to prevent deterioration as well as the possibility to grant derogations in accordance with article 4(7) of the WFD into Swedish law, primarily as a result of the *Weser* ruling. In particular, the Bill presents important legal changes regarding the possibilities to impose up-to-date environmental requirements for the many facilities for hydropower production already in place.⁴⁵⁶

According to the Bill, the government of Sweden is responsible for establishing a national plan for the review of existing hydropower plants, while the responsibility for applying for a review of the permits in accordance to the plan as well as the costs linked to such processes, is placed on the operators.⁴⁵⁷ This means that, in a near future, there will be both a plan and funding to ensure up-to-date environmental requirements for hydropower production in Sweden. From a holistic and integrated planning perspective, the Bill thus represents an important step forward, especially as facilities for hydropower production, including dams and water control buildings in the same river basin, can be reviewed simultaneously in accordance with the plan. Also in other respects, the Bill presents important legal changes in relation to facilities for hydropower. For example, a general time-limitation of 40 years is instated for facilities for hydropower, where the permit holders are made responsible for applying for new permits when time has elapsed.⁴⁵⁸ Although the timeframe of 40 years can be perceived as too long from the perspective of adaptive management, the new rule represents an important step towards introducing general time-limits on permits.⁴⁵⁹

Another vital change now adopted is that the current limitation in review procedures – entailing that licensing authorities in such procedures must not

⁴⁵⁵ EU Commission, Infringement procedure 2007/2239; and above sections 1.1 and 3.1.

⁴⁵⁶ Under the current legislation, the administrative resources necessary to carry out a review are quite considerable; this has resulted in a very slow-paced review of hydropower permits and facilities in Sweden. As identified in Government Official Report (SOU) 2014:35, only 78 out of a total of 3654 hydropower permits had been reviewed and updated in 2014, and the estimation was that it would take about 800 years to update all of the remaining hydropower permits at the current rate. See Government Official Report (SOU) 2014:35, 'I vått och torrt – förslag till ändrade vattenrättsliga regler', p. 270. The new Bill aims also at correcting some of the remaining seemingly unjustified rules applicable solely to water operations. See also paper II, pp. 8-11.

⁴⁵⁷ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 74-75, 78-98 and 203. Forthcoming as Environmental Code Ch 11 s 28, Act (2018:1407). In addition, the right to compensation for production losses has been removed (ibid, p. 38).

⁴⁵⁸ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 177 ff and 201. Forthcoming as Environmental Code, Ch 11 s 27, Act (2018:1407).

⁴⁵⁹ In the original proposal, a 20-year timeframe was discussed, but also that timeframe was criticised in the consultation process as too long to ensure adequate environmental conditions for water operations.

impose conditions or other rules that are so intrusive that the activity or operation no longer can be pursued or is significantly hampered – no longer includes review procedures for hydropower facilities.⁴⁶⁰ Also, the costs for litigation are altered,⁴⁶¹ and the special right of compensation for production losses in situations where the authorities have initiated a review procedure for hydropower facilities will be abolished, with a transitional period of ten years.⁴⁶² In review procedures for hydropower, a complete documentation of the conditions that apply to the operation at present must be included, however, no specific environmental impact assessment, and thus no consultation with stakeholders or the public, will be required.⁴⁶³ Overall, the adopted changes concerning hydropower facilities are positive from the viewpoint of integrated and adaptive governance and the WFD.

Other aspects of the Bill are, however, more ambiguous in relation to the requirements under the directive.⁴⁶⁴ This primarily because the Bill, in certain respects, represents a no-gold-plating approach to WFD implementation in Sweden, in which the level of ambition is decreased rather than increased.⁴⁶⁵ For example, the Bill suggests that the possibilities for determining waters as artificial and/or heavily modified as well as for using exemptions under the directive, including the derogation regime in article 4(7) (such as to allow new modifications despite their negative impact on the water environment), should be fully utilised in implementation.⁴⁶⁶ In line with this, the Swedish government has imposed onto the Water District Authorities the duty to make full use of the exemptions under the directive when classifying waters and

⁴⁶⁰ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 112 ff, and 220-221. Forthcoming as Environmental Code, Ch 24 s 10 para 2, Act (2018:1407). This means, however, that the limitation remains as regards other water operations as well as environmentally hazardous activities, (forthcoming as Environmental Code Ch 24 s 9, Act (2018:1407)), which must be regarded as a shortcoming with the proposal from the viewpoint of facilitating adaptive governance. As a result of the focus on hydropower facilities, the Bill, in many respects, has little significance for other kinds of water operations or environmentally hazardous activities.

⁴⁶¹ The general principle will essentially be that the parties bear their own costs for litigation.

⁴⁶² Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 77, 125-128, 137-140.

⁴⁶³ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 119-, and 197. Forthcoming as Environmental Code Ch 6 s 20 para 2, Act (2018:1407).

⁴⁶⁴ In these respects, it is clear that the new Bill is a solution of compromise, resulting from negotiations with the hydropower industry and also between several political parties representing different perspectives. The proposal is based on an energy agreement between several parliamentary parties, as well as on an industry-wide financing solution that representatives of the major hydropower companies have committed to arrange. As a result, it is a stated purpose in the Bill to design the new review system in a way that does not become unnecessarily administrative or financially burdensome for the individual in proportion to the intended environmental benefits, see Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', p. 175.

⁴⁶⁵ See e.g. Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 76, 175-177. It is, for example, specifically expressed that the Bill does not contain any proposals for more stringent environmental requirements than those required under current law.

⁴⁶⁶ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 76 and 148-157.

deciding on EQSs.⁴⁶⁷ In combination with other aspects of the Bill that will be further described below in this section, this increased governmental steering of the Water District Authorities risks undermining the trust and mandate that they have already built regarding other actors in the water administration so far.

There is also a risk that the legal status of EQSs for water will be weakened by the adopted changes, rather than strengthened. For example, in connection with licensing procedures, the Bill imposes a new obligation onto the licensing authorities to obtain a statement from the Water District Authorities concerning the quality of the water in question and the Water District Authorities' grounds for decisions on EQSs. Underlying this new provision are the debate and criticism regarding uncertainties surrounding the water classification process that have been directed to the Water District Authorities over the years.⁴⁶⁸ The new licensing rule applies in two different situations. *First*, if the documentation provided by the applicant indicates that the quality of the water differs from the water quality that the Water District Authorities have based their decision on, *and* that this lack of conformity is important to determine reasonable and appropriate environmental conditions.⁴⁶⁹ *Second*, if the matter concerns allowing for an activity or action by the use of the new exemption for activities of public interest,⁴⁷⁰ a provision that essentially corresponds to the derogation regime in article 4(7) of the WFD.

On the one hand, it is positive that the Water District Authorities, as experts on the waters and water-related problems in their respective districts, are given a chance to give their opinions on licensing matters that may result in adverse effects on the water environment. On the other hand, it is clear from the preparatory works that the primary aim of the first part of the new obligation is to enable the Water District Authorities to review and, if necessary, adjust decided EQSs by lowering the requirements during an on-going management cycle.⁴⁷¹ Thus, the change at hand is, seemingly, primarily

⁴⁶⁷ See Appropriation Directions addressed to the County Administrative Boards, 2018, direction no 31. See also Water District Authorities, 'Redovisning av uppdrag 25 i länsstyrelsernas regleringsbrev för 2017: Översyn av förutsättningarna för en ökad tillämpning av undantag inom vattenförvaltningen', 2018. Previous research show that appropriation directions from the government play an important role in how the PoMs are implemented, and they thus constitute a significant steering instrument. See e.g. Christiernsson, 'Åtgärdsprogrammets funktion vid länsstyrelsernas prövningar och tillsyn av vattenverksamheter', 2015, pp. 62-63; and Michanek et al, *Genomförande av det svenska systemet för miljökvalitetsnormer*, 2016, p. 35.

⁴⁶⁸ The criticism stems from the fact that the process of classifying and deciding on EQSs for each individual water body is complex and largely-based on estimations and expert assessments, rather than on entirely certain and complete documentation of the water conditions.

⁴⁶⁹ Forthcoming as Environmental Code Ch 22 s 13 para 1 point 1a-b, Act (2018:1407).

⁴⁷⁰ Forthcoming as Environmental Code Ch 22 s 13 para 1 point 2, Act (2018:1407).

⁴⁷¹ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 151, ff and 211-214. For example, through this obligation to obtain an opinion from the Water District Authorities, the Water District Authorities

made to avoid placing higher requirements on precautions than usually required for an activity that is under review for a permit, due to the potential adverse effects of the quality of the water of the project.

The government of Sweden also intends to supplement this new provision with an obligation for the Water District Authorities to, in situations where they do *not* find reasons for adjusting a particular EQS, raise the issue to the government itself for review. In such situations, “the government can come to a different conclusion than the Water District Authorities, and issue regulations that changes the EQS decided by the Water District Authority.”⁴⁷² The motivation, therein, is to “ensure a necessary balancing of interests of importance for setting the standards.”⁴⁷³

This new possibility to challenge already-decided EQSs for water in the context of a licensing procedure, can be viewed as controversial, in particular since, at least indirectly, it is the applicant for a new or extended permit that can raise the issue, and perhaps with a view to obtaining less-stringent conditions of precaution in this permit.⁴⁷⁴ This possibility thus risk to weaken the legal status of EQSs for water significantly. There is also a risk that it will undermine the credibility of the Water District Authorities’ ability to make accurate decisions, and disturb their regular cyclical freshwater governance work. More importantly, the possibility does not appear to be fully consistent with the CJEU’s statement in *Weser*, namely that:

“Article 4 of the WFD imposes an obligation to prevent deterioration of the status of bodies of water that has binding effects on Member States *once the ecological status of the body of water concerned has been determined* (...), in particular, during the process of granting permits for particular projects pursuant to the system of derogations set out in Article 4.” (emphasis added).⁴⁷⁵

It is also explicitly expressed in the Bill that the EQSs for water will be determined following a political balancing of opposing interests, but always within the limits that EU law requires and Swedish law allows.⁴⁷⁶ However, under the WFD, a political balancing of interests is *not* to determine the

will, in turn, have an opportunity to make “necessary adjustments” according to documentation provided by the applicant, before the licensing authority decides on the permit matter (ibid, p. 213).

⁴⁷² Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, p. 214 (my translation).

⁴⁷³ Ibid, p. 151 (my translation).

⁴⁷⁴ In this context, it should be observed that EQSs are not appealable in the Swedish system, in general.

⁴⁷⁵ Case C-461/13, *Weser*, paras 43 and 48.

⁴⁷⁶ Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, p. 175.

environmental objectives (thus in Sweden the EQSs for water). Rather, those decisions are to be based on the classification of the current water status (environmental conditions at hand) and an expert assessment of what is reasonable to achieve (and when to achieve it), in light of, for example, identified existing pressures on the water environment.⁴⁷⁷ Nor may the assessment as to whether a project causes deterioration of the water status involve any such balancing of interests, according to the CJEU. Such balancing of interests are, rather, only allowed in the assessment of whether or not to *grant* a derogation under article 4(7) of the WFD.⁴⁷⁸

It can also be questioned whether governmental steering of this kind can be considered fully compatible with administrative authorities' guaranteed independence in application of the law and individual decision-making under the Swedish Constitution, generally referred to as 'the ban on ministerial government'.⁴⁷⁹ When deciding on EQSs for, for example, surface water, the Water District Authorities apply the regulations on classification of surface water and EQSs developed by the SwAM.⁴⁸⁰ The process thus relates to the application of execution regulations developed by a national Agency after delegation from the Swedish government under the Environmental Code (Chapter 5 section 1).⁴⁸¹ As Derlén, Lindholm and Naarttijärvi argue, the authorities have significant protection for their independence when executing administrative power in the sense of applying valid norms in individual situations.⁴⁸² Considering this, it can be argued that the Swedish government should not so strongly influence how a Swedish administrative authority (in

⁴⁷⁷ Above section 3.2.

⁴⁷⁸ Case C-461/13, *Weser*, para 68; and above section 3.2.3.2.

⁴⁷⁹ All administrative authorities are guaranteed partial independence in terms of how to decide on particular cases relating to the exercise of public authority vis-à-vis an individual or a local authority, and also in terms of how to apply the law in individual matters (Instrument of Government Ch 12 s 2). Nergelius explains that the constitutional interpretation of this administrative independence is, essentially, that the Government of Sweden shall provide guidelines or 'politics' to give direction to the activities of the administrative authority, while the *execution* of that politic resides with the independent administrative authorities themselves, see Nergelius, *Svensk statsrätt*, 2014, p. 294. Similarly, Derlén, Lindholm & Naarttijärvi, explain that the independence of administrative authorities in Sweden prohibits the Swedish Government from determining how an authority shall apply valid norms to decide a matter in relation to such norms, see Derlén, Lindholm & Naarttijärvi, *Konstitutionell rätt*, 2016, p. 237.

⁴⁸⁰ SwAMs regulations (HVMFS 2013:19) on classification and environmental quality standards for surface waters.

⁴⁸¹ According to Derlén, Lindholm and Naarttijärvi, the preparatory works indicate that the ban on ministerial government comprises the application of valid norms, including those decided by the Swedish government and subordinate authorities, so long as they are not decided with the support from the government's so-called residue competence of the Instrument of Government Ch 8 s 7. See Derlén, Lindholm & Naarttijärvi, *Konstitutionell rätt*, 2016, p. 237; Government Bill (prop.) 1973:90, 'Med förslag till ny regeringsform och ny riksdagsordning', p. 398; and Government Bill (prop.) 1986/87:99, 'Om ledning av den statliga förvaltningen', p. 25.

⁴⁸² Derlén, Lindholm & Naarttijärvi, *Konstitutionell rätt*, 2016, p. 239. See also Nergelius, *Svensk statsrätt*, 2014, p. 294.

this case the Water District Authorities and the Water District Boards) applies valid norms (here the regulations developed by the SwAM and the Geological Survey of Sweden) in an individual situation (here to decide whether to adjust a previously-decided EQS for water).

The case law developed by the CJEU also strongly indicates that, once the environmental objectives and/or EQSs for water have been decided, they consist of specific, detailed and precise results that must be achieved. In the view of *Weser*, *Schwarze Sulm*, and *Protect*, this restriction applies, in particular, to processes of granting permits, where the derogation regime is the only possibility to allow for a new project that is likely to lead to adverse effects on the water environment.⁴⁸³ As described in section 3.2.3.2, the CJEU held in *Weser* that the environmental objectives of the WFD must be complied with “in every stage of implementation”,⁴⁸⁴ and, thus, that Member States are required to refuse authorisation to projects that violate article 4 of the WFD.

With this decision in mind, I argue in paper III that the environmental objectives are legally binding also, for example, in municipal planning activities, and therefore that Swedish municipalities are not allowed to adopt plans or authorise projects that might have adverse effects on the water environment.⁴⁸⁵ According to the Swedish government in the preparatory works, this is also the ambition with the new rule prohibiting authorities from allowing projects that might deteriorate the water status or compromise the possibilities to achieve the EQSs for water; it should cover authorisation procedures carried out according to sectoral laws beside the Environmental Code.⁴⁸⁶ However, the narrow design of the new rule does not reflect such an understanding of the *Weser* case as presented above; the provision only covers a prohibition to authorise *activities* or *measures* to start or be altered if they can be expected to lead to deterioration or compromise the achievement of the EQSs for water.⁴⁸⁷ Municipal planning decisions are, thus, not covered by the wording of the forthcoming provision.⁴⁸⁸ It is also highly uncertain whether the provision covers inspections of activities and measures already in

⁴⁸³ Above section 3.2.3. As further developed within the final analysis of chapter 5, it can also be questioned as to whether this possibility, unless clearly linked to a procedure that allows participation and transparency from different stakeholders and the public, meets the requirements of article 14 of the WFD. The Swedish Government does not address the participatory aspects in the preparatory works.

⁴⁸⁴ Case C-461/13, *Weser*, para 50.

⁴⁸⁵ Paper III, p. 3. See also Michanek, ‘Tillstånd får inte ges in aktuell ytvattenstatus försämrats eller uppnåendet av god ytvattenstatus äventyras’, 2015, p. 4.

⁴⁸⁶ Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, p. 160.

⁴⁸⁷ Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, p. 191. Forthcoming as Environmental Code Ch. 5 s. 4 para 1, Act (2018:1407).

⁴⁸⁸ See further paper III, p. 14. Compared to the current provision in the Environmental Code Ch 2 s 7 para 3, covering procedures on permissibility, licensing, approvals and exemptions, the new provision appears surprisingly narrow.

progress, due to the wordings of “to start or be altered” implying that it primarily targets procedures for new or expanded activities or measures. Hence, this seems to be an example of such a phenomena, which Munck describes as ‘legislation by motives’, meaning that the preparatory works contain specific statements that are not comprised within the wording of the legal text.⁴⁸⁹

Similarly, the new provision states that in procedures for “new licenses or reviews of existing licenses” all necessary conditions of precaution shall be prescribed, so as to ensure that the water quality does not deteriorate and the achievement of the EQSs is not compromised.⁴⁹⁰ Compared to the wording of the current provision on EQSs in the form of limit values, which generally covers all situations of “proceedings and inspections”,⁴⁹¹ the design of this new provision seems unduly narrow. This narrow alteration, in turn, would seem to risk weakening the legal situation, rather than strengthening it, in particular when put in combination with the new possibility to question decided EQSs for water, as discussed above.

Another potential weakness of the new Bill in view of implementing the WFD is the abolishment of the current, long-standing water law provision known as the ‘beneficial clause’ (båtnadsregeln). The beneficial clause stipulates that the benefits from public and private viewpoint must be greater than the damages caused if undertaking a water operation. As accentuated by Uppsala University in their response to the new Bill, the beneficial clause has been of significant importance from an environmental perspective, due to the rule’s function of preventing water operations that would have only minor or moderate public or private benefits.⁴⁹² By abolishing this rule, Uppsala University argued that the level of protection will be lowered, because it will become significantly more difficult to completely prevent authorisation of water operations, and especially those with only minor or small societal benefits.⁴⁹³ The balancing of interests shall, in the new Bill, be based on the general rules of consideration in Chapter 2 of the Swedish Environmental Code, wherein the threshold for allowing activities is significantly lower than

⁴⁸⁹ Munck, ‘Rättskällor förr och nu’, 2014, p. 202.

⁴⁹⁰ Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, p. 191. Forthcoming as Environmental Code Ch 5 s 4 para 2, Act (2018:1407).

⁴⁹¹ Environmental Code Ch 2 s 7 para 2. The provision will be moved to Ch 5 s 5 para 1, when the new Bill enters into force; however, it will then be expressly limited to EQSs for content other than water. See Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, p. 195.

⁴⁹² Government Bill (prop.) 2017/18:243, ‘Vattenmiljö och vattenkraft’, pp. 166–167.

⁴⁹³ Ibid.

that of the beneficial clause, and, moreover, it is more difficult to completely prevent activities or measures to be undertaken.⁴⁹⁴

I share the concerns that an abolishment of the beneficial clause risks resulting in a weakening of the environmental protection of water environments, even with the Bill's new provision on non-deterioration. This, in view of the narrow design of the new prohibiting rule, as discussed above, but also due to the broad interpretation of the obligation of non-deterioration that the Swedish government brings forward in the new Bill. For example, it is argued that the term 'compromise' in article 4 of the WFD, does not mean *any* aggravation in the efforts to achieve the desirable quality of the water environment, but, rather, that it means such a high risk that the possibilities to achieve the environmental objectives can be considered to have been left to chance.⁴⁹⁵ As a result, it is, according to the government, possible to allow for activities or measures that will place stressors on WFD-related work to improve the aquatic environment or that make achievement of the directive's environmental objectives more difficult in certain situations. This since every small risk of deterioration will not, under the new Bill, prevent activities from being authorised or altered.⁴⁹⁶

Finally, a forthcoming provision of importance when considering the requirements of the WFD, is that water operations currently being carried out with the support of older water rights, such as immemorial prescription and privileges, will be legalised via being equated with permits granted under the Environmental Code.⁴⁹⁷ Thus, the moratorium includes not only facilities for hydropower purposes (many of which, as of today, have yet to be subject to any environmental assessment), but also older mills and dams that have been built for other purposes. Through the new Bill, all of these older water operations will be legalised without any environmental assessment made and, in many cases, without any prescribed conditions regarding environmental protection or precaution; instead, the concept put forward is to impose

⁴⁹⁴ As a rule, activities or measures must be likely to cause significant damage or substantial detriment to human health or the environment to be rejected, and, even in such cases, the Swedish Government can still permit the activity, see Environmental Code Ch 2 s 9 paras 1-3.

⁴⁹⁵ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', p. 176 and 212.

⁴⁹⁶ Ibid, p. 176 and 195.

⁴⁹⁷ Ibid, pp. 98-111, and 183. This issue has been the subject of extensive legal inquiry and debate, see, for example, Government Official Report (SOU) 2013:69, 'Ny tid ny prövning – förslag till ändrade vattenrättsliga regler', p. 187-197; Lindqvist, 'Privilegiebrev och urminnes hävd', 2013; Lindqvist, 'Den småskaliga vattenkraftens rättsliga förutsättningar i Sverige', 2013; Olsen Lundh, 'Tvenne gånger tvenne ruttna gärdesgårdar', 2013; Strömberg, 'Urminnes hävd och vattenrätten', 2014; Darpo, 'Tradition och förnyelse på vattenrättens område' 2014; and Darpo, 'Så nära, och ändå så långt bort', 2016.

environmental conditions on such operations during the ordinary instrument of permit review.⁴⁹⁸

However, since only water operations for hydropower purposes will be included in the national plan stipulating when a review for up-to-date environmental requirements are to be initiated, many older water operations will, in turn, be legalised without any timeframe for when, if ever, to impose modern environmental conditions onto them.⁴⁹⁹ Many of these older mills and dams are problematic from an environmental viewpoint as they impact water flow and create migration barriers for fish and other species. Given that one purpose of the new Bill is to better transpose the environmental objectives of the WFD into Swedish law, the design of the new rules appears unfortunate in this regard.

To sum up, these approaching legislative changes provide crucial steps forward in improving certain aspects of Swedish water law, in particular those aspects that relate to imposing up-to-date environmental requirements on facilities producing hydroelectricity. The passing of the new Bill, however, also raises significant legal concerns, in light of the integrated and adaptive freshwater governance system of the WFD and its requirements as interpreted by the CJEU. Most importantly, central aspects of the Bill seem to emphasise flexibility and increased adjustment possibilities in relation to changing the *objectives* for the water bodies, rather than the possibilities to adjust *management strategies* due to their previous insufficiency to reach the environmental objectives. In this light, the new legislative Bill does not support an adaptive approach in the meaning of achieving ambitious environmental objectives in the long-term by adjustments of management strategies in light of monitoring results. I will return to discuss this further in the final analysis in chapter 5.

⁴⁹⁸ Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft', pp. 98-112. Under the current legislation, the inspection authorities in Sweden may submit such operators to apply for a permit, instead of initiating a process of review, if they are considered to be illegal by the authorities.

⁴⁹⁹ A relevant question in this context is how much time and resources the inspection authorities will have for such processes of evaluating older mills and dams, in light of the introduction of the national review plan for hydropower facilities that will require their focus and attention?

4. Overview and Results of Appended Papers

This section provides an overview of the four appended papers that this thesis builds upon, including main conclusions.

4.1 Paper I

Title: ‘What About State Implementation? New Governance and the case of the European Union Water Framework Directive in Sweden’, *Europarättslig Tidskrift*, 2015, Vol. 3, pp. 508-524.

With a primary focus on the WFD and its transposition in Sweden, paper I examines and analyses the ways in which the role of law and legal frameworks has changed in systems informed by new, multi-level governance approaches, compared to more traditional, top-down and hierarchical government ideas. This is seen against the general background of the EU WFD constituting an early example of a new and multi-level governance approach in EU environmental law and governance. Such new governance approaches include the privileging of open and flexible framework legislation over detailed regulations, and the prioritising of consideration of national diversities under the flag of subsidiarity. In light of the analysis, the paper calls for a renewal of legal perspectives in the national implementation of the WFD. More specifically, the Swedish implementation of the WFD is used as an example to discuss the need for EU Member States to adopt clear legal frameworks when implementing framework directives such as the WFD, as well as other flexible EU legislation characterised by new governance ideas.

Generally, the paper maintains that the shift from ‘government’ to ‘new governance’ in EU environmental law and policy calls for new tools in national implementation, since law and legal frameworks remain of fundamental importance in the management of complex natural resources, such as freshwater. A closer examination of the Swedish implementation process shows insufficient legal implementation in this regard. The overall challenge, from a legal perspective, is identified in the paper as to adjust the legal solutions to a more goal-oriented structure in lieu of a rule-oriented structure, to support the bottom-up steering techniques emphasised in new governance systems. Nevertheless, the legal perspective as well as the design of the legal framework are still of fundamental importance and must thus be re-

established. In particular, the legal framework must support flexible, adaptive governance systems and decentralised decision-making, but without jeopardising effective enforcement of decided actions headed towards set environmental objectives, such as good water status under the WFD.

4.2 Paper II

Title: ‘Before and After Weser: Legal Application of the WFD Environmental Objectives in Sweden’, *Journal of Environmental Law*, Vol. 2, 2019 (*forthcoming*) (Accepted manuscript).

Paper II analyses Sweden’s implementation of the WFD through a review of high-profile court cases regarding the application of the WFD’s environmental objectives in individual authorisation processes for water operations. More specifically, the study asks how the environmental objectives of the WFD have been interpreted and applied by Swedish courts in these authorisation processes. In particular, the paper seeks to explore whether the assessments of the Swedish courts comply with the general legal obligations under EU law, such as loyal interpretation and full application of EU provisions as interpreted by the CJEU. All reviewed cases deal with the authorisation of water operations whose effects on the possibilities to achieve the environmental objectives of the WFD have been a key contested issue, and cover both new water operations and expansions of existing operations and permits. The selection of court cases covers both the time before and after the landmark CJEU *Weser* case in 2015.

The analysis reveals a fairly high degree of inertia in the interpretation and application of the environmental objectives of the WFD by Swedish courts. Judging by the courts’ reasoning in the reviewed cases, the paper argues that traditional values, such as stability and legal certainty, have played a significantly greater role in the authorisation decisions than requirements regarding flexibility and high levels of environmental protection and precaution as desired in the adaptive freshwater governance system of the WFD. Furthermore, the analysis indicates a reluctance to fully apply EU law as interpreted by the CJEU in *Weser* and *Schwarze Sulm*, in particular since all of the contested projects reviewed were authorised without the derogation regime of article 4(7) of the WFD being applied or even discussed.⁵⁰⁰ In light

⁵⁰⁰ As explained in the paper and in section 3.3.2.2 above, the Land and Environment Court of Appeal issued a judgement in June 2018, altering the earlier case-law criticised in this paper, by actually applying the derogation regime of article 4(7) of the WFD in the particular case. See Land and Environment Court of Appeal,

of this, the overall conclusion of the paper is that traditional legal certainty aspects often trump flexibility and high levels of environmental protection as desired in the adaptive freshwater governance system of the WFD. This raises questions about judicial preconceptions and the procedural autonomy of the Member States vis-à-vis the *effet utile* of EU law through judicial implementation by national courts.

4.3 Paper III

Title: ‘The Water Framework Directive and Spatial Planning in Sweden – Time for Legal Integration!’ (*Manuscript*)

Paper III seeks to illustrate and address the lack of integration of the integrated planning and adaptive freshwater governance system of the WFD and Swedish spatial planning law. Legislative improvements in this regard are also proposed and discussed. The paper initially illustrates the typically crucial role of spatial planning activities, which in Sweden foremost are regulated by the Planning and Building Act (2010:900), in the implementation of the WFD and the achievement of its environmental objectives, i.e. a good water status. The obligations residing with the municipalities in this regard are in the paper analysed in light of the general legal obligations of Member State authorities under EU law, particularly as they have been interpreted in case law by the CJEU.

First and foremost, as the CJEU held in the *Weser* case, the environmental objectives of the WFD, including the obligation to prevent deterioration, are legally binding on Member State authorities at each stage of implementation. As a result, the paper holds that in each subsequent decision-making situation that might negatively affect the water status the WFD environmental objectives must be complied with. On the same note, it is argued in the paper, this includes decisions on spatial planning or local building permits, whose impact on the aquatic environment could be damaging. In essence, the Member States are thus prohibited from authorising projects, as well as adopting spatial plans or granting building permits, which might cause deterioration or jeopardise the attainment of a

M 5186-17 (‘Ställoppet’), 2018-06-12. By this judgement, the Land and Environment Court of Appeal corrected its own previous position, in particular regarding interpretation of the non-deterioration requirement. The national Court also clarified that Ch 2 s 7 paras 1-3 of the Swedish Environmental Code, can be interpreted in light of article 4(7) of the WFD, so as to include the possibility to grant a derogation in situations where a project will lead to adverse effects or jeopardise the possibilities to achieve set environmental objectives, but the prescribed conditions of the WFD provision are assessed to be met. See in particular pp. 11-13 of the judgement.

good water status, unless the decision can be motivated under the derogation regime of article 4(7) in the WFD. The reasons for such derogations must then be clearly motivated and explained in the RBMPs.

However, the results of the paper reveal a clear lack of legal integration of the integrated and adaptive governance system of the WFD and the legal framework for spatial planning in Sweden. As a result, water quality aspects are at great risk of being ignored in planning activities at the local or regional levels, which, in turn, makes the WFD's environmental objectives more difficult to achieve under the current legal framework. In light of this, the paper discusses and proposes adjustments to the legal framework, so as to better implement the integrated river basin planning system and adaptive governance approach of the WFD, as well as to better adhere to the legal obligations under EU law.

4.4 Paper IV

Title: 'EU:s ramdirektiv för vatten och dagvattenförorening – Klarar Sverige kraven? (The EU Water Framework Directive and Storm water Pollution – Can Sweden Cope with the Requirements?)', *Nordic Environmental Law Journal*, 2011, Vol. 1, pp. 3-30.

Paper IV discusses Sweden's implementation of the WFD from a legal perspective, with a particular focus on the environmental effects of polluted storm water. Against the background of polluted storm water as constituting a *dominant* source of numerous pollutants in Swedish surface water bodies, with the ability to cause groundwater pollution as well, the paper initially identifies management of polluted storm water as a crucial measure to address in order to achieve the environmental objectives of the directive. This, in particular, since pollution of the water environment is one of the main problems the WFD aims to address. The paper combines analysis of relevant legal material and literature with semi-structured interviews with key persons within the Bothnian Bay river basin district, the northernmost river basin district in Sweden. The interviews were conducted with persons identified as responsible for implementing the WFD in the particular river basin district, and who also had responsibilities regarding the handling of (polluted) storm water.

The results of the paper indicate insufficient Swedish implementation of the WFD with respect to the issue of polluted storm water. In particular, as the conducted interviews and a review of previous studies show, polluted

storm water is generally not purified, nor is the pollutant content measured, prior to its being discharged into aquatic environments in Sweden. This even though the result of the *legal* analysis shows that the Swedish Environmental Code does contain several instruments and legal principles that can be used to require the measurement and purification of polluted storm water, in particular when considering the statutory precautionary principle. This being the case, the paper therefore holds that the relevant provisions are not precise enough to ensure the imposition of such requirements; they leave too much to the discretion of the governance officials and municipalities involved. In addition, enforcement authorities fail to comply with the legal obligation to initiate reviews of old permits in order to adjust them to the environmental requirements stipulated in the directive. In short, more attention needs to be paid to the environmental effects of polluted storm water, for example in relation to planning and building projects.

The results of the paper also indicate the inadequacy of the current legal framework for the implementation of the key legal instruments of the WFD, mainly EQSs and PoMs, to achieve prescribed environmental results. In particular, it is argued in the paper, these instruments need to be more clearly integrated with the legal framework for spatial planning. The results also reveal lack of clarity in the division of roles, mandates and responsibilities in the implementation of EQS for water, and the extent to which the PoMs are binding on subsequent decision-makers at different levels. In light of this, it is argued in the paper, the administration of water needs clarification in the legal framework. Sweden's implementation of the WFD can therefore not be considered sufficient in light of the implementation problems identified.

5. Results and Concluding Analysis

5.1 Introduction

This thesis has examined the role of law and the design of the formal institutional framework in national implementation of the adaptive and integrated freshwater governance system of the WFD. In previous chapters, I have identified key functions the formal institutional framework must provide to underpin such complex governance systems as the directive represents. I have also identified and discussed the legal obligations that the directive imposes on Member States in implementation, and described the Swedish implementation process. In this final chapter, I will further analyse the Swedish implementation of the WFD, with the primary focus on determining whether Sweden's formal institutional framework is sufficient to fully comply with the model for governing freshwater stipulated in the directive, and, ultimately, achieve the prescribed environmental results.

A central argument of this thesis is that law and the design of the formal institutional framework at the national level plays a significant role when implementing new regimes for governance of natural resources, such as the freshwater governance system of the WFD. The governance approach in EU environmental law and policy, under which the WFD is adopted, clearly reflects the general principles of subsidiarity and proportionality when implementing EU directives, also indicating the primary responsibility of Member States in this regard. This line of reasoning has been further reinforced as a result of this study, when considering the central role of law and key functions identified to be provided by the formal institutions in order to facilitate a transition to adaptive and integrated governance regimes. The four functions identified in chapter 2 are:

- 1) *Overall objective and direction* for the water administration as a whole.
- 2) *Administrative structure* where roles, responsibilities and authoritative mandates are distributed and potential conflicts between actors and levels are prevented and resolved.
- 3) *Adaptive capacity* through sufficient feedback-loops and adaptive functions in the law, where discretion, experimentation and learning at the lowest appropriate level are combined with sufficient guidance and control to avoid passivity as well as arbitrary interpretations and applications of the legal rules.

- 4) *Control and enforcement mechanisms* to ensure that learning and adaptation towards the set environmental objectives take place as a result of monitoring feedback and all bodies of governance carry out the tasks imposed on them.

In light of the foregoing, a general and primary conclusion of this thesis is that integrated and adaptive governance of freshwater in accordance with the model prescribed by the WFD, requires governmental steering and a clear transposition into the formal institutional frameworks of Member States. It is thus argued here, that the design of the formal institutional framework is key to supporting a transition to a new regime or system of governance, and essential in order to facilitate such a regime shift required to implement the holistic, hydrologically based, integrated and adaptive governance system of the directive. Without such formal support, existing laws and policies are more likely to present barriers to change and keep the status quo of the former system or policy, as a result of inbuilt inertia or path dependence of established regimes and practices.

The evaluation of Sweden's implementation below is conducted in light of the key functions listed above, combined with the legal obligations under EU law in general and the WFD in particular. These requirements under EU law will therefore first be summarised (section 5.2), followed by the analysis of the Swedish implementation of the directive (section 5.3). Thereafter I will present my proposals for improving the Swedish formal institutional framework (section 5.4). The chapter ends with a few concluding remarks (section 5.5).

5.2 Summation of Member State obligations under the WFD

As a rule, when implementing EU directives, Member States are responsible for achieving the result prescribed, while the choice of form and methods are left to the discretion of each Member State. As an environmental framework directive adopted under article 192 of the TFEU, the WFD leaves quite a lot of room for national discretion in implementation, as it does not prescribe in detail *how* the environmental result, in this case primarily the environmental objectives of article 4, is to be achieved. However, in order to ensure the full effectiveness of a directive in accordance with the result it pursues, the CJEU has in case law required of Member States to adopt all necessary measures into their national legal systems. This means, as is also emphasised in paper I

of this thesis, that the Member States have the main responsibility for instating proper administrative arrangements and designing sufficient legal and institutional frameworks in order to ensure that the environmental objectives of article 4 of the WFD can be attained within the prescribed time frames. At present, the absolute deadline set by the directive is year 2027.⁵⁰¹

Besides emphasising the environmental objectives, the WFD prescribes a rather detailed freshwater governance system that Member States must transpose into their national legal orders and water administrations, where in particular the six-year freshwater governance cycle, including several procedural requirements, are imposed on Member States. When considering the general requirements of the WFD and the case law developed by the CJEU, Member States must ensure that their national systems for freshwater governance work towards the long-term goal of good water status through a gradual and incremental planning and governance process. To that end, Member States must adopt specific environmental objectives, PoMs, RBMPs and monitoring programmes, as well as procedures for stakeholder involvement. Additional requirements are to establish procedures for continuous evaluation during each management cycle, as well as to report on progress made to the EU Commission every six years.

Central in the WFD is that the natural flow of water together with established environmental objectives for water quality and quantity constitute the basis for governance arrangements and implementation. Considering this, it is crucial that the objectives are legally binding and mandatory to adhere to in planning and subsequent decision-making at different levels and across sectors, as also indicated by the CJEU in *Weser*. Here the Court implied that once the specific environmental objectives for each water body or river basin have been established, they prescribe specific and detailed results that are legally binding in subsequent decision-making at all stages of implementation. As a result, Member State authorities are, for example, prohibited from authorising projects that might deteriorate the water status or jeopardise the achievement of the environmental objectives, unless the project can be motivated under the derogation regime in article 4(7) of the WFD.

In light of *Schwarze Sulm* and *Acheloos*, the Member States are allowed a certain amount of discretion when assessing whether a derogation can be granted, but all of the conditions must be thoroughly examined and motivated in the grounds for the decision. In light of *Protect*, Member States must also ensure that concerned individuals and duly constituted environmental NGOs

⁵⁰¹ However, a revision, probably including an extension, of the directive is planned to be initiated in 2019.

are able to rely on the specific environmental objectives before a national court, to question, for example, whether a national authority has kept within the bounds of discretion granted by article 4 of the WFD, when granting a permit that may negatively affect the water status. The discretion of the Member States in this regard is thus ultimately limited by the general requirements contained in article 4 of the WFD.

The integrated planning approach of the WFD generally entails that implementation of the environmental objectives must be coordinated between levels, actors and sectors. Such integration can be achieved by sufficiently integrating them into law, policies and planning and subsequent decision-making in all areas that might deteriorate the water status or jeopardise the possibilities of reaching the environmental objectives. Another key aspect is to identify the relevant measures and instruments that can facilitate implementation of the objectives, at both the overarching river basin district level as well as in relation to specific river basins or water bodies. Crucial in adaptive governance in light of achieving environmental objectives is also that the measures adopted including requirements against individual impactors can be adjusted, if monitoring and evaluation indicate that the environmental objectives have not been or will not be achieved in time. In other words, there must be adaptive capacity within the administration and within the legal framework.

When, for example, deciding on measures for a district as well as for a specific water body or river basin, the WFD emphasises transparency, subsidiarity and involvement of stakeholders and the public. As also emphasised in adaptive governance theory in general, particularly the decisions on *which* measures to adopt to improve water quality or secure water quantity in relation to a specific water body or river basin, should be taken at the lowest appropriate level and with participation of stakeholders, NGOs and the general public, to make room for local and stakeholder knowledge, initiatives, compromises, experimentation and learning. However, *to* adopt and implement measures to incrementally achieve the environmental objectives are mandatory for Member States, along with procedural requirements on monitoring, evaluation and reporting. The national system must thus ensure that sufficient follow-up, adaptation and adjustment of management strategies are conducted in light of monitoring results, in accordance with adaptive management principles where learning and incremental steps towards the overall objectives are in focus. Considering this, it is essential that information on progress and evaluations of the effectiveness of adopted and undertaken measures are reported to higher level

authorities in the governance system, in particular authorities representing the river basin district as a whole.

Against this backdrop, I will now evaluate whether the Swedish formal institutional framework is sufficient for facilitating a shift towards the integrated and adaptive freshwater governance system of the WFD, and achieve the prescribed environmental results.

5.3 Does the Swedish implementation of the WFD represent an integrated and adaptive freshwater governance regime?

5.3.1 Opportunities and barriers in Swedish freshwater governance

The Swedish freshwater governance system and formal institutional framework encompasses opportunities as well as barriers for implementing the WFD. A significant facilitating feature is that the water administration introduced for the purpose of transposing the directive nationally represents a multi-level governance or polycentric structure primarily based on river basin districts. As a result, the governance arrangements reflect the hydrological requirement of the directive as well as its demand for proper administrative arrangements to that effect. The Swedish system also holds great adaptive potential, as the general legal framework for environmental and water law contains a relatively high degree of flexibility or adaptable rules. These generally formulated rules are intended to be adjusted to the circumstances at hand and thus able to adapt to different interpretations and applications. In combination with a decentralised governance culture with clear elements of local self-government, the system provides for local initiatives and knowledge, not least in the choice of measures to adopt in a specific river basin or water body.

Another facilitating feature of the Swedish system is that it generally provides for transparency and good opportunities for participation in decision-making procedures, especially in licensing procedures and through EIA procedures prior to authorisation. Environmental NGOs as well as concerned individuals have possibilities to appeal *inter alia* licensing decisions under the Environmental Code.⁵⁰² As a result of implementing the WFD, there are specific formal procedures to ensure stakeholder involvement

⁵⁰² See the Environmental Code Ch 16 ss 12-13.

and public transparency in decision-making related to the WFD, in particular before deciding on EQSs, PoMs and RBMPs for each six-year cycle. As these decisions constitute general standard decisions taken by an administrative authority, however, they cannot be appealed either by the authorities or by environmental NGOs or individuals concerned.

However, when analysing the Swedish freshwater governance system in light of the key functions identified as crucial for the formal institutional framework to deliver in such integrated, adaptive and multi-level governance systems the WFD represents, it becomes apparent that central aspects of all four key functions are missing in the Swedish system. For example, direction (key function 1) giving priority to freshwater governance or water quality work is largely missing in the formal institutional framework, and the water administration does not have a clear administrative structure (key function 2) to rely on in implementation. Moreover, the adaptive capacity (key function 3) is somewhat hampered due to insufficient guidance of decision-making in combination with weak (and sometimes even total absence of) formal requirements on follow-up, adaptation and reporting on measures and progress to higher hierarchical levels. Nor are the formal demands that do exist sufficiently underpinned by control and enforcement mechanisms (key function 4).

As implied in section 3.3.2.1, some of these shortcomings may be due to the fact that the partly new water administration introduced to implement the WFD, was instated in an already existing administrative culture, with established practices, roles and responsibilities. The partly new administration, including new authorities (Water District Authorities), decisive organs (Water District Boards) and voluntary informal actors (Water Councils), was also not sufficiently underpinned by a clear legislative framework and administrative structure, defining the roles, responsibilities and authoritative mandate for the governance bodies and actors involved. As reflected in the papers of this thesis, this lack of formal guidance has resulted in uncertainties, legitimacy issues and conflicts between levels and actors, which have hampered the implementation of the directive. The most evident example of this is the legitimacy issues that the Water District Authorities and the Water District Boards have struggled with, as they were instated at the same regional hierarchical level as the twenty-one County Administrative Boards, despite having responsibilities for significantly larger geographical areas, often including the territories of several County Administrative Boards. Issues of legitimacy have also arisen since the EQSs, PoMs and RBMPs are decided on the regional level by the Water District Boards, but still considered

legally binding for hierarchically superior national agencies, as well as same-level County Administrative Boards and the lower-level municipalities.

Another aspect that has caused difficulties in implementation is that the EQSs for ecological status of surface water as well as the EQSs for groundwater were not given a clear legal status in the Swedish transposition of the WFD environmental objectives. As reflected in paper II and above in chapter 3, this caused uncertainties and differing opinions in the interpretation and application of them in procedures before Swedish courts, especially before the *Weser* case but also partly afterwards. An additional factor that seems to have hampered the Swedish implementation process is a lack of formal integration of the freshwater governance and planning system of the WFD, both vertically within all levels of governance and horizontally into other sectors and policies. For example, the rules do not impose clear requirements to consider EQSs for water, PoMs and RBMPs, in planning and subsequent decision-making at all levels and in all relevant sectors. In paper III, this lack of legal integration in relation to local planning activities is addressed, as it constitutes one of the clearest examples of this general lack of horizontal legal integration.

As noted in chapter 3, however, the Swedish government and parliament have recognised some of these problems and made significant efforts to improve the Swedish implementation of the WFD in recent years. For example, several government official inquiries have been initiated over the years and motions from the parliament have requested the government to address certain issues in water governance. As a result, legislative changes have been adopted, where the latest adopted Government Bill (2017/18:43) on the water environment and hydropower has been of particular interest for this thesis. The Bill provides for important legal changes in view of the requirements of the directive, where, for example, the non-deterioration requirement will be clearly reflected in the Swedish Environmental Code. The prohibition against new deteriorating projects will also be linked directly to individual authorisation procedures under the Code, together with the possibility to grant derogations in accordance with article 4(7) of the WFD. The Bill also presents a promising solution to how existing facilities for hydropower in Sweden, within a realistically reasonable time frame, will receive up-to-date environmental requirements in due course.

However, as indicated in chapter 3 and as will be further elaborated in the following sections, the forthcoming legislative changes are not, despite the significant efforts made, sufficient to address all current problems in the Swedish implementation of the directive. In some respects, the steering provided in the Bill even risks impairing the timely achievement of the environmental objectives for water. This in view of the fact that the

Government Bill proposes a no-gold-plating strategy to WFD implementation in Sweden, where the level of ambition has fallen rather than increased. Combined with the new possibility to question decided EQSs for water in light of the documentation provided by the applicant in authorisation processes, the legitimacy of the decisions on EQS for water as well as the legal status of these standards risk being weakened rather than strengthened. To ensure transparency and stakeholder involvement in such a potential revision process of EQSs during a management cycle, the process must be combined with clear requirements on procedure. It is also uncertain if the new rule for prohibition of new projects discussed above will apply to authorisation procedures tried under sectoral legislations outside of the Environmental Code, or to municipal planning activities under the Planning and Building Act.

In the following sections, I discuss further the main implementation problems in Swedish freshwater governance identified in this study before presenting proposals on how they could be addressed by the formal institutional framework. As stated above, the conclusions and proposals are based on the results of this study, including the role of law and the design of the formal institutional framework in adaptive environmental governance regimes, combined with the previous knowledge of implementation difficulties in Sweden.

5.3.2 Uncertain legal status of EQSs for water

Conclusion 1: The legal status of Swedish EQSs for water adopted to implement the WFD needs to be clarified and strengthened. This applies especially to planning and subsequent decision-making at all authoritative levels and in all adjoining policy fields.

Key function 1, identified in chapter 2, addresses the need to provide an overall objective and direction for an adaptive environmental governance regime, anchored within the legislative framework and within the administration. Such objectives and definitional guidance can increase the likelihood that all levels and actors within a polycentric administrative structure work towards the same overarching goal. The central instrument for transposing the

environmental objectives of the WFD into Swedish law, namely EQSs for water, cannot be considered to provide such definitional guidance. As described in chapter 3, as well as reflected in papers II and IV of this thesis, the legal status of EQS, in particular EQSs for water, has been uncertain and debated for years. This, in turn, has caused problems in their implementation at all levels and within all authorities, including the national courts, as shown in papers II, III and IV.

In light of *Weser*, the EQSs adopted to transpose the environmental objectives into Swedish law, must be legally binding in all stages of implementation. This applies to all EQSs for water, regardless of whether they relate to the chemical or ecological status or potential of surface water or to the chemical or quantitative status of groundwater. In addition, the non-deterioration requirement of article 4 of the WFD is absolute and may only be infringed as a result of applying the derogation regime in article 4(7) of the directive provided the conditions are fulfilled. As the CJEU held in *Weser*, Member States are obliged to comply with the provisions of article 4 in the WFD in every decision-making situation that might result in adverse effects on the aquatic environment. As a result, and as argued in paper III, Member State authorities are prohibited from authorising projects, as well as adopting spatial plans or granting building permits which might cause deterioration or jeopardise the possibilities to achieve decided EQSs, unless the decision can be motivated under article 4(7) of the directive.

Through the newly adopted legislative changes,⁵⁰³ the legal status of EQSs for water and, in particular, the non-deterioration requirement, will be clarified in relation to authorisation of new or altered activities or measures under the Environmental Code. However, as described in chapter 3 and also criticised in paper III, the narrow wording and design of the adopted legal rule make its applicability to all subsequent decision-making that risks adversely affecting the water status unlikely. In particular, the rule is unlikely to apply to municipal planning decisions under the Planning and Building Act, and is, as a result, not in complete accordance with the *Weser* case and subsequent case law developed by the CJEU. Nor does the new rule provide such direction requested initially in this section, where legally binding objectives are embedded in the legal system and within the water administration as a whole.

Furthermore, as discussed in chapter 3 above, the narrow design of the adopted rule combined with the new possibility for licensing authorities to question decided EQSs for water in connection with licensing procedures, risks weakening the legal status of EQSs rather than strengthening it. In

⁵⁰³ Act (2018:1407) amending the Environmental Code.

particular, since a main purpose of the new rule is to enable the Water District Authorities to review and, if necessary, adjust decided EQSs for water by lowering the requirements during an on-going management cycle. As noted in chapter 3, the amendment primarily aims to avoid placing higher requirements on precautions than usually required for an activity that is under review for a new or extended permit. The promised supplement to the new rule, where the Water District Authorities must raise the issue with the Swedish government for review if they do not find reasons to adjust the particular EQS for water, is also clearly politically motivated. According to the CJEU, however, political balancing of opposing interests is not an issue when deciding on the environmental objectives.

Another factor of importance is that the new possibility for revision of EQSs during an on-going management cycle is not clearly linked to a procedure that allows participation and transparency with different stakeholders and the general public. In consideration of article 14 of the WFD, and the statements made on its interpretation by the CJEU in *Protect*, it is highly uncertain whether the forthcoming rule, without being connected to a formal opportunity to participate, is in accordance with the directive. Article 14 of the WFD was adopted to implement the Aarhus Convention.⁵⁰⁴ The CJEU also held in *Protect* that the combined provisions of article 9(3) of the Aarhus Convention, article 47 of the EU Charter on human rights, and article 14 of the WFD preclude national procedural rules that deprive, for example, environmental NGOs of the right to participate in permit procedures where the pursuit of the environmental objectives of the directive is an issue.

To conclude, the type of governmental steering and control provided for by the new Bill, risks undermining the trust and mandate established by the Water District Authorities over the years in Swedish freshwater governance. The forthcoming legislative changes combined with the guidance provided in the Bill, also risk undermining the legal status of EQSs for water, or, at the very least, leading to continued problems of interpretation and their application in various decision-making situations by administrative authorities, municipalities and national courts. The somewhat decreased level of ambition in Swedish freshwater governance signalled in the Bill, for example through the pronounced no-gold-plating approach (to *inter alia* make full use of the exemptions under the WFD when classifying waters and deciding on EQSs) is also worrying with respect to the legal status of EQSs for water.

⁵⁰⁴ UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

5.3.3 Deficient administrative structure for Swedish freshwater governance

Conclusion 2: The current administrative structure of the Swedish freshwater administration lacks legitimacy and needs to be clarified. It is deficient in terms of supporting the freshwater administration introduced to implement the WFD.

Considering the results of paper I and key function 2 – administrative structure – it can be concluded that in the complex and multi-level governance system represented by the WFD, it is central that the formal institutional framework provides a clear distribution of roles, responsibilities and authoritative mandate for the governance bodies involved. It is also important that potential conflicts between actors and levels arranged in a polycentric structure are formally resolved. Although some overlap between levels and actors is recommended in the literature when governing natural resources such as freshwater, it is essential to simultaneously provide a polycentric governance structure with some degree of hierarchy and division of authority. In particular, previous studies show that internal conflicts between different levels and actors can be reduced and prevented if the formal framework identifies who decides in potential situations of conflict. The need for such a clear framework is particularly important when instating new systems or procedures, due to the inbuilt inertia and path dependence of existing or established governance systems.

However, as the results of this study show, the current administrative structure for the administration of freshwater in Sweden, provides insufficient support in this regard. For example, papers I, III and IV identify a lack of internal legitimacy within the freshwater administration, where actors express uncertainties as to their roles, responsibilities and mandate, and present different views on how conflicts between actors or levels should be resolved. This implies that the current administrative structure is inadequate in terms of division of responsibilities, mandate and authority and thus needs to be clarified. This conclusion is further reinforced by the fact that there is an

ongoing government official inquiry concerning the administration of water in Sweden, supposed to be presented during the second half of 2019.⁵⁰⁵

As indicated in chapter 3, I propose retaining the current water administration primarily intact, but with certain regulatory adjustments to clarify role distribution, reduce uncertainties and increase legitimacy of the decisions on EQS, PoMs and RBMPs. My position is based on the view that an excessive restructuring or reorganisation at this point of implementing the WFD would risk slowing down the operational water-related work, not least when one considers that the current administration of water, however unclear it may have been at the outset, seemingly now has begun to settle. In view of the directive, the current administration with regional Water District Authorities responsible for holistic planning and governance of individual river basin districts is appropriate, as it reflects the hydrologically based river basin approach of the WFD. Moreover, the knowledge about the waters and water-related pressures in each district, as well as the routines for implementing the WFD that the Water District Authorities have established over the years, would risk being jeopardised by an excessive restructuring at this point.

Nevertheless, considering the uncertainty and legitimacy issues illustrated in this study, the Swedish freshwater governance administration needs to be clarified and the legitimacy of the decisions on EQSs, PoMs and RBMPs should be increased. I will present and discuss my proposals to improve clarity of the administrative structure of the freshwater administration and to enhance the legitimacy of the freshwater planning and governance system in Sweden in section 5.4.2 below.

⁵⁰⁵ Government Review Directions (Dir.) 2017:96, 'Översyn av vattenförvaltningens organisation'.

5.3.4 Insufficient horizontal and vertical integration of the EQSs, PoMs and RBMPs adopted to implement the WFD

Conclusion 3: Sweden has not sufficiently integrated the water governance system of the WFD horizontally and vertically into existing policies and legislations. This hampers the achievement the EQSs for water through adaptive management, and obstructs an integrated river basin planning approach in implementation.

In the foregoing section, the need for an adequate administrative structure within the Swedish freshwater governance system was discussed. This third conclusion, concerning insufficient integration of the freshwater governance system adopted to implement the WFD in Sweden, is aligned to that discussion. Hence, it relates to key functions 2 and 4 – administrative structure and control and enforcement mechanism – both of which are deficiently underpinned by the formal institutional framework in Swedish freshwater governance. In essence, a holistic and integrated perspective is partly missing in the Swedish formal institutional framework, as neither PoMs nor RBMPs are clearly integrated in sectoral policies or between different levels of governance, and thus neither clearly binding on planning and subsequent decision-making in Sweden at all levels and within all sectors.

Important legal steps towards a more integrated system have, however, been taken in recent years, in particular as regards vertical integration within the water governance system and for activities and measures under the Environmental Code.⁵⁰⁶ But, as noted, the legislative changes implemented and proposed so far cannot be deemed sufficiently straightforward, especially with regard to horizontal integration. In many respects, despite the central overarching Environmental Code, Swedish environmental and water law is quite sectoral and often focused on individual problems and activities. For example, paper III illustrates the lack of legal integration between Swedish

⁵⁰⁶ See e.g. the Environmental Code Ch 5 s 13, authorising the Swedish government to require an account from one or several municipalities on how they plan to consider PoMs in, for example, planning activities, and the Environmental Code Ch 5 s 15, stipulating that authorities making decisions under the Environmental Code must ensure that decided PoMs and RBMPs are available as documentation for the decision. See also the forthcoming legislative changes making adjustments in the Environmental Code that will enter into force January 1 2019, Act (2018:1407).

freshwater governance and municipal spatial planning law. Paper IV similarly shows how fragmented and complicated the Swedish legal framework is for handling polluted storm water.

In light of the integrated river basin planning approach of the WFD, and as also indicated by the CJEU in *Weser*, it is crucial that the documentation provided by the Water District Authorities (EQSs, PoMs and RBMPs) is binding on planning and subsequent decision-making within all sectors and at all levels of governance. Considering this, the conclusion that the Swedish formal institutional framework is insufficient in terms of horizontal and vertical integration, also relates to the general discussion held in chapter 3 of the rather weak legal framework for implementing EQSs for water. As found in papers I, III and IV, the PoMs are essential in this regard, because they, if properly designed, offer the strategic planning needed for meeting the environmental objectives. Combined with the crucial information provided for in the RBMPs for each river basin district, a holistic and integrated planning can be established.

In Sweden, however, the implementation of the PoMs for each river basin district is inadequate and needs to be strengthened through formal requirements on procedure, follow-up, evaluation, adjustment and reporting. Likewise, consideration of the RBMPs, providing crucial information on, for example, the water status, identified problems and existing pressures within a district, must be made mandatory in planning and subsequent decision-making at all levels and within all relevant sectors. In the previous Swedish debate, the lack of specificity in the PoMs delivered by the Water District Authorities has often been emphasised as the main reason for their lack of impact. I do not, however, fully share this criticism. As I see it, the lack of impact and implementation difficulties of the PoMs, relate more to the insufficient legal rules regarding procedures for their implementation, including requirements on follow-up and reporting on progress and measures.

As previously indicated, the current structure, where overarching PoMs are developed by the five Water District Authorities for each river basin district, is essentially satisfactory, considering that these programmes cover entire river basin districts. However, new legal rules are required to establish how the overarching PoMs are to be implemented by the authorities and municipalities. For example, a specification (or operationalisation) of the PoMs must be required by the implementing authorities, where they are made responsible for linking the overarching measures prescribed in the PoMs for a river basin district into specific, operational measures and actions related to specific problems, water bodies or river basins. In certain situations, it might even be necessary to develop specific PoMs at lower authoritative levels. Such

specification requirements are also in line with article 13(5) of the WFD. The legal framework must also be supplemented with clear requirements on follow-up, including an evaluation of the progress made and an estimation of where additional or alternative measures need to be undertaken. Strict and sanctioned requirements on reporting are also important. Considering the adaptive management approach of the WFD, it is crucial that higher level authorities are well-informed and up-to-date on, for example, progress, setbacks and current water status, to be able to revise and decide on EQSs, PoMs and RBMPs for the next six-year cycle on the best possible and complete basis. My proposals for clarifications in this regard are presented in section 5.4.1 below.

5.3.5 Inadequate adaptive capacity within Swedish freshwater governance

Conclusion 4: The fairly flexible formal Swedish institutional framework contains insufficient guidance for subsequent decision-making and too little control to ensure compliance with EQSs for water. Simultaneously, it is too rigorous in other aspects, primarily as regards the legal effects of previous rulings.

As described in chapter 2, from a legal viewpoint key function 3 – adaptive capacity – primarily requires an adaptable legal framework that is able to adjust in response to feedback, while simultaneously controlling and limiting the discretion of decision-makers to avoid arbitrary or unpredictable decisions, and ensure that measures and adaptation take place. An administration's adaptive capacity must thus be underpinned by key function 4 – control and enforcement mechanisms. Considering this, it is important to emphasise that flexibility primarily is desired with regard to *which* measures to adopt at the lowest appropriate level, enabling consideration of local and stakeholder knowledge, experimentation and learning in development and implementation of measures, while the formal system simultaneously must ensure *that* steps are undertaken to improve, in this case, the water status.

The formal institutional framework must thus provide both regulatory flexibility and sufficient guidance, control and enforcement to ensure accountability and legitimacy within the system. For example, in decision-making situations that require balancing of interests, the legislator must exercise sufficient control by supplementing the adaptable rules with legal standards (rules, criteria, legal definitions and principles prescribed in law) that set out *how* interests are to be balanced in individual situations.

In general, Swedish environmental and water legislation is quite adaptable and able to adjust to the conditions at hand. The Swedish decentralised freshwater governance system also allows for local and regional initiatives and self-governance to a large extent, primarily as regards which measures to adopt in relation to specific water bodies or river basins. Through procedures for participation and the voluntary Water Councils (open to anyone who has an interest or wants to be involved), there are also opportunities for stakeholders and the general public, at least to a certain extent, to influence which measures to adopt in relation to specific water bodies or river basins. As discussed in the previous section, the PoMs developed at the river basin district level are quite overarching, leaving it to the implementing authorities to decide on the more specific measures. However, the adaptable system of rules in Swedish environmental and water law and governance is not underpinned by sufficient guidance, control and enforcement mechanisms to ensure compliance with EQSs for water or that management strategies are adapted in response to feedback. The formal institutional framework thus provides flexibility, but not sufficient guidance and control. This reduces predictability for individuals, and, eventually, risks undermining the legitimacy of the formal institutional system.

For example, in paper IV, I conclude that the Swedish legal framework contains several rules and legal principles that can be used to impose requirements for handling polluted storm water, but the relevant provisions are not precise enough to ensure the imposition of such requirements; they leave too much to the discretion of the governance officials and municipalities involved. The wide discretion, without being combined with sufficient guidance, in turn may lead to inadequate consideration of the environmental effects of polluted storm water in the practical application of the legal provisions, and this despite storm water constituting a dominant source of numerous pollutants in Swedish surface water bodies. As a result, it risks hampering the possibilities to achieve the EQSs for water. The result of paper II similarly supports the conclusion that the Swedish legal framework allows too much discretion to individual decision-makers when interpreting and applying the EQSs for water. The reviewed court cases show, for example, that

the national courts and expert authorities often interpret the EQSs for water differently in individual proceedings. The paper also shows that traditional legal certainty aspects often trump flexibility and a high level of environmental protection in situations where balancing of interests is involved.

Furthermore, as illustrated in paper III, the wide discretion available to municipalities when applying the Planning and Building Act, without clear requirements to consider the PoMs and RBMPs in subsequent municipal planning and decision-making, often results in insufficient consideration of the EQSs for water as well as the PoMs and RBMPs in the balancing of interests when applying the Act. The mere fact that not all of the 290 municipalities even report to the Water District Authorities on progress and/or which measures they have adopted in accordance with a PoM each year, indicate that the Swedish water governance system is not sufficiently underpinned by adequate enforcement and control mechanisms. The legal framework thus needs to provide both additional guidance – through, for example, rules, criteria, clear legal definitions and principles – for the water governance system prescribed in law, and control and enforcement mechanisms – through, for example, reporting requirements and possibilities for the Water District Authorities to intervene to counteract passivity. Hence, in light of the results of papers II–IV, the need for adaptive capacity is also clearly aligned with the need to integrate and supersede the freshwater governance system in subsequent decision-making and planning activities at all levels and sectors, discussed in relation to Conclusion 3 (section 5.3.4) above.

While the Swedish framework for freshwater governance can be said to allow for too much discretion in the respects discussed so far, it also contains structures that are too rigorous to be compatible with the need for adaptive capacity under an adaptive governance approach. One such legal structure regards the legal effects of previous rulings. As described in paper II, permits for water operations as well as environmentally hazardous activities are traditionally not time-limited in Sweden, and need to be reviewed in a court of law to be modified or revoked. This structure significantly impairs the possibilities to, for example, impose up-to-date environmental requirements on existing permits, which, in turn, hampers the adaptive capacity of Swedish authorities. The current legal framework makes it difficult to initiate review procedures of permits, even if monitoring results indicate that it is necessary to impose up-to-date requirements or even to revoke permits in certain situations. The general Swedish debate on imposing up-to-date requirements on the many existing facilities for hydropower production, as well as interviews conducted in paper IV, testify to that effect. Furthermore, as shown

in paper II and discussed in chapter 3, the insufficient and partly conflicting guidance regarding the legal status of EQSs for water provided by the national legislator so far, have resulted in a slow and incremental process of interpreting and applying the EQSs for water in Swedish courts, before, but also partly after, the *Weser* case.

In the forthcoming legislative amendments, a general time-limitation for permits for hydropower production will be instated, but no corresponding requirement is proposed for other water operations or environmentally-hazardous activities. The general time-limit of 40 years that will be imposed, must also be viewed as far too long to ensure the modernisation of environmental requirements and an adaptive governance approach as intended by the WFD. Similarly, it is positive from the viewpoint of adaptive capacity that the current limitation in review procedures – entailing that licensing authorities in such procedures must not impose conditions or other rules that are so intrusive that the activity or operation no longer can be pursued or is significantly hampered – no longer includes review procedures for hydropower facilities. This means, however, that the limitation remains as regards other water operations as well as environmentally hazardous activities,⁵⁰⁷ which must be regarded as another shortcoming with the proposal from the viewpoint of facilitating adaptive governance. As a result of the primary focus on hydropower facilities, the Bill, in many respects, has little significance for other kinds of water operations or environmentally hazardous activities.

⁵⁰⁷ Forthcoming as Environmental Code Ch 24 s 9, Act (2018:1407).

5.3.6 Overall conclusion: No full regime shift towards an adaptive and integrated water governance system has occurred in Sweden

Overall conclusion: No full regime shift towards the hydrological, adaptive and integrated system of the WFD has occurred in Sweden. This has hampered the implementation of the directive; the system for water planning and governance is not clearly reflected in the formal institutional framework nor sufficiently underpinned by the administrative structure at national level.

All in all, the implementation difficulties discussed, combined with the no-gold-plating strategy proposed by the Swedish government in the latest Bill, the overall conclusion of this thesis is that no full regime shift in the direction of the hydrological, adaptive and integrated system of the WFD has taken place in Sweden, particularly not in legal terms. The conclusion is supported by all four papers as well as by the general discussion on the Swedish implementation of the WFD, and well founded in the legal and governance literature concerning the role of law and formal arrangements in complex, multi-level environmental governance regimes. It is particularly problematic that central aspects of the latest Bill seem to emphasise flexibility and increased adjustment possibilities in relation to changing the *objectives* for the water bodies, rather than the possibilities to adjust *management strategies* due to their previous insufficiency to reach the environmental objectives. In this light, the new legislative Bill does not support an adaptive approach in the meaning of achieving ambitious environmental objectives in the long-term by adjustments of management strategies in light of monitoring results.

In general, the results of this study indicate that the lack of a clear formal transposition of the requirements under the directive into national law has caused difficulties in implementation at all administrative levels (paper I, III and IV), including the national courts (paper II). As a result, the current Swedish legal framework and institutional governance arrangements are insufficient to guarantee full implementation of the freshwater governance

system of the WFD and, ultimately, achieve the prescribed environmental results assuring a good water status.

In light of the implementation difficulties discussed here, including the overall conclusion, in the next section I will present my proposals to remedy the shortcomings. Bearing in mind that the Swedish water governance system provides favourable opportunities and constitutes a good basis for full implementation of the directive, the ambition is to suggest improvements in the formal institutional framework that more clearly support a holistic, adaptive and integrated freshwater governance system at the scale of river basins. Several of the proposals are designed with the Swedish administrative traditions and the conventional administrative culture in mind. In essence, the proposals aim to supplement the formal institutional framework to provide the limits of discretion in decision-making as well as for flexibility in choice of measures at all levels of governance and within all sectors through, primarily, formal mechanisms for guidance, procedure, support and control.

5.4 Legislative proposals

The proposals presented in this section are divided into two main groups. The first group (section 5.4.1) contains proposals that aim to clarify the legal status of EQSs for water as well as to achieve a more integrated freshwater governance system in Sweden. The proposals thus primarily address how to ensure that EQSs for water, as well as decided PoMs and RBMPs, are taken into account in subsequent decision-making at all levels and within all adjoining sectors. The second group (section 5.4.2) contains proposals to increase legitimacy of the freshwater administration and of the overarching decisions on EQSs, PoMs and RBMPs. The proposals also aim to improve the administrative structure as well as the adaptive capacity of the current freshwater administration. All proposals, ten in total, of which the first five are presented in the same cluster as they are related, are followed by an explanation about how they can be expected to improve the particular implementation hurdle discussed.

5.4.1 Proposals for improving the legal status of EQSs and achieving a more integrated freshwater governance system

Proposal 1: *Require authorities and municipalities to account for how EQSs have been considered (and, when necessary, complied with) in decision-making according to the Environmental Code and sectoral laws, such as licensing, planning and inspections, through amendments in these legislations.*

Proposal 2: *Ensure that all authorities and municipalities are prohibited from authorising projects or adopting plans that risk deteriorating the water status or jeopardising the possibilities to achieve the EQSs for water, by amending the forthcoming provision⁵⁰⁸ such as to include planning and decision-making under the Environmental Code as well as sectoral laws, such as the Planning and Building Act.*

Proposal 3: *Ensure that PoMs and RBMPs are taken into account in planning and subsequent decision-making, by, for example, amending the current provision in Chapter 5, section 15 of the Environmental Code, to explicitly include municipal planning and decision-making under the Planning and Building Act, as well as planning and decision-making under other sectoral legislations.*

Proposal 4: *Introduce sanctioned requirements on implementation, follow-up, evaluation and reporting of PoMs. For example, by amending Chapter 5 of the Environmental Code with such requirements and with a general penalty clause to counteract passivity and ensure accountability in decision-making at all stages of implementing the PoMs.⁵⁰⁹*

Proposal 5: *Refer to Chapter 5 of the Environmental Code in its entirety in current provisions in sectoral legislations.⁵¹⁰*

⁵⁰⁸ Forthcoming on January 1 2019 as Environmental Code Ch 5 s 4, see Act (2018:1407) amending the Environmental Code.

⁵⁰⁹ Such a rule could, for example, be designed as follows: “The government or a public authority determined by the government may issue injunctions towards an administrative authority or a municipality that fails to comply with the requirements under Ch 5 of the Environmental Code or with the obligations imposed on them according to a valid programme of measures. Such injunctions may be made subject to imposition of a conditional fine.”

⁵¹⁰ Instead of merely stipulating that EQSs decided under Ch 5 of the Environmental Code must be followed in the application of these laws, the current provisions can be amended and instead refer to the whole of Ch 5 of the Code, and thus include the PoMs, the new prohibiting rule as well as the possibility to grant derogations in accordance with article 4(7) of the WFD.

Motivation: In light of *Weser*, the legal status of EQSs for water must be strengthened through amendments in Swedish law. These amendments must clearly reflect that all subsequent decision-making that might deteriorate the water status or make it more difficult to achieve EQSs for water is prohibited, unless the particular decision can be motivated under the derogation regime of article 4(7) in the WFD. The national legal rules must thus reflect the necessity for all decision-making under the Environmental Code (for example, licensing, inspections, permissibility, approvals and exemptions) to be in compliance with EQSs for water. This basic obligation must also be reflected in all sectoral legislation that, beside the Environmental Code, provides opportunities to decide on plans or grant permits of different kinds. As illustrated and proposed in paper III, this applies not least to municipal spatial planning decisions under the Planning and Building Act.

Likewise, the implementation of the PoMs must be strengthened through clear requirements in the legal framework, and the combined planning provided for by the RBMPs and the PoMs made mandatory to consider in planning and subsequent decision-making at all authoritative levels and by all relevant sectors. In this respect, rules on implementation, follow-up, evaluation and reporting are required to counteract passivity at all stages of implementation of a decided PoM. Such requirements must also be underpinned with the opportunity to issue injunctions, which may be subject to the imposition of a conditional fine. Properly implemented, an integrated planning approach also enables new operations by clearly identifying where it is appropriate or inappropriate to exploit for different purposes based on current water status and the previously known pressures and impact on aquatic environments.

To reflect these basic obligations, adjustments can, for example, be made in Chapter 5 of the Environmental Code, as well as in current provisions in sectoral laws so as to clearly reflect the necessity of adhering to Chapter 5 of the Code in its *entirety* in subsequent decision-making when applying these laws. As the current provisions in Swedish sectoral laws merely state that EQSs under Chapter 5 of the Environmental Code must be “followed” in applications of the laws, they are too vague and imprecise when considering the clear obligations expressed in for example *Weser* and *Schwarze Sulm*. Hence, sectoral decision-making must be clearly connected to the prohibition against deteriorating the water status or impairing the possibilities to achieve the EQSs for water, unless motivated by use of the derogation regime. Such a possibility must, however, be exercised under a certain level of transparency and control. The Water District Authorities should thus be authorised to revise and repeal decisions on derogations, by introducing a similar control

mechanism as the current procedure for control of certain municipal decisions under the Environmental Code.⁵¹¹ Authorities as well as environmental NGOs and concerned individuals must enjoy an opportunity to appeal such decisions.

Proposal 6: *Specify in the PoMs for each river basin district, by adding a general measure directed at all administrative authorities and the municipalities, their responsibility for translating the PoMs into specific and operational measures within their respective areas of responsibility. It should also be stated that specific programmes need to be developed for those water bodies where the environmental objectives run the greatest risk of not being achieved within set timeframes. Such specific programmes must be developed in consultation with relevant authorities, municipalities, stakeholders and the general public.*

Motivation: As argued in section 5.3.4 above, the current structure, with quite overarching PoMs at the river basin district level, is essentially satisfactory in view of the integrated and adaptive approach of the WFD. The general PoMs shall reflect the main identified problems in a district and provide examples of the most crucial measures to undertake in each district. Rather than making the PoMs of the entire river basin district more precise as regards specific measures, a more efficient strategy would be to specify the overarching PoMs with operational measures to be taken by each individual authority and municipality. When deemed necessary, the PoMs must also be complemented with specific action programmes or management plans related to, for example, identified problems, problem areas, or specific water bodies and/or river basins, as article 13(5) of the WFD suggests.⁵¹²

Reflecting both the participatory and the integrated planning approach of the WFD, the process of developing such more specific action programmes or management plans should be undertaken in consultation with local and regional authorities, stakeholders and the public. Such an approach could also help to prevent future criticism from the EU Commission regarding lack of specific measures in the PoMs; the RBMPs can clearly describe which detailed programmes and/or management plans that have been adopted to address identified problems in a district, alternatively in relation to specific water bodies or river basins.

⁵¹¹ See the Environmental Code Ch 19 ss 3a-b.

⁵¹² Such an approach is also partly supported by action 5 directed at the County Administrative Boards in the Swedish PoMs for Water Management for 2016-2021.

In my view, it is not realistic nor desirable, to ask of the Water District Authorities, who each represent an entire river basin district, to be able to specify exactly what specific, operational measures need to be undertaken in order to achieve good status (or ecological potential) in each individual water body of a district. Such a solution is likely to hit some impactors hard while others completely avoid actions, depending on the current degree of information within the particular Water District Authority. More importantly, however, such a solution would infringe against one of the basic features of the WFD: that decisions should be taken as close as possible to the locations where water is affected and used, while allowing for flexibility in the measures chosen, adjusted to the regional and local conditions at hand.

Hence, overly specific PoMs at river basin district level greatly risk reducing flexibility in the choice of measures, thus preventing local initiatives and experimentation, for example, to find the most cost-effective solution in different contexts. Instead, in accordance with this study, it is important to ensure that all authorities and municipalities do what they are obliged to in accordance with a decided PoM, while the programme itself is flexible and able to adjust as regards the choice of specific measures to adopt to achieve the EQSs for water.

Proposal 7: *Ensure that possible opportunities to adjust EQSs for water, in response to new information on the water status during an on-going management cycle, is used restrictively by the authorities. Such opportunities must be connected to the ordinary formal procedure for deciding on EQSs; allowing for public participation and stakeholder involvement, to ensure transparency, equality and consideration of individual rights in the decisions.*

Motivation: It follows from proposals 1–5 that it is very important to emphasise in the law that decided EQSs for water are legally binding and must be complied with in subsequent decision-making by the relevant authorities and municipalities. However, as also reflected in the forthcoming new provision enabling licensing authorities to question the EQSs for water based on the documentation provided by the applicant in a permit procedure,⁵¹³ the process of determining EQSs for water contains a certain amount of uncertainty as applications are based on currently available data in combination with expert assessments. In consideration of this uncertainty combined with the adaptive management approach of the WFD, there should

⁵¹³ Forthcoming as Environmental Code Ch 22 s 13 para 1 point 1a-b.

be some room in the law for adjusting EQSs in advance (that is, prior to the mandatory six-year review process) in response to new information and data. The rules regulating such a possibility must, however, clearly emphasise that it is the state of the water environment that determines whether an adjustment is necessary, and that adjustments can occur in both downward and upward directions. Both the WFD and the Swedish legislation can also be considered to allow for this, stipulating that a review must be done *at least* every six years.

It is also crucial, in light of article 14 of the WFD combined with the general requirements of the Aarhus Convention, that such a possibility to adjust decided EQSs in advance is connected to the ordinary formal procedure in which access to information and participation by stakeholders and the public are guaranteed. In this case, consultation with concerned stakeholders and the public should be conducted prior to the decision, so as to ensure that the new decision is based on all available knowledge and data. In particular, local and regional information of the quality of the water and improvements based on previous measures should be taken into account in the new decision. Bearing in mind that EQSs in Sweden are not directly binding on individuals and that, as a consequence of this, decisions on EQSs cannot be appealed, such a procedure prior to decision-making becomes extra crucial to ensure transparency and legitimacy of the decisions.

5.4.2 Proposals to improve legitimacy, administrative structure and adaptive capacity

Proposal 8: *Centralise the decisions on EQSs, PoMs and RBMPs to a national Agency, tentatively the SwAM (HaV).*

Motivation: The proposal aims primarily at increasing the legitimacy of the decisions among actors at all levels of the water administration, by moving the decisions to a higher, in this case national, level. Such a decision-making procedure is more in accordance with Swedish administrative traditions, which, in turn, is more likely to create legitimate decisions of which the whole water administration can approve. The proposal thus reflects the key function 1 identified in chapter 2 whereby the legislative framework shall provide an overall objective embedded in the legal system and within the administration, as well as clear direction for the water administration as a whole, to facilitate incremental change enabling the achievement of the overarching goal of good water status.

In light of key function 1 and the results of papers I–IV, the legitimacy of decisions is likely to increase if they are made at the highest possible authoritative level, for example by the government or a central administrative authority. In this case, a centralisation of the decisions would mean that it would no longer be questionable whether the decisions are taken in the right order, or whether a lower-level authority can make decisions that steer the work of hierarchically superior authorities. Due to the water expertise required and the recurring frequency of decisions under the water management cycle of the WFD, I would argue that the SwAM is an appropriate decision-making authority.

With this proposal, the Water District Authorities would keep their main responsibilities and prepare the decisions on EQSs, PoMs and RBMPs for each district in the same way and with the same established practices as today, while the Water District Boards will lose their decisive functions. As this study has not closely examined the role and functions of the Water District Boards, further investigations are needed to establish whether or not these bodies of governance should be retained in some form, for example as advisory bodies for the Water District Authorities. Besides the Water District Boards losing their decisive function, the rest of the current water administration in Sweden can in essence continue as before with this proposal. As the environmental objectives and the overall plan for achieving them will be entrenched higher up in the administrative structure, future work will, however, have a clearer direction than the current structure provides. In relation to this, it is also significant to once again underline the importance of maintaining flexibility in the choice of measures to adopt under the PoMs at the regional and local operational levels, as discussed above; such flexibility is not infringed with this proposal.

Proposal 9: Clarify the role and mandate of the Water District Authorities in relation to other actors in Swedish water governance, for example by appointing them as an independent Water Authority with a budget of their own and with offices in each of the five current districts.

Motivation: As this study shows, the role and mandate of the Water District Authorities in Swedish freshwater governance are unclear and need to be clarified and strengthened vis-à-vis other actors in the administration of freshwater. One solution could be to separate the Water District Authorities from the twenty-one County Administrative Boards and establish them as a new, independent authority. This new Water Authority would be allocated primary responsibilities for the overarching river basin district planning and

governance in all five current river basin districts, and, as a suggestion, hierarchically organised in between the national Agencies and the regional County Administrative Boards.

In light of the results of this and previous studies, it is important that the Water District Authorities are made more visible in the administrative structure, and that their role and mandate are clarified and strengthened, especially against the current same-level and lower-level authorities as discussed in relation to conclusion 2 above. As an independent authority with an individual appropriation direction and budget, the governmental control as well as the work of the authority becomes more transparent, which in turn is likely to increase legitimacy of their work as well as the governmental control of the authority. The operational work can also be facilitated if the Water District Authorities have their own budget at their disposal, so that resources can be allocated directly to, for example, structural water management measures and restoration projects, instead of competing of funds with other sectors and interests.

Similarly, a separate Water Authority with its own mandate in freshwater governance, which differs from the more general role and mandate of the twenty-one regional County Administrative Boards primarily aimed at regional concerns, can give water issues the increased weight required under the WFD and the case law developed by the CJEU. Hence, by separating the Water District Authorities from the County Administrative Boards and at the same time placing the new Water Authority above the regional and municipal levels, the role and mandate of the Water District Authorities can be strengthened simultaneously as water issues are given due weight in the competition with other interests.

With this proposal, the five offices of the new Water Authority would correspond to the five current Water District Authorities, where the Water Directors could constitute a joint board which decides primarily budget-related matters and has the main responsibility to report on the progress of the work to the relevant (hierarchically superior) national Agencies (the SwAM and the Geological Survey of Sweden). The more precise conditions for the proposed new Water Authority cannot, however, be developed further based on the results of this study, but constitutes an interesting area for continued research. The more detailed consequences of this proposal also need to be further investigated. In this context, it must be acknowledged that the Swedish water administration currently is under official investigation, as a result of the inquiry initiated by the Swedish government.⁵¹⁴

⁵¹⁴ Government Review Directions (Dir.) 2017:96, 'Översyn av vattenförvaltningens organisation'.

Proposal 10: Introduce time-limits on permits for both water operations and environmentally-hazardous activities.

Motivation: The adaptive approach to freshwater governance prescribed by the WFD requires adopted measures to be adjusted in light of monitored results. In essence, an adaptive governance regime requires an adaptable legal framework, allowing for the imposition of new requirements on, for example, current impactors as a response to increased knowledge and/or establishment of new, modern technologies. A legal construction viewing permits, and the conditions prescribed therein, as immovable and with ever-lasting validity imposes a significant barrier to adaptive governance of water resources. An adaptable formal institutional framework must rather, as a rule, impose time-limits on permits, where the permit holder is responsible for applying for a revised permit when the time has elapsed. The permit holder should, in accordance to current provisions in Swedish environmental law,⁵¹⁵ also be responsible for providing the documentation (for example an environmental impact assessment) for the review process. Such a solution is also in line with the statutory Polluter Pays Principle.

An estimation of reasonable time limits cannot be made based on this study. However, from the general viewpoint of adaptive management, I consider the adopted 40-year time-limit for hydropower operations as too long, and would have preferred it cut in half (as was also originally proposed). It is also important to use the current possibilities for prescribing time-limited conditions, for example, as regards emission limit values, purification techniques and other technological measures on precaution. As new technologies are developed constantly and knowledge of impacts on the water environment likewise increases all the time, such conditions need to be revised regularly and more frequently than entire permits, tentatively every five years or so.⁵¹⁶

⁵¹⁵ Environmental Code Ch 2 s 1.

⁵¹⁶ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [2010] OJ L 334/17, builds, for example, on such a general and regular model of reconsideration and increased control.

5.5. Concluding remarks

This thesis has examined the fundamental role of law and the design of the formal institutional framework in the implementation of the hydrologically based, integrated and adaptive governance system of the WFD, with Sweden as the main object of study. I have, when studying the Swedish case, in many respects argued for more rules and increased formal or governmental steering, to underpin the polycentric and decentralised governance structure of the directive, where several actors and authoritative levels are involved. However, as stated initially in this thesis, I have concentrated on identifying the kind of rules and formal institutional steering arrangements that can facilitate a shift towards an adaptive and integrated governance regime. In this respect, the formal institutional framework must support and ensure adaptation of management strategies (advantageously bottom-up) with a view to achieving the environmental objectives prescribed, as well as promoting integrated cooperation between the levels and actors involved, including stakeholders, NGOs and the general public. The formal institutional framework must provide the limits of discretion and flexibility in decision-making at all levels of governance, through sufficient guidance and control.

Important to observe is thus that I do not advocate more traditional government in the form of centralised, strictly hierarchical steering and control, or a system where the central government or a central authority makes all decisions and in detail controls what is to be done and by whom. Such centralised government and control are not compatible with the governance model prescribed by the WFD, where subsidiarity, experimentation and learning at the lowest appropriate level are emphasised, particularly as regards the choice of specific measures to adopt. The ambition here has rather been to suggest improvements in the formal institutional framework, in order to provide direction, administrative structure, and adaptive capacity, underpinned by sufficient control and enforcement mechanisms, to ensure that incremental but certain steps towards the environmental objectives are undertaken. As this thesis has illustrated, the role of law and the design of the formal institutional framework are of crucial importance to propel such a process towards the overarching goal of good water status. In essence, formal governance arrangements can provide the path to a sustainable freshwater governance regime.

Svensk sammanfattning

Sötvatten är en av jordens viktigaste resurser, helt nödvändig för att upprätthålla liv och tillhandahålla ekosystemtjänster för flera olika mänskliga behov, såsom dricksvattenförsörjning, matproduktion, fiske och vattenrening. EU:s ramdirektiv för vatten (RDV) antogs år 2000, mot bakgrund av ett ökande tryck på Europas vatten samt en fragmenterad vattenlagstiftning inom Unionen. Ramvattendirektivet introducerade ett nytt förvaltningssystem för sötvattenresurser i EU, baserat på vattnets naturliga flöden genom dess fokus på avrinningsområden och ett integrerat och adaptivt förhållningssätt, där förvaltningen av vatten bedrivs i cykler om sex år med det övergripande syftet att uppnå en hållbar vattenförvaltning. RDV ställer upp dels ett krav om icke-försämring, dels ambitiösa miljömål för ekologisk och kemisk status för ytvatten och kvantitativ och kemisk status för grundvatten.

I denna avhandling har rättens roll och funktion i förvaltningen av sötvattenresurser i enlighet med den modell som RDV föreskriver undersökts, med Sveriges implementering av direktivet som huvudsakligt studieobjekt. Fokus har legat på att analysera om det svenska vattenförvaltningssystemet och dess rättsliga ramverk kan anses tillräckligt för att fullt ut genomföra den modell för vattenförvaltning som föreskrivs i RDV och, i förlängningen, uppnå de föreskrivna miljömålen. Studien är baserad på en rättsvetenskaplig metod, där kvalitativ textanalys av rättsligt material har använts med huvudsakligt syfte att analysera innehållet i den nationella rätten mot bakgrund av de rättsliga krav som EU-rätten uppställer, och då särskilt genom RDV. De huvudsakliga tolkningsmetoderna som använts i den rättsliga analysen är reglers ordalydelse samt systematisk och ändamålsenlig/teleologisk tolkning. Vid sidan av de traditionella rättskällorna – lag, förarbeten, rättspraxis och doktrin (samt annat offentligt material) – har litteratur och material som utvecklats inom andra vetenskapliga discipliner använts i analysen, främst för att fördjupa förståelsen av den modell för vattenförvaltning som föreskrivs i RDV likväl som rättens roll för att underlätta genomförandet av den.

Studien består av två huvudsakliga delar. Den första delen utgörs av den kontextuella ramen för hela avhandlingen (kappan) bestående av fem olika kapitel och den andra delen består av fyra artiklar, som var och en på sitt eget sätt bidrar till att uppnå det övergripande syftet med avhandlingen. I kappans kapitel 1 presenteras studiens bakgrund, syfte och avgränsningar, metod och material samt hur den förhåller sig till tidigare forskning på området. Därefter följer i kapitel 2 en omfattande litteraturstudie som huvudsakligen syftar till

att identifiera och sammanfatta rättens roll i ett sådant adaptivt, integrerat och flernivå-förvaltningssystem som RDV föreskriver, där även deltagande av allmänheten och andra intressenter ingår. Kapitel 3 utgör den huvudsakliga rättsutredningen av avhandlingens studieobjekt – lagstiftning för sötvattenresurser på EU-nivå och nationell nivå. Först beskrivs och analyseras RDV med fokus på att kartlägga de rättsliga skyldigheter som direktivet medför, följt av en beskrivning och initial analys av det svenska genomförandet av direktivet. Även avhandlingens fyra ingående artiklar utgör centrala bidrag till denna rättsutredning och analys och de huvudsakliga resultaten av varje artikel presenteras därför i kapitel 4. I det avslutande 5:e kapitlet, sker först en återkoppling till de huvudsakliga funktioner som i kapitel 2 identifierades som centrala för det rättsliga ramverket att bidra med i sådana komplexa förvaltningssystem som RDV föreskriver, följt av en sammanfattning av de huvudsakliga skyldigheter som direktivet medför för medlemsstaterna, inklusive Sverige. Merparten av kapitel 5 ägnas sedan till att, baserat på studiens resultat, ingående analysera det svenska vattenförvaltningssystemet och dess rättsliga ramverk, i ljuset av de centrala funktionerna samt de rättsliga skyldigheterna identifierade i studiens tidigare kapitel. Innan jag går närmare in på studiens huvudsakliga resultat och slutsatser följer en sammanfattning av innehållet och resultatet av avhandlingens fyra artiklar.

Artikel I studerar RDV och hur det har införlivats i Sverige, i vidare syfte att undersöka på vilket sätt och i vilken omfattning rättens roll och funktion kan anses ha förändrats med anledning av introduktionen av nya förvaltningssystem och idéer, särskilt på EU-nivå men även från ett nationellt perspektiv. Genom att studera RDV och det multi-level-governance-system som direktivet bygger på – där subsidiaritet, flernivå-perspektiv, decentralisering av beslutsfattande till lägsta lämpliga nivå samt deltagande av enskilda intressenter och allmänheten är centrala utgångspunkter – argumenteras i artikeln för att nya krav ställs på medlemsstaterna i det nationella genomförandet. De är ansvariga för att se till att de ramar som direktivet ställer uppfylls i tillräcklig grad på den nationella nivån, särskilt vad gäller det rättsliga ramverket, och att de uppställda kraven, särskilt resultatet, säkerställs och uppnås inom föreskrivna tidsramar. Resultatet av artikeln visar dock att det svenska genomförandet är otillräckligt, särskilt med anledning av en något otydlig roll- och ansvarsfördelning för den (delvis) nya vattenförvaltningsorganisationen. Det riskerar att försvåra arbetet med att uppnå de uppställda miljömålen i direktivet.

Artikel II undersöker hur de svenska domstolarna har tolkat och tillämpat miljö kvalitetsnormerna för vatten i tillståndsprövningar för

vattenverksamheter, dels före den uppmärksammade Weserdomen 2015 och dels efter domen. Rättsfall beslutade mellan åren 2012-2017 har beaktats i artikeln. Artikeln belyser och diskuterar huruvida det vaga och delvis felaktiga införlivandet av RDV i Sverige kan ha orsakat ett bristande genomslag för miljö kvalitetsnormerna för vatten. Det gäller särskilt för tillståndsprövningar i konkurrens med andra intressen, inte minst traditionella rättssäkerhetsvärden såsom tillstånds rättskraft. Den främsta orsaken är att miljö kvalitetsnormerna för ekologisk status inte gavs samma status och rättsverkan i individuella provningar som gränsvärdesnormer för kemisk status, men även för att undantagsregimen i artikel 4(7) RDV inte blev korrekt införlivad i Sverige. Artikeln visar på hur bristen av ett tydligt rättsligt genomförande riskerar att försena genomslaget för nya miljömål, samt hur det leder till osäkerheter och minskad förutsebarhet i domstolsprövningar av nya och reviderade tillstånd.

Artikel III undersöker och analyserar i vilken utsträckning det holistiska, integrerade och adaptiva förvaltningssystem som RDV föreskriver har blivit horisontellt integrerat med svensk planeringslagstiftning, med särskilt fokus på förhållandet mellan miljöbalkens (1998:808) (MB) krav och plan- och bygglagen (2010:900) (PBL). I artikeln argumenteras för att lagändringar krävs i PBL och MB, mot bakgrund av den centrala roll som fysisk planering har i implementeringen av de vattenrelaterade miljö kvalitetsnormerna. Även vikten av en horisontell integrering av RDV:s vattenförvaltningssystem i planeringsbeslut och efterkommande beslutsfattande på olika nivåer och inom alla relevanta sektorer bör generellt uppmärksammas i ökad utsträckning. För att säkerställa att kommunala planer och beslut är förenliga med miljö kvalitetsnormerna för vatten, måste även åtgärdsprogram och förvaltningsplaner beaktas i beslutsfattandet och i artikeln påpekas att utökade krav i lagstiftningen kan åstadkomma detta. Det handlar främst om att rättsligt förtydliga det ansvar som redan gäller för kommunerna under nuvarande regelverk, men med mer explicit uttryckta krav i bindande lagregler.

Artikel IV, slutligen, undersöker det svenska genomförandet av RDV med särskilt fokus på miljöeffekterna av förorenat dagvatten som avrinner från hårdgjorda ytor i bebyggda miljöer, som i stor utsträckning leds orenat direkt ut i svenska sjöar och vattendrag. I artikeln argumenteras för att dagvatten är ett miljöproblem som kan påverka möjligheterna att uppnå de miljömål som RDV ställer upp och därför behöver uppmärksammas i större utsträckning i det svenska genomförandet av direktivet. Den rättsliga analysen av regleringen kring dagvatten i kombination med intervjuer med nyckelpersoner i genomförandet av RDV i Bottenvikens vattendistrikt visar

dock att det rättsliga ramverket tycks vara otillräckligt för att säkerställa att förorenat dagvatten tas om hand på ett tillräckligt sätt för att minska risken för att föroreningar leds ut i vattendragen. Trots att lagstiftningen ger utrymme för att ställa krav verkar den praktiska hanteringen brista. Slutsatsen är att lagstiftningen lämnar för stort ansvar och utrymme till enskilda tjänstemän, myndigheter och kommuner, men utan tydlig vägledning eller tillräckliga krav från lagstiftaren kring hur förorenat dagvatten ska hanteras.

Sammantaget visar artiklarna och analysen i kappan att det svenska vattenförvaltningssystemet och regelverket kring dess genomförande innehåller både möjligheter och hinder för att fullt ut genomföra den modell för vattenförvaltning som RDV ställer upp. Den administrativa ordningen med vattenmyndigheter för varje huvudsakligt avrinningsdistrikt reflekterar den grundläggande hydrologiska utgångspunkten i direktivet, samtidigt som det svenska regelverket lämnar visst utrymme för adaptivitet eller anpassning av de åtgärder som vidtas för att nå de uppställda målen. Därutöver innebär det starkt decentraliserade svenska systemet i kombination med tydliga krav på transparens och deltagande, att det finns goda möjligheter för att hitta de mest lämpliga åtgärderna i förhållande till olika vatten och omständigheter där lokal kunskap kan tas tillvara.

Trots dessa möjligheter är avhandlingens övergripande slutsats att det svenska genomförandet av direktivet är otillräckligt för att fullt ut motsvara ett integrerat och adaptivt förvaltningssystem i enlighet med RDV, de senast beslutade lagändringarna (prop. 2017/18:243) till trots. Inte minst visar den avslutande analysen att det svenska systemet innehåller brister med avseende på alla de fyra centrala funktioner som i avhandlingens kapitel 2 identifierades som betydelsefulla för det rättsliga systemet att bidra med i sådana komplexa förvaltningssystem som RDV föreskriver. Närmare bestämt uppdagades brister dels i definitionen av övergripande mål och riktning (funktion 1), dels genom avsaknad av en tydlig administrativ struktur, där roller, ansvar och befogenheter är tydligt fördelade (funktion 2). Systemet visade sig även innehålla otillräcklig styrning, uppföljning och kontroll av beslutsfattande på alla nivåer (funktion 3), samt brister i kontroll och sanktionsmekanismer (funktion 4) så att ett stegvis genomförande av de uppställda miljökvalitetsnormerna för vatten kan säkerställas och miljömålen slutligen uppnås. Avhandlingen presenterar tio förslag för hur de funna bristerna kan åtgärdas för att förbättra genomförandet av RDV i Sverige och, i slutänden, uppnå en hållbar förvaltning av färskvattenresurser.

References

Swedish Official Documents

Government Bills (propositioner)

Government Bill (prop.) 1973:90, 'Med förslag till ny regeringsform och ny riksdagsordning'.

Government Bill (prop.) 1981/82:130, 'Med förslag till ny vattenlag m.m'.

Government Bill (prop.) 1986/87:99, 'Om ledning av den statliga förvaltningen'.

Government Bill (prop.) 1997/98:45, 'Miljöbalk'.

Government Bill (prop.) 2003/04:2, 'Förvaltning av kvaliteten på vattenmiljön'.

Government Bill (prop.) 2003/04:57, 'Vattendistrikt och vattenmiljöförvaltning'.

Government Bill (prop.) 2008/09:170, 'En sammanhållen svensk havspolitik'.

Government Bill (prop.) 2009/10:184, 'Åtgärdsprogram och tillämpningen av miljökvalitetsnormer'.

Government Bill (prop.) 2010/11:86, 'Havs- och vattenmyndigheten'.

Government Bill (prop.) 2017/18:243, 'Vattenmiljö och vattenkraft'.

Government Official Reports (Statens offentliga utredningar)

Government Official Report (SOU) 1977:27, 'Revision av vattenlagen'.

Government Official Reports (SOU) 2002:105, 'Klart som vatten'.

Government Official Reports (SOU) 2002:107, 'Bestämmelser om miljökvalitet – Miljöbalkskommitténs bestänkande angående införandet av EG:s ramdirektiv för vatten i Sverige'.

Government Official Report (SOU) 2005:59, 'Miljöbalken; miljökvalitetsnormer, miljöorganisationerna i miljöprocessen och avgifter'.

Government Official Report (SOU) 2005:113, 'Åtgärdsprogram för miljökvalitetsnormer'.

Government Official Report (SOU) 2008:48, 'En utvecklad havsmiljöförvaltning'.

Government Official Report, (SOU) 2009:42, 'Vattenverksamhetsutredningen'.

Government Official Report (SOU) 2010:8, 'En myndighet för havs-och vattenmiljö'.

Government Official Report, SOU 2012:89, '4 kap. 6 § miljöbalken'.

Government Official Report, SOU 2013:69, 'Ny tid ny prövning – förslag till ändrade vattenrättsliga regler'.

Government Official Report (SOU) 2014:35, 'I vått och torrt – förslag till ändrade vattenrättsliga regler'.

Government Official Report (SOU) 2014:50, 'Bättre samordning och struktur inom havs- och vattenmiljöområdet'.

Government Official Report (SOU) 2015:43, 'Vägar till ett effektivare miljöarbete'.

Government Official Report, (SOU) 2017:2, 'Kraftsamling för framtidens energi'.

Government Review Directions (Kommittédirektiv)

Government Review Directions (Dir.) 2017:96, 'Översyn av vattenförvaltningens organisation'.

Other Official Documents

Appropriation Directions addressed to the County Administrative Boards, 2018.

Geological Survey of Sweden (SGU), Report 2017:09, 'Grundvattenbildning och grundvattentillgång i Sverige' 2017.

Swedish Agency for Marine and Water Management (SwAM), 'Sötvatten 2017', 2018.

Swedish Agency for Marine and Water Management (SwAM), 'Följder av Weserdomen. Analys av rättsläget med sammanställning av domar', Rapport 2016:30, 2016.

Water District Authorities, 'Redovisning av uppdrag 25 i länsstyrelsernas regleringsbrev för 2017: Översyn av förutsättningarna för en ökad tillämpning av undantag inom vattenförvaltningen', 2018.

Water District Authorities, 'Sammanställning av kommuners och myndigheters rapportering av genomförda åtgärder 2017', 2018.

EU Official Documents

Legislation

Council Directive 75/440/EEC of June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States [1975] OJ L 194/26.

Council Directive 80/778/EEC of 15 July 1980 relating to the quality intended for human consumption [1980] OJ L 229/11.

Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources [1991] OJ L 375/1.

Council Directive 91/271/EEC concerning urban waste-water treatment [1991] OJ L 135/40.

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora [1992] OJ L 206/7.

Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption [1998] OJ L 330/32.

Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment [2001] OJ L 197/30.

Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC [2006] OJ L 64/37.

Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration [2006] OJ L 372/19.

Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks [2007] OJ L 288/27.

Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for Community action in the field of marine environmental policy [2008] OJ L 164/19.

Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) [2010] OJ L 334/17.

Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy [2013] OJ L 226/1.

Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment [2014] OJ L 124/1.

Treaty on the European Union, Consolidated version [2016] OJ C 202/13.

Treaty on the Functioning of the European Union, Consolidated version [2016] OJ C 202/47.

Charter of Fundamental Rights of the European Union, of 18 February 2000, consolidated version [2016] OJ C 202/389.

European Commission Communications

European Commission, 'European Governance – A white paper', COM(2001) 428 final, OJ C 287/1.

European Commission, Infringement procedure against Sweden, Case 2007/2239. Reasoned opinion on January 25 2018 (dnr UD2018/01748/RS).

European Commission, 'The Fitness Check of EU Freshwater Policy', SWD(2012) 393 final, 15.11.2012.

European Commission, 'Commission Staff Working Document on the Implementation of the Water Framework Directive (2000/60/EC). Member State: Sweden', SWD(2012) 379 final, 14.11.2012.

European Commission, 'Proposal for a directive of the European Parliament and of the Council, amending Directives 2000/60/EC and 2008/105/EC as

regards priority substances in the field of water policy', COM(2011) 876 final, 31.1.2012.

European Commission, 'Blueprint to safeguard Europe's Water Resources', COM(2012) 673 final, 14.11.2012.

European Commission, 'The Water Framework Directive and the Floods Directive: Actions towards the 'good status' of EU water and to reduce flood risks', COM(2015) 120 final, 9.3.2015.

European Commission, 'Better regulation for better results - An EU agenda', COM(2015) 215 final, 19.5.2015.

European Commission, 'Granskningen av genomförandet av EU:s miljöpolitik. Landrapport - Sverige', SWE(2017) 56 final, 3.2.2017.

European Commission, 'Notice on access to justice in environmental matters' [2017] OJ C 275/1.

Other EU and international official documents

The international UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ('Aarhus Convention') on access to information, public participation in decision-making and access to justice in environmental matters, Aarhus 25 June 1998.

Council Decision 2005/370/EC of 17 February 2005, [2005] OJ L 124/1.

Common Implementation Strategy for the Water Framework Directive and the Floods Directive, Guidance Document No. 36, 'Exemptions to the Environmental Objectives according to Article 4(7)', 2017.

Case Law

Court of Justice of the European Union

Case 6/64, *Flaminio Costa v. E.N.E.L.* [1964] ECR 585.

Case 126/80, *Maria Salonia v Giorgio Poidomani and Franca Baglieri* [1981] ECR 136.

Case 14/83, *Von Colson und Kamann v. Lans Nordrhein-Westfalen*, [1984] ECR 1891.

Case 152/84, *M.H. Marshall v. Southampton and South-West Hampshire Area Health Authority* [1986] ECR 723.

Case 222/84, *Marguerite Johnston v. Chief Constable* [1986] ECR 1651.

Case 80/86, *Kolpinghuis Nijmegen BV* [1987] ECR 3969.

Joined Cases 97/87, 98/87 and 99/87, *Dow Chemical Ibérica, SA, and others v Commission of the European Communities* [1989] ECR I-3165.

Case C-106/89, *Marleasing SA v La Comercial Internacional de Alimentacion SA* [1990] ECR I-4135.

Joined Cases C-87/90, C-88/90, and C-89/90, *A. Verholen and others v. Sociale Verzekeringsbank Amsterdam* [1991] ECR I-3757.

Case C-361/88, *Commission v Federal Republic of Germany* [1991] ECR I-2567.

Case C-58/89, *Commission v Federal Republic of Germany* [1991] ECR I-4983.

Case C-312/93, *Peterbroeck, Van Campenhout & Cie SCS v. Belgian State* [1995] ECR I-4599.

Joined Cases C-430/93 and C-431/93, *Jeroen van Schijndel and others* [1995] ECR I-4728.

Case C-72/95, *Aannemersbedrijf P.K. Kraaijeveld BV and others v. Gedeputeerde Staten van Zuid-Holland* [1996] ECR I-5403.

Case C-129/96, *Inter-Environnement Wallonie ASBL v. Region Wallonie* [1997] ECR I-7411.

Case C-127/02, *Landelijke Vereniging to Behoud van de Waddenzee* [2004] ECR I-7405.

Case C-201/02, *Delena Wells v Secretary of State for Transport, Local Government and Regions* [2004] ECR I-748.

Case C-371/02, *Björnekulla Fruktindustrier AB v. Procordia Food AB* [2004] ECR I-5791.

Case C-32/05, *Commission v. Grand Duchy of Luxemburg*, [2006] ECR I-11323.

Case C-237/07, *Janecek v Freistaat Bayern* [2008] ECR I-6221.

Case C-263/08, *Djurgården – Lilla Värtans Miljöskyddsförening v Stockhoms kommun genom dess marknämnd* [2009] ECR I-9967.

Case C-50/09, *Commission v Ireland* [2011] ECR I-874.

Case C-240/09, *Lesoochránárske zoskupenie VLK v Ministerstvo zivotného prostredia Slovenskej republiky* [2011] ECR I-1285.

Case C-43/10, *Nomarchiaki Aftodioikisi Aitoloakarnanias and Others v Ipourgios Perivallontor, Chrotaxias kai Dimosion ergon and Others* [2012] EU:C:2012:560.

Case C-525/12, *Commission v. Federal Republic of Germany* [2014] ECLI:EU:C:2014:2202.

Case C-404/13, *ClientEarth v The secretary of State for the Environment, Food and Rural Affairs* [2015] ECLI:EU:C:2014:2382.

Case C-461/13, *Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland* [2015] ECR I-433.

Case C-243/15, *Lesoochránárske zoskupenie VLK v Obvodný úrad Trenčín* [2016] ECR I-838.

Case C-346/14, *Commission v Republic of Austria* [2016] ECR I-322.

Case C-664/15, *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation v Bezirkschauptmannschaft Gmünd* [2017] EU:C:2017:987.

Swedish case law

Swedish Supreme Court, NJA 2004, s. 735.

Land and Environment Court of Appeal (MÖD), Case M-2649-16 (*‘Lasele’*), 2017-04-21.

Land and Environment Court of Appeal (MÖD), Case M 2650-16 (*‘Långbjörn’*), 2017-04-21.

Land and Environment Court of Appeal (MÖD), Case M 5186-17 (*‘Ställopet’*), 2018-06-12.

Literature

Andersson, Ingela, Petersson, Mona and Jarsjö, Jerker, 'Impact of the European Water Framework Directive on local-level water management: Case study Oxunda Catchment, Sweden', *Land Use Policy* 29, 2012, pp. 73-82.

Arnold, Craig A., and Gunderson, Lance H., 'Adaptive Law and Resilience', *Environmental Law Reporter*, 2013, Vol. 43, pp. 10426-10442.

Baaner, Lasse, 'Programmes of Measures under the Water Framework Directive – A Comparative Case Study', *Nordic Environmental Law Journal*, 2011, Vol. 1, pp. 31-52.

Baaner, Lasse, 'The Programme of Measures of the Water Framework Directive – More than just a Formal Compliance Tool?', *Journal for European Environmental and Planning Law*, 2011, Vol. 8, Issue 1, pp. 82-100.

Bengtsson, Bertil, Bjällås, Ulf, Rubenson, Stefan and Strömberg, Rolf, 'Legislative Commentaries to the Environmental Code', Zetee, 2017.

Bernitz, Ulf, *Europarättens genomslag*, Stockholm: Norstedts Juridik, 2011.

Bernitz, Ulf, 'Preliminary References and the Swedish Courts: What Explains the Continuing Restrictive Attitude?' in Rosas, Allan, Wahl, Nils, Lindh, Pernilla, Cardonnel, Pascal, *Constitutionalising the EU Judicial System: Essays in honour of Pernilla Lindh*, Oxford: Hart Publishing, 2012, pp. 120-124.

Bernitz, Ulf and Kjellgren, Anders, *Europarättens grunder*, 5th edn, Stockholm: Norstedts Juridik, 2014.

Bernitz, Ulf, 'Förhandsavgöranden av EU-domstolen. Utvecklingen av svenska domstolars hållning och praxis 2010-2015', Stockholm, *Sieps*, Report 2016:9, 2016.

Bernitz, Ulf, Carlsson, Mia, Heuman, Lars, Leijonhufvud, Madeleine, Magnusson Sjöberg, Cecilia, Seipel, Peter, Warnling-Nerep, Wiweka and Vogel, Hans, *Finna rätt – Juristens källmaterial och arbetsmetoder*, 14th edn, Stockholm: Norstedts Juridik, 2017.

Bjällås, Ulf, Fröberg, Magnus and Sundelin, Arvid, 'Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas och vad får den för betydelse?', Fröberg & Lundholm Advokatbyrå, 2015.

Boeve, Marlon, and van den Broek, G.M. 'The Programmatic Approach; a Flexible and Complex Tool to Achieve Environmental Quality Standards', *Utrecht Law Rev*, 2012, Vol. 8, Issue 3, pp. 74-85.

Bohman, Brita, *Transboundary Law for Social-Ecological Resilience. A study on Eutrophication in the Baltic Sea Area*, Stockholm: Stockholm University, 2017.

Brack, Werner, Dulio, Valeria, Ågerstrand, Marlene, Allan, Ian, Altenburger, Rolf, Brinkmann, Markus, Bunke, Direk, Burgess, Robert, M., Cousins, Ian, Escher, Beate, I., Hernández, Félix, J., Hewitt, L. Mark, Hilscherová, Klára, Hollender, Juliane, Hollert, Henner, Kase, Robert, Klauer, Bernd, Limdim, Claudia, López Herráez, David, Miége, Cécil, Munthe, John, O'Toole, Simon, Posthuma, Leo, Rüdél, Heinz, Schäfer, Ralf, B., Sengl, Manfred, Smedes, Foppe, van de Meent, Dik, van den Brink, Paul, J., van Gils, Jos, van Wezel, Annemarie, P., Vethaak, Dick, A., Vermeirssen, Etienne, van der Ohe, Peter, C. and Vrana, Branislav, 'Towards the review of the European Union Water Framework Directive: Recommendations for more efficient assessment and management of chemical contamination in European surface water resources', *Science of the Total Environment*, 2017, Vol. 576, pp. 720-737.

Carlman, Inga, 'Adaptiv miljöplanering nästa', In: Michanek, Gabriel and Björkman, Ulla (eds.), *Miljörätten i förändring – en antologi*, Rättsfondens Skriftserie 36, Uppsala: Iustus Förlag, 2003, pp. 285-326.

Carpenter, Stephen R., Westley, Frances and Turner, Monica G., 'Surrogates for resilience of social-ecological systems', *Ecosystems*, 2005, Vol. 8, Issue 8, pp. 941-944.

Chaffin, Brian C., Gosnell, Hannah and Cosens, Barbara A., 'A decade of adaptive governance scholarship: synthesis and future directions', *Ecology and Society*, 2014, **19**(3): 56.

Christiernsson, Anna, *Rättens förhållande till komplexa och dynamiska ekosystem – En studie om rättsliga förutsättningar för adaptiv och ekosystembaserad reglering och planering för bevarandet av biologisk mångfald vid jakt*, Luleå: Luleå Tekniska Universitet, 2011.

Christiernsson, Anna, 'Åtgärdsprogrammets funktion vid länsstyrelsernas prövningar och tillsyn av vattenverksamheter', *Nordic Environmental Law Journal*, 2015, Vol. 2, pp. 59-75.

Craig, Robin K, and Ruhl, J.B., 'Designing Administrative Law for Adaptive Management', *Vanderbilt Law Review*, 2014, Vol. 67, Issue 1, pp. 1-87.

Craig, Robin K., Garmestani, Ahjond S., Allen, Craig R., Arnold, Craig A., Birgé, Hannah, DeCaro, Daniel A., Fremier, Alexander K., Gosnell, Hannah and Schlager, Edella. 'Balancing stability and flexibility in adaptive governance: an analysis of tools available in U.S environmental law', *Ecology and Society*, 2017, **22**(2): 3.

Cosens, Barbara A., and Stow, C. A, 'Resilience and Water Governance'. In: Garmestani, Ahjond S., & Allen, Craig R. (eds.), *Social-Ecological Resilience and Law*, New York: Columbia University Press, 2014, pp. 142-175.

Cosens, Barbara, Gunderson, Lance, Allen, Craig, and Harm Benson, Melinda, 'Identifying legal, ecological and governance obstacles, and opportunities for adapting to climate change', *Sustainability*, 2014, Vol. 6, pp. 2338-2356.

Cosens, Barbara, Gunderson, Lance and Chaffin, Brian, 'The adaptive water governance project: Assessing law, resilience and governance in regional socio-ecological water systems facing a changing climate', *Idaho Law Review*, 2014, Vol. 1, pp. 1-27.

Cosens, Barbara A., Craig, Robin K., Hirsch, Shana Lee, Arnold, Craig Anthony, Benson, Melinda H., DeCaro, Daniel A., Garmestani, Ahjond S., Gosnell, Hannah, Ruhl, J.B. and Schlager, Edella, 'The role of law in adaptive governance', *Ecology and Society*, 2017, **22**(1): 30.

Darpö, Jan, 'Tradition och förnyelse på vattenrättens område. Om mötet mellan gamla tillståndsregimer och moderna miljökrav', *Nordic Environmental Law Journal*, 2014, Vol. 2, pp. 101-119.

Darpö, Jan, 'Direkt effekt och processuell autonomi – omigen om Bunge- domen och EU-rättens genomslag', *Svensk Juristtidning*, 2014, Vol. 9, pp. 735-746.

Darpö, Jan, 'Så nära, och ändå så långt bort. En svensk betraktelse av norsk vattenrätt och frågan om tillstånds rättskraft', *WP/Juridiska fakulteten vid Uppsala University*, 2016.

Darpö, Jan, 'On the Bright Side (of the EU's Janus Face). The EU Commission's Notice on Access to Justice in Environmental Matters', *Journal for European Environmental and Planning Law*, 2017, Vol. 14, pp. 373-398.

Derlén, Mattias and Lindholm, Johan, "Festina lente" – europarättens genomslag i svensk rättspraxis 1995-2015', *Europarättslig Tidskrift*, 2015, Vol. 1, pp. 151-177.

Derlén, Mattias and Lindholm, Johan, 'Judiciell aktivism eller prejudikatbildning? – En empirisk granskning av Högsta Domstolen', *Svensk Juristtidning*, 2016, Vol. 2, pp. 143-158.

Derlén Mattias, Lindholm Johan and Naarttijärvi, Markus, *Konstitutionell rätt*, Stockholm: Wolter Klüwer, 2016.

Derlén, Mattias and Lindholm Johan, 'Från Champagne till Ramlösa: EU-domstolens rättspraxis i svenska underinstanser', *Europarättslig Tidskrift*, 2017, Vol. 4, pp. 695-716.

DeCaro, Daniel A., Chaffin, Brian C., Schlager, Edella, Garmestani, Ahjond S. and Ruhl, J. B., 'Legal and institutional foundations of adaptive environmental governance', *Ecology & Society*, 2017, **22**(1): 32.

de la Mare, Thomas and Donnelly, Catherine, 'Preliminary Rulings and EU Legal Integration: Evolution and Stasis', In: Craig, Paul and de Burca, Gráinne (eds), *The evolution of EU law*, 2 edn, Oxford: Oxford University Press, 2011, pp. 363-406.

de Witte, Bruno, 'Direct Effect, Primacy and the Nature of the Legal Order', In Craig, Paul and de Búrca, Gráinne (eds), *The Evolution of EU Law*, 2 edn, Oxford: Oxford University Press, 2011, pp. 323-362.

Dietz, Thomas, Ostrom, Ellinor and Stern, Paul C., 'The struggle to govern the commons', *Science*, 2003, Vol. 302, pp. 1907-1912.

Duit, Andreas, Galaz, Victor and Löf, Annette, 'Fragmenterad förvirring eller kreativ arena? – från hierarkisk till förhandlad styrning i svensk naturvårdspolitik', In: Pierre, Jon and Sundström, Göran (eds.), *Samhällsstyrning i förändring*, Malmö: Liber Förlag, 2009, pp. 125-148.

Ebbesson, Jonas, 'The rule of law in governance of complex socio-ecological changes', *Global Environmental Change*, 2010, Vol. 20, Issue 3, pp. 414-422.

Ebbesson, Jonas and Hey, Ellen, 'Introduction: Where is Law in Social-Ecological Resilience?', *Ecology and Society*, 2013, **18**(3): 25.

Ekelund-Entsson, Martina and Gipperth, Lena, 'Mot samma mål? Implementeringen av EU:s ramdirektiv för vatten i Skandinavien', *Juridiska institutionens skriftserie*, Skrift 6, Handelshögskolan vid Göteborgs universitet, 2010.

Folke, Carl, Hahn, Thomas, Olsson, Per and Norberg, Jon, 'Adaptive Governance of Social-Ecological Systems', *Annual Review of Environmental Resources*, 2005, Vol. 30, p. 441-473.

Folke, Carl, 'Resilience: The emergence of a perspective for social-ecological systems analyses', *Global Environmental Change*, 2006, Vol. 16, pp. 253-267.

Frohlich, Miguel F., Jacobson, Chris, Fidelman, Pedro and Smith, Timothy F., 'The relationship between adaptive management of social-ecological systems and law: a systematic review', *Ecology & Society*, 2018, **23**(2): 23.

Fröberg, Magnus and Bjällås, Ulf, 'Är målen i EU-direktiven som rör vatten genomförda på ett juridiskt korrekt sätt i svensk rätt och kan genomförandet anses funktionellt?', Fröberg & Lundholm Advokatbyrå, 2013.

Fura, Elisabet, 'En offensiv Högsta domstol – en kommentar', *Svensk Juristtidning*, 2014, Vol. 2, pp. 101-104.

Giakoumis, Theodoros and Voulvoulis, Nikolaos, 'The Transition of EU Water Policy Towards the Water Framework Directive's Integrated River Basin Management Paradigm', *Environmental Management*, 2018, <https://doi.org/10.1007/s00267-018-1080-z>.

Gipperth, Lena, *Miljökvalitetsnormer – en rättsvetenskaplig studie i regelteknik för operationalisering av miljömål*, Göteborg: Göteborgs Universitet, 1999.

Gooch, Josefine, *Protecting Ecological Integrity in Transboundary Watercourses. An Integrational Approach to Implementing Environmental Flows*, Faculty of law, Lund: Lund University, 2016.

Green, Olivia O., Garmestani, Ahjond S., van Rijswijk, Helena F. M. W. and Keessen, Andrea M., 'EU Water Governance: Striking the right balance between Regulatory Flexibility and Enforcement?', *Ecology & Society*, 2013, **18**(2): 10.

Green, Olivia O., Garmestani, Ahjond S., Allen, Craig R., Gunderson, Lance H., Ruhl, J.B., Arnold, Craig A., Graham, Nicholas A.J., Cosens, Barbara, Angeler, David G., Chaffin, Brian C. and Holling, C.S., 'Barriers and bridges to the integration of social-ecological resilience and law', *Frontiers in Ecology and the Environment*, 2015, Vol 13, Issue 6, pp. 332-337.

Greener, Ian, 'The Potential of Path Dependence in Political Studies', *Politics*, 2005, Vol. 25, Issue 1, pp. 62-72.

Grimeaud, David, 'The EC Water Framework Directive: An Instrument for Integrating Water Policy', *RECIEL*, 2004, Vol. 13, Issue 1, pp. 27-39.

Grizzetti, Bruna, Lanzanova, Denis, Liqueste, Camino, Reynaud, Arnaud and Cardoso, Ana Cristina, 'Assessing water ecosystem services for water resource management', *Environmental Science & Policy*, 2016, Vol. 61, pp. 194-203.

Groothuijse, Frank and Uylenburg, Rosa, 'Everything according to plan? Achieving environmental quality standards by a programmatic approach' in Peeters, Marjan and Uylenburg, Rosa, *EU Environmental Legislation. Legal Perspectives on Regulatory Strategies*, Cheltenham: Edward Elgar Publishing, 2014, pp. 116-145.

Gräns, Minna, 'Allmänt om användningen av andra vetenskaper inom juridiken', In: Nääv, Maria & Zamboni, Mauro (eds), *Juridisk Metodlära*, 2nd edn, Lund: Studentlitteratur, 2018, pp. 429-442.

Gunderson, Lance H., Carpenter, Steve R., Folke, Carl, Olsson, Per and Peterson, Gerry, 'Water RATs (Resilience, Adaptability and Transformability) in Lake and Wetland Social-Ecological Systems', *Ecology & Society*, 2006, **11**(1): 16.

Gunderson, Lance H, Allen, Craig R. and Holling C. S., *Foundations of Ecological Resilience*, Washington D.C.: Island Press, 2009.

Gunningham, Neil, 'Environmental law, Regulation and Governance: Shifting Architectures', *Journal of Environmental Law*, 2009, Vol. 21, Issue 2, pp. 179-212.

Gupta, Joyeeta, Termeer, Catrien, Klostermann, Judith, Meijerink, Sander, van den Brink, Margo, Jong, Pieter, Nooteboom, Sibout and Bergsma, Emmy, 'The Adaptive Capacity Wheel: a Method to Assess the Inherent Characteristics of Institutions to Enable the Adaptive Capacity of Society', *Environmental Science & Policy*, 2010, Vol. 13, Issue 6, pp. 459-471.

Gustafsson, Jan-Erik, 'Organisationer för samordnad mark- och vattenförvaltning', *Vatten*, 1994, Vol. 2, pp. 161-165.

Hathaway, Oona A., 'Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System', *Yale Law School John M. Olin Center for Studies in Law, Economics, and Public Policy*, Working Paper Series, 2003, pp. 601-633.

Hedelin, Beatrice and Gustafsson, Jan-Erik, 'Swedish Water Management – A comparison of some municipal master plans and the requests of the Water Framework Directive', *Vatten*, 2003, Vol. 2, pp. 75-80.

Hedin, Sigrid, Dubois, Alexandre, Ikonen, Riikka, Lindblom, Patrick, Nilsson, Susanna, Tynkkynen, Veli-Pekka, Viehauser, Michael, Leisk, Ülle and Veidemane, Kristina, *The Water Framework Directive in the Baltic Sea Region Countries – vertical implementation, horizontal integration and transnational cooperation*, Stockholm: Nordregio Report 2007:2, 2007.

Holling, Crawford S., (ed.), *Adaptive environmental assessment and management*, Chichester, New York, Brisbane, Toronto: John Wiley & sons, 1978.

Holzinger, Katharina, Knill, Christoph and Schäfer, Ansgar, 'Rhetoric or Reality? "New Governance" in EU Environmental Policy', *European Law Journal*, 2006, Vol. 12, Issue 3, pp. 403-420.

Hooghe, Liesbet and Marks, Gary, 'Unraveling the Central State, but How? Types of Multi-level Governance', *The American Political Science Review*, 2003, Vol. 97, No. 2, pp. 233-243.

Howarth, William, 'The Progression Towards Ecological Quality Standards', *Journal of Environmental Law*, 2006, Vol. 18, Issue 1, pp. 3-35.

Huitema, Dave, Mostert, Erik, Egas, Wouter, Moellenkamp, Sabine, Pahl-Wostl, Claudia and Yalcin, Resul, 'Adaptive Water Governance: Assessing the Institutional Prescriptions of Adaptive (Co-)Management from Governance Perspective and Defining a Research Agenda', *Ecology and Society*, 2009, **14**(1): 26.

Hydén, Håkan, *Rättssociologi som rättsvetenskap*, Lund: Studentlitteratur, 2002.

Jacobsen, Brian H., Tegner Anker, Helle and Baaner, Lasse, 'Implementing the water framework directive in Denmark – Lessons on agricultural measures from a legal and regulatory perspective', *Land Use Policy*, vol. 67, 2017, pp. 98-106.

Jakobsson, Eva, 'Industrialization of Rivers: A Water System Approach to Hydropower Development', *Knowledge, Technology & Policy*, 2002, Vol. 14, No. 4, pp. 41-56.

Jans, Jan, H., Squintani, Lorenzo, Aragão, A. and Wegener, B. W., "'Gold-plating" of European Environmental Measures?', *Journal for European Environmental & Planning Law*, 2009, Vol. 6, Issue 4, pp. 417-435.

Jans, Jan H. and Vedder, Hans H.B., *European Environmental Law – After Lisbon*, 4th edn, Gröningen: Europa Law Publishing, 2012.

Jareborg, Nils, 'Rättsdogmatik som vetenskap', *Svensk Juristtidning*, 2004, pp. 1-10.

Jóhannsdóttir, Aðalheiður, 'The Value of Proactive Methodological Approaches for Understanding Environmental Law', *Scandinavian Studies in Law*, 2014, Vol. 59, pp. 243-258.

Josefsson, Henrik, 'Achieving Ecological Objectives', *Laws*, Vol. 1, 2012, pp. 39-63.

Josefsson, Henrik, *Good Ecological Status. Advancing the Ecology of Law*, Uppsala: Uppsala University, 2015.

Keessen, Andrea M., Van Kempen, Jasper H, Van Rijswijk, Helena, Robbe, Jan and Backes, Chris W., 'European River Basin Districts: Are They Swimming in the Same Implementation Pool?' *Journal of Environmental Law*, 2010, Vol. 22, No. 2, pp. 197-222.

Kellet, Peter, 'Is the better regulation agenda producing better regulation?', *Environmental Law and Management*, 2008, vol. 20, pp. 221-231.

Keskitalo, Carina and Pettersson, Maria, 'Implementing Multi-level Governance? The Legal Basis and Implementation of the EU Water Framework Directive', *Environmental Policy and Governance*, 2012, Vol. 22, Issue 2, pp. 90-103.

Klamert, Marcus, 'Judicial implementation of directives and anticipatory indirect effect: Connecting the dots', *Common Market Law Review*, 2006, Vol. 43, Issue 5, pp. 1251-1276.

Klamert, Marcus, *The principle of loyalty in EU law*, Oxford: Oxford University Press, 2014.

Kleineman, 'Rättsdogmatisk metod', In: Nääv, Maria & Zamboni, Mauro (eds.), *Juridisk Metodlära*, 2nd edn, Lund: Studentlitteratur, 2018, pp. 21-46.

Kochskämper, Elisa, Challies, Edward, Newig, Jens and Jager, Nicolas W., 'Participation for Effective Environmental Governance: Evidence From Water Framework Directive Implementation in Germany, Spain and the United Kingdom', *Journal of Environmental Management*, 2016, Vol. 181, pp. 737-748.

Korkea-aho, Emilia, 'Watering Down the Court of Justice? The Dynamics between Network Implementation and Article 258 TFEU Litigation', *European Law Journal*, 2014, Vol. 20, Issue 5, pp. 649-666.

Langlet, David and Mahmoudi, Said, *EU:s miljö rätt*, 3d edn, Stockholm: Norstedts Juridik, 2011.

Lee, Maria, 'Law and Governance of Water Protection Policy', In: Scott, Joanne, *Environmental Protection: European Law and Governance*, Oxford: Oxford University Press, 2009, pp. 27-55.

Lehrberg, Bert, *Praktisk juridisk metod*, 9th edn, Uppsala: Iusté Förlag, 2016.

Lindqvist, Ingela, 'Privilegiebrev och urminnes hävd – Vilken ställning har de enligt miljöbalken?', *Nordic Environmental Law Journal*, 2013, Vol. 1, pp. 39-50.

Lindqvist, Ingela, 'Den småskaliga vattenkraftens rättsliga förutsättningar i Sverige', Working Paper 2013:1, Uppsala University, Faculty of Law, 2013.

Lundin, Olle, *Maktutövning under lagarna? En ESO-rapport om trotsiga kommuner*, Regeringskansliet, 2015.

Lundius, Marianne, 'The Changing Role of National Courts', *Europarättslig Tidskrift*, 2015, Vol. 4, pp. 761-768.

Lundqvist, Lennart J., 'Integrating Swedish Water Resource Management: a multi-level governance trilemma', *Local Environment*, 2004, Vol. 9, No. 5, pp. 413-424.

Mahony, James and Thelen, Kathleen, 'A Theory of Gradual Institutional Change', In: Mahony, James and Thelen, Kathleen (eds.), *Explaining Institutional Change. Ambiguity, Agency, and Power*, Cambridge: Cambridge University Press, 2010, pp. 1-37.

Mattson, Dag, 'Domarnas makt – domarrollen i ett nytt rättsligt landskap', *Svensk Juristtidning*, 2014, Vol. 8, pp. 587-596.

Mayr, Stefan, 'Putting a Leash on the Court of Justice? Preconceptions in National Methodology v *Effet Utile* as a Meta-Rule', *European Journal of Legal Studies*, 2012/13, Vol. 5, No. 2, pp. 8-21.

Mayoral, Juan A. and Wind, Marlene, 'Introduction. National courts vis-à-vis EU law: new issues, theories and methods', In: Witte, Bruno de, Mayoral, Juan A., Jaremba, Urszula, Wind, Marlene and Podstawa, Karolina, *National Courts and EU law: New issues, theories and methods*, Cheltenham: Edward Elgar Publishing, 2016, pp. 1-11.

McDonald, Jan and Styles, Megan C., 'Legal Strategies for adaptive Management under Climate Change', *Journal of Environmental Law*, 2014, Vol. 26, pp. 25-53.

Meadowcroft, James, 'Who is in charge here? Governance for sustainable development in a complex world', *Journal of Environmental Policy and Planning*, 2007, Vol. 9, Issue 3-4, pp. 299-314.

Michanek, Gabriel, *Den svenska miljö rättens uppbyggnad*, Uppsala: Iustus förlag, 1985.

Michanek, Gabriel, 'Tillstånd får inte ges in aktuell ytvattenstatus försämrats eller uppnåendet av god ytvattenstatus äventyras – analys av EU-domstolens förhandsavgörande C-461/13', *JP Miljönet*, 2015.

Michanek, Gabriel, Darpö, Jan, Jagers, Sverker, Sundblad, Eva-Lotta, Söderholm, Patrik and Gipperth, Lena, *Genomförande av det svenska systemet för miljö kvalitetsnormer, lärdomar från forskningsprogrammet SPEQS*, Havsmiljöinstitutet och Naturvårdsverket, 2016.

Munck, Johan, 'Rättskällor förr och nu', *Juridisk Publikation*, Jubileumsnummer, 2014, pp. 199-208.

Neergaard, Ulla and Nielsen, Ruth, 'Where Did the Spirit and Its Friends go? On the European Legal Method(s) and the Interpretational Style of the Court of Justice', In: Neergaard, Ulla, Nielsen, Ruth and Roseberry, Linn (eds.) *European Legal method - Paradoxes and Revitalisation*, Copenhagen, DJÖF Publishing, 2011, pp. 95-184.

Neergaard, Ulla, Nielsen, Ruth and Roseberry, Linn (eds.), *European Legal Method*, Copenhagen: DJÖF Publishing, 2011.

Nergelius, Joakim, 'Judicial Review in Swedish Law – A Critical Analysis', *Nordic Journal of Human Rights*, 2009, Vol. 27, Issue 2, pp. 142-160.

Nergelius, Joakim, *Svensk statsrätt*, 3 ed, Lund: Studentlitteratur AB, 2014.

Neuhaus, Paul Heinrich, 'Legal Certainty versus Equity in the Conflict of Laws', *Law and contemporary Problems*, Vol. 28, 1963, pp. 795-807.

Nilsson, Annika K. and Bohman, Brita, 'Legal prerequisites for ecosystem-based management in the Baltic Sea area: The example of eutrophication', *Ambio*, 2015, Vol. 44, pp. 370-380.

North, Douglass C., *Institutions, institutional change and economic performance*, St Louis: Washington University, 1990.

Nääv, Maria & Zamboni, Mauro (eds.), *Juridisk Metodlära*, 2nd edn, Lund: Studentlitteratur, 2018.

Olsen, Lena, 'Rättsvetenskapliga perspektiv', *Svensk Juristtidning*, 2004, pp. 105-145.

Olsen Lundh, Christina, 'Tvenne gånger tvenne ruttna gärdesgårdar – Om urminnes hävd och vattenkraft', *Nordic Environmental Law Journal*, 2013, Vol. 2, pp. 85-108.

Olsen Lundh, Christina, 'Four points on point four: Implementing Environmental Quality Standards in Sweden', *Scandinavian Studies in Law*, 2014, Vol. 59, Environmental law, pp. 319-349.

Olsen Lundh, Christina, 'Miljökvalitetskrav eller miljökvalitetsnormer? Reflektioner med anledning av en rapport om Sveriges implementering av ramvattendirektivet', *Nordic Environmental Law Journal*, 2014, Vol. 2, pp. 61-94.

Olsen Lundh, Christina, *Panta rei – om miljökvalitetskrav och miljökvalitetsnormer*, Göteborg: Havsmiljöinstitutet & Göteborgs Universitet, 2016.

Olsen Lundh, Christina, 'Norm är norm – om flytande normprövning och implementeringen av ramdirektivet för vatten', *Nordic Environmental Law Journal*, 2017, Vol. 1, pp. 57-78.

Ostrom, Elinor, *Governing the commons – the evolution of institutions for collective action*, Cambridge: Cambridge University Press, 1990.

Ostrom, Elinor, *Understanding Institutional Diversity*, Princeton & Oxford: Princeton University Press, 2005.

Ostrom, Elinor, 'The Challenge of Common-Pool Resources', *Environment: Science and Policy for Sustainable Development*, 2008, Vol. 50, Issue, pp. 8-21.

Ostrom, Elinor, 'A General Framework for Analyzing Sustainability of Social-Ecological Systems', *Science*, 2009, Vol. 325, Issue 5939, pp. 419-422.

Pahl-Wostl, Claudia, Lebel, Louis, Kneiper, Christian and Nikitina, Elena, 'From applying panaceas to mastering complexity: Toward adaptive water governance in river basins', *Environmental science and policy*, 2012, Vol. 23, pp. 24-34.

Paloniitty, Tiina, 'The Weser Case: Case C-461/13 *Bund v Germany*', *Journal of Environmental Law*, 2016, Vol. 28, Issue 1, pp. 151-158.

Peczenik, Alexander, *On Law and Reason*, Dordrecht: Springer Science + Business Media B.V, 2008.

Pettersson, Maria, *Renewable Energy Development and the Function of Law – A Comparative Study of Legal Rules Related to the Planning, Installation and Operation of Windmills*, Luleå: Luleå University of Technology, 2008.

Pettersson, Maria, 'Path Dependence in the Legal System – Implications for the Development of Wind Power', *Nordic Environmental Law Journal*, 2011, Vol. 2, pp. 35-51.

Pettersson, Maria and Goytia, Susana, 'The Role of the Precautionary Principle and Property Rights in the Governance of Natural Resources in Sweden', *Nordic Environmental Law Journal*, 2016, Vol. 1, 107-121.

Posner, Richard, *Frontiers of Legal Theory*, Harvard University Press, 2001.

Prechal, Sasha, *Directives in EC Law*, Oxford: Oxford University Press, 2005.

Reichel, Jane, *God förvaltning i EU och i Sverige*, Stockholm: Jure Förlag AB, 2006.

Reichel, Jane, *Ansvarsutkrävande – svensk förvaltning i EU*, Stockholm: Jure Förlag AB, 2010.

Reichel, Jane, 'European Legal Method from a Swedish Perspective – Rights, Compensation and the Role of the Courts', In: Neergaard, Ulla, Nielsen, Ruth and Roseberry, Linn (eds.) *European Legal method - Paradoxes and Revitalisation*, Copenhagen: DJÖF Publishing, 2011, pp. 245-278.

Reichel, Jane. 'EU-rättslig metod', In: Nääv, Maria & Zamboni, Mauro (eds.), *Juridisk Metodlära*, 2nd edn, Lund: Studentlitteratur, 2018, pp. 109-142.

Rheinstein, Max, *Max Weber on law in economy and society*, Harvard: Harvard University Press, 1954.

Sadl, Urska, 'The role of *effet utile* in preserving the continuity and authority of European Union law: Evidence from the citation web of the pre-accession case law of the Court of Justice of the EU', *European Journal of Legal Studies*, 2015, Vol. 8, No. 1, pp. 18-45.

Sandgren, 'Om teoribildning och rättsvetenskap', *Juridisk Tidskrift*, 2004-05, Issue 2, pp. 297-333.

Sandgren, Claes, 'Framtidens avhandlingar i rättsvetenskap', 2007, In: Sandgren, Claes, *Vad är rättsvetenskap?*, Stockholm: Jure Förlag, 2009, pp. 258-278.

Sandgren, Claes, 'Rättsvetenskap och samhällsnytta', In: Norée, Anna, Durling Sitte, Catharina, Wenneberg, Susanne & Zila, Josef, *Festskrift till Madeleine Leijonhufvud*, Norstedts Juridik AB, Stockholm, 2007, pp. 1-21.

Sandgren, 'Är rättsdogmatiken rättsdogmatisk?', *Tidsskrift for Rettsvitenskap*, 2005, Vol. 118, Issue 4-5, pp. 648-656.

Scott, Colin, 'Governing Without Law or Governing Without Government? New-ish Governance and the Legitimacy of the EU', *European Law Journal*, 2009, Vol. 15, Issue 2, pp. 160-173.

Scott, Joanne & Trubek, David M., 'Mind the Gap: Law and New Approaches to Governance in the European Union', *European Law Journal*, 2002, Vol. 8, Issue 1, pp. 1-18.

Sevä, Mikael & Sandström, Annica, 'Decisions on Street Level: Assessing and Explaining the Implementation of the European Water Framework Directive in Sweden', *Environmental Policy and Governance*, 2017, Vol. 27, Issue 1, pp. 74-89.

Solheim, Anne, L., Austnes, Kari, Peterlin, Monika, Kodes, Vít, Filippi, Renata, Semerádová, Silvie, Prchalová, Hana, Künitzer, Anita, Spiteri, Claudette, Prins, Theo and Collins, Robert, P., *Ecological and chemical status and pressures in European waters. Thematic assessment for EEA Water 2012 Report*, European Topic Centre for Inland, Coastal and Marine Waters, Report 1/2012.

Spangenberg, Carl, 'De Bärande Balkarna', In: Gipperth, Lena and Zetterberg, Charlotta (eds), *Miljörättsliga Perspektiv och Tankevändor, Vänbok till Jan Darpö & Gabriel Michanek*, Uppsala: Iustus förlag, 2013.

Strömberg, Rolf, 'Urminnes hävd och vattenrätten – några synpunkter', *Nordic Environmental Law Journal*, 2014, Vol. 2, pp. 95-100.

Strömberg, Rolf, 'HD och EU-forin – vart är vi på väg?', *Svensk Juristtidning*, 2014, Vol. 5-6, pp. 487-495.

Strömholm, *Rätt, rättskällor och rättstillämpning – en lärobok i allmän rättslära*, 5th edn, Stockholm: Norstedts Juridik, 1996.

Svensson, 'De lega interpretata – om behovet av metodologisk reflektion', *Juridisk Publikation*, Jubileumsnummer, 2014, pp. 211-226.

Söderberg, Charlotta, 'Complex governance structures and incoherent policies: Implementing the EU water framework directive in Sweden', *Journal of Environmental Management*, 2016, Vol. 183, pp. 90-97.

Tegner Anker, Helle, de Graaf, Kars, Purdy, Ray and Squintani, Lorenzo, 'Coping with EU Environmental Legislation – Transposition Principles and Practices', *Journal of Environmental Law*, 2015, 27, pp. 17-44.

Teubner, Gunther, 'Substantive and Reflexive Elements in Modern Law', *Law and Society Review*, 1983, Vol. 17, Issue 2, pp. 239-286.

Voulvoulis, Nikolaos, Arpon, Karl D. and Giakoumis, Theodoros, 'The EU Water Framework Directive: From great expectations to problems with implementation', *Science of the Total Environment*, 2017, Vol. 575, pp. 358-366.

van Holten, Saskia and van Rijswijk, Marleen, 'The governance approach in European Union Environmental Directives and its consequences for flexibility, effectiveness and legitimacy', In: Peeters, Marjan and Uylenburg, Rosa, *EU Environmental Legislation. Legal Perspectives on Regulatory Strategies*, Cheltenham: Edgar Elgar Publishing, 2014, pp. 13-47.

van Kempen, Jasper, 'Countering the Obscurity of Obligations in European Environmental Law: An Analysis of Article 4 of the European Water Framework Directive', *Journal of Environmental Law*, 2012, Volume 24, Issue 3, pp. 499-533.

van Oosten, Cora, Uzamukunda, Assumpta and Runhaar, Hens, 'Strategies for achieving environmental policy integration at the landscape level. A framework illustrated with an analysis of landscape governance in Rwanda', *Environmental Science and Policy*, 2018, Vol. 83, pp. 63-70.

van Rijswijk, Marleen, Edelenbos, Jurian, Hellegers, Petra, Kok, Matthijs and Kuks, Stefan, 'Ten building blocks for sustainable water governance: an integrated method to assess the governance of water', *Water International*, 2014, Vol 39, Issue 5, pp. 725-742.

van Rijswijk, Marleen and Backes, Chris, 'Ground Breaking Landmark Case on Environmental Quality Standards? The Consequences of the CJEU "Weser-judgement" (C-461/13) for Water Policy and Law and Quality Standards in EU Environmental Law', *Journal for European Environmental and Planning Law*, 2015, Vol. 12, pp. 363-377.

von Homeyer, Ingmar, 'The Evolution of Environmental Governance', In: Scott, Joanne, *Environmental Protection: European Law and Governance*, Oxford: Oxford University Press, 2009, pp. 1-26.

Walker, Brian H. and Salt, David A., *Resilience Thinking: Sustaining Ecosystems and People in A Changing World*, Washington: Island Press, 2006.

Wersäll, Fredrik, 'En offensiv Högsta domstol. Några reflektioner kring HD:s rättsbildning', *Svensk Juristtidning*, 2014, Vol. 1, pp. 1-8.

Westerlund, *En hållbar rättsordning – rättsvetenskapliga paradigmer och tankevändor*, Uppsala: Iustus Förlag, 1997.

Westerlund, *Miljörättsliga grundfrågor 2.0*, Uppsala: Åmyra Förlag, 2003.

Westerlund, Staffan, *Fundamentals of Environmental Law Methodology*, Uppsala: Uppsala University, 2007.

Wiklund, Ola, 'Om Högsta domstolens rättsskapande verksamhet – löper domstolen amok?', *Svensk Juristtidning*, 2014, Vol. 4, pp. 335-347.

Wind, Marlene, 'The Nordics, the EU and the Reluctance Towards Supranational Judicial Review', *Journal of Common Market Studies*, 2010, Vol. 48, Issue 4, pp. 1039-1063.

Zamboni, Mauro, *Law and Politics. A dilemma for contemporary legal theory*, Berlin, Heidelberg: Springer-Verlag, 2008.

Internet

www.speqs.se (18-04-30)

<http://www.vattenmyndigheterna.se/Sv/publikationer/Pages/default.aspx?ptype=Beslutsdokument&year=2016>. (18-06-30).

http://ec.europa.eu/environment/water/water-framework/objectives/implementation_en.htm (18-10-26).

http://deltongo.userpage.fu-berlin.de/documents/2016-11-18_00_WRRL-Forum_Vortrag-Rodriguez-Romero-The-2019-review-of-the-Water-Framework-Directive.pdf (18-10-26).

Paper I

WHAT ABOUT STATE IMPLEMENTATION?

New Governance and the case of the European Union Water Framework Directive in Sweden

Johanna Söderasp*

1. INTRODUCTION

The debate regarding EU Member State implementation deficits¹ within EU environmental law and policy has been active since the early 1990s, yet the ‘gap’ between policy goals and environmental outcomes remains alarming.² For example, in the case of the EU Water Framework Directive (WFD) since 2000,³ implementation has been far from successful within EU Member States. This is illustrated by poor prognoses for achieving the WFD’s rather ambitious environmental objectives which are aimed at the ultimate goal of ‘good water status’ for all water bodies in Europe by the end of 2015.⁴ The EU Commission estimated in 2012 that only 53% of surface waters within the EU will have

* Doctoral Candidate in Environmental Law, Luleå University of Technology, Sweden. The author would like to thank Christina Allard and Carina Lundmark for valuable comments on the manuscript. The article has undergone peer review.

¹ The term ‘implementation’ is used throughout this article in the sense of ‘transposition, application and enforcement’, see S. Prechal, *Directives in EC Law* (Oxford University Press, 2005), pp. 5–6. The focus in the paper is therefore not solely on transposition, but rather on application and enforcement. For an analysis of the legal obligations in Member State transposition of EU Directives, see M. Bergström, *Det nationella genomförandetrymmet – Reella valmöjligheter under påföljdsansvar eller rutinmässig sanktionering av redan fattade beslut?*, ERT, 2008, pp. 995–1017.

² A. Jordan, *The Implementation of EU Environmental Policy: A problem without a Political Solution?* (1999), *Environment and Planning Government and Policy*, 17 (1), pp. 69–90; Decision No 1386/2013/EU, *The 7th Environment Action Programme to 2020 – Living well, within the limits of our planet*.

³ Dir 2000/60/EC.

⁴ Art. 4 and Annex V, Dir 2000/60/EC. ‘Good water status’ encompasses the environmental objectives of good ecological and chemical status of surface waters and good quantitative and

reached good water status or potential therein within the original time frame.⁵ Essential reasons for such poor prognosis are an absence of robust legal frameworks and appropriate water administrations in the majority of EU Member States.⁶ In Sweden, for example, the responsible authorities declare that a good water status will not be attained in a majority of the countries water bodies by the end of 2015.⁷

In this article I argue for a renaissance in the fundamental role of legal perspectives within modern and complex management systems. The Swedish implementation of the WFD is used as an example to discuss the need for clear legal frameworks in EU Member States, when implementing framework Directives and other vague and flexible EU legislation. The Swedish case is interesting since it exhibits difficulties in WFD implementation within an EU Member State, known to be one of the leading countries in the field of environmental law and policy. The analysis is founded on applicable EU and Swedish sources of law, official documents and reports regarding the WFD and its implementation in Sweden, alongside a review of relevant legal and political science literature. Most scholars argue from preconceived stances whereas here I combine valuable insights from political science literature on new governance, with a more traditional legal perspective on modern governance solutions.

Generally it is maintained that the modern water management system prescribed in the WFD coincides with a shift in EU environmental law and policy from 'government' to 'new governance.' One way of explaining the gap between policy goals and environmental performance is that an increased use of new governance approaches within the EU has diminished legal perspectives. Such new governance approaches include the favouring of open and flexible framework legislation over detailed Acts, and the prioritising of consideration of national diversities under the flag of subsidiarity.⁸ At the same time, prerequisites for EU Member States seem to have changed due to the fact that national implementation of EU legal Acts has become increasingly important. Traditional concepts of law and law-making within the EU have been displaced with-

chemical status for groundwater, however there are several exceptions and derogations contained within Article 4, such as extended deadlines until 2027 for achieving the ultimate goal of good water status.

⁵ COM 670 final, 2012, pp. 6–8. The prognosis still stands according to the latest EU commission report regarding the EU Water Framework Directive, see COM 120 final, 2015, pp. 2–3.

⁶ COM 670 final, 2012, pp. 6–8.

⁷ Survey of the official documents of the five Water Authorities, distributed for the purpose of public consultation on the proposals for the next water management cycle, reaching from 2015–2021, available at www.vattenmyndigheterna.se (2015-03-04).

⁸ I. von Homeyer, *The Evolution of Environmental Governance*, p. 20 and M. Lee, *Law and Governance of Water Protection Policy*, p. 141, both in J. Scott (ed.), *Environmental Protection: European Law and Governance* (Oxford University Press, 2009).

out concrete alternatives serving as replacements, causing a ‘re-nationalisation’⁹ of legal measures on the EU Member State level.¹⁰ This re-nationalisation of legal measures must be taken seriously by EU Member States so that vagueness and uncertainties within EU legislation is not transferred to national legal systems and left to administrative authorities to sort out.¹¹

2. CHANGING GOVERNING STRUCTURE IN THE EUROPEAN UNION

2.1 The general trend

The governing structure of Western States has changed over recent decades and in related literature many scholars have described the changing role of the State and central Government in terms of a shift ‘from government to governance.’¹² In legal scholarship, and in particular in the context of EU governance, the expression of ‘new governance’ is commonly used as a summarising concept of these changes.¹³ The term ‘government’ is, traditionally, strongly associated with notions such as a strong central State and various components including hierarchy, formality, hard-and-fast rules, top-down control and legal enforcement.¹⁴ ‘Governance’ ideas, on the other hand, such as new governance and multi-level governance, instead imply a lesser degree of central control and systems-steering driven by visions, imprecise objectives and framework legislation. Another feature of governance is an increasing decentralisation and a shifting of the delegation of formal power and responsibility from central Government to

⁹ K. Holzinger, C. Knill and A. Schäfer, *Rhetoric or Reality? ‘New Governance’ in EU Environmental Policy*, European Law Journal, 2006, 12 (3), p. 409.

¹⁰ C. Scott, *Governing Without Law or Governing Without Government? New-ish Governance and the Legitimacy of the EU*, European Law Journal, 2009, 15 (2), pp. 161–162 and 169–170; J. Scott and D. M. Trubek, *Mind the Gap: Law and New Approaches to Governance in the European Union*, European Law Journal, 2002, 8 (1), pp. 1–18.

¹¹ For a summary of the Swedish Council of Legislation’s view on implementation, see O. Henkow, *Genomförande av Direktiv från EU – Hur bör “klara, precisa och ovillkorliga” bestämmelser i ett direktiv från EU genomföras i svensk rätt då bestämmelserna i vissa fall är oklara, oprecisa och tvetydiga?*, ERT, 2010, pp. 456–459.

¹² See eg J. Rosenau and E-O Czempiel (eds.) *Governance without Government: Order and Change in World Politics* (Cambridge, 1992); R.A.W. Rhodes, *The New Governance: Governing without government*, Political Studies, 1996, XLIV, 652–677; J. Pierre and G. Sundström (eds), *Samhällsstyrning i förändring* (Liber, 2009); R. Bellamy and A. Palumbo, *From Government to Governance* (Ashgate Publishing Ltd, 2010).

¹³ See eg n. 10 and G. de Búrca and J. Scott, *Law and New Governance in the EU and the US*, (Hart, 2006); K. Sideri, *Law’s Practical Wisdom. The Theory and Practice of Law Making in New Governance Structures in the European Union* (Ashgate Publishing Ltd, 2007).

¹⁴ R.A.W. Rhodes, n. 12, pp. 652–677; P. Björk, G. Bostedt, H. Johansson, *Governance* (Studentlitteratur, 2003), p. 22.

lower-level authorities and non-governmental actors.¹⁵ The differences between the two governance models have manifested as a shift in governmental steering from a traditional, rule-oriented hierarchical structure to a goal-oriented management culture involving more actors than would a pivotal, central Government. As presented below, these changes are currently prominent in EU law in general and in environmental management in particular.

In an EU context new governance has been described as ‘governing without law,’ where informal instruments (soft-law) and administrative networks are used in lieu of formal rules and legal enforcement.¹⁶ When it comes to analysing the instrumental use of law and methods of law-making within the history of the EU, a dividing line can be drawn between two major periods of development. The first period, from approximately 1968 to 1995, is strongly associated with the use of law as a means for Member State integration. A second period, from approximately 1995 to the present day, is one in which different modes of governance have emerged and the role of law has been diminished.¹⁷ The most important agenda during the first development period was the establishment of the internal EU market, with Member State harmonisation as the strong guiding principle. The establishment of the internal EU market was a regulatory project of enormous proportions, since ‘...there was no market without EU law and, at the same time, the most visible representation of this European market was a set of laws.’¹⁸ In this first period, use of the classic ‘Community Method’ as a means of law-making and integration prevailed. The main features of the Community Method within the EU are: *firstly*, that the EU Commission has monopoly on initiating EU legislation; *secondly*, that decisions by the European Council are taken by qualified majority; *thirdly*, that the European Parliament plays an active role in decision-making and; *fourthly*, that the Court of Justice of the European Union (CJEU) is the authoritative interpreter of EU law, thus guaranteeing a uniform interpretation of relevant key concepts.¹⁹

The focus on law as the force of integration, as well as an ambition to use legal means so as to create full harmonisation of the internal market, strongly represents the government perspective during this first period in the history of the EU. In contrast, new governance, as part of the second period, has been defined as ‘any major departure from the classic Community Method’ of law-

¹⁵ P. Hall and K. Löfgren, *Politisk styrning i praktiken*, (Liber, 2006), p. 207; J. Scott and D. M. Trubek, n. 10, pp. 5–6.

¹⁶ C. Scott, n. 10, pp. 169–170.

¹⁷ Ibid. 161–162 and 169–170; c.f. R. van Gestel and H-W. Micklitz, ‘Revitalising Doctrinal Legal Research in Europe: What About Methodology?’ In: U. Neergaard, R. Nielsen, L. Roseberry (eds), *European Legal Method – Paradoxes and Revitalisation* (DJOF, 2011), p. 38.

¹⁸ R. van Gestel and H-W. Micklitz, n. 17, p. 42.

¹⁹ COM (2001) 428 final, p. 8.

making.²⁰ The ultimate evidence of a governance shift within the EU came with the EU Commission's *White Paper on Governance* in 2002.²¹ The development towards new governance was propelled, *inter alia*, by a lack of overview and capacity for legal control of the many laws adopted during the first stage of EU development, coupled with the increasing complexity of EU law and policy. In essence, the EU Commission needed new methods with which to enforce and control EU law. At the same time, the principle of subsidiarity within the EU increased a need for participatory approaches and a widened dialogue involving both national administrative authorities and local stakeholders.²²

With the White Paper followed a 'politicization of law-making',²³ in which traditional legislation received a more obscure role in favour of differing methods of new governance. Such new governance methods have included co-regulation and self-regulation, soft law in lieu of hard law, framework legislation in lieu of detailed Acts, and the emergence of a more integrated administrative structure within the EU.²⁴ This new administrative structure is based primarily on informal co-operation between EU authorities and national administrative authorities, whereby EU authorities steer Member State behaviour through a network approach rather than through law and legal means.²⁵

2.2 Towards 'New Governance' in EU Environmental Law and Policy

The shift towards new governance occurred even earlier with respect to environmental law and policy, where it can be seen from the mid-1980s onward. In this policy field the shift was impelled against the backdrop of an increased realisation that effective management of complex environmental problems, such as sustainable use of water resources, requires involvement from and collaboration amongst many different actors.²⁶ A formalisation of the changes within environmental law and policy came with the adoption of the EU's Fifth Environmental Action Programme in 1993,²⁷ declared in the wake of the United Nations' Conference on Environment and Development held in Rio de Janeiro in 1992. The EU programme was entitled 'Towards Sustainability' and, in

²⁰ J. Scott and D. M. Trubek, n. 10, p. 1.

²¹ COM (2001) 428 final.

²² J. Scott and D. M. Trubek, n. 10, pp. 6–8; J. Reichel, *God förvaltning i EU och Sverige* (Jure, 2006), p. 564.

²³ R. van Gestel and H-W. Micklitz, n. 17, p. 46.

²⁴ J. Scott and D. M. Trubek, n. 10, p. 2; C. Scott, n. 10, p. 167.

²⁵ See *infra* section 3.1 where the strong influence of the informal CIS network elaborated within the WFD is discussed.

²⁶ L. Hooge and G. Marks, *Types of multi-level governance*, European Integration online Papers, 2001, 5 (11), p. 4.

²⁷ Official Journal of the European Communities, C 138, 17.05.1993.

comparison with earlier action programmes, it was a much more strategic policy instrument containing long-term goals, in lieu of short-term concrete measures.²⁸ The programme accentuated joint responsibility amongst all sectors of society and opened the door for the use of new and broader instruments. Such instruments included public information and education and the use of 'bottom-up' strategies rather than the previous 'top-down' legislative approach.²⁹

Political scientist Ingmar von Homeyer describes the evolution of EU environmental law and policy through identifying and explaining four different regimes: *the Environment regime (1972–1982)*, *the Internal market regime (1982–1992)*, *the Integration regime (1992–1998)*, and *the Sustainable development regime (1998–present)*.³⁰ Similar to the first of the two EU development periods presented above, the first two environmental regimes are associated with harmonisation and primarily with legally binding, top-down regulation alongside strong legal enforcement action on the part of the EU Commission. Characteristic of the two latter regimes has, instead, been a focus on economic efficiency, transparency and environmental effectiveness; all of which are features closely connected to governance ideas. The legislation of the integration regime, for example, contained a certain degree of flexibility and decentralisation, often at the cost of Member State harmonisation. Another significant feature of the integration regime was its shift towards 'more inclusive, networked governance'.³¹ In sum, the period from 1992 to the present day emphasises a decentralised governance model and decision-making that reflects broader participation, including stakeholders and experts, so as to create more flexible and locally-adapted management solutions.

Framework Directives, such as the WFD, are the most characteristic regulatory instrument of both the integration regime and the latter sustainable development regime. Main features of these Directives include vague objectives and long-term environmental targets, a broad scope and focus on the environment in the large. Other significant features of these framework Directives is a focus on procedure and flexibility in implementation, leaving much decision-making and responsibility to EU Member States.³² In the context of legislative measures the use of new governance approaches have altered roles within the EU and shifted the balance between EU authorities and the Member States, enabling EU Member States to 'exercise their own command capacity'.³³ The hard rules,

²⁸ J. H. Jans and H. H. B. Vedder, *European Environmental Law*, 4th edition (Europa Law Publishing, 2012), p. 340.

²⁹ Ibid. 340 and 407–408; Official Journal of the European Communities, C 138, 17.05.1993, p. 17.

³⁰ I. von Homeyer, n. 8, pp. 1–26.

³¹ Ibid. 15.

³² Ibid. 16–18.

³³ M. Lee, n. 8, p. 41.

previously provided by the EU through legally-binding, top-down regulation focused on specific environmental problems during the first two regimes, must now be provided through national legislation.³⁴ This re-nationalisation of legal measures needs to be taken seriously by EU Member States, however, in practise this has not always occurred.³⁵

3. NEW GOVERNANCE AND THE EU WATER FRAMEWORK DIRECTIVE

3.1 The purpose and goals of the WFD

The WFD represents an illustrative example of new governance approaches within EU environmental law and policy. The overall ambition of the Directive is to promote sustainable water use based on long-term protection of water resources.³⁶ Constituting a framework Directive under Article 192 of the Treaty on Function of the European Union (TFEU), the WFD leaves considerable room for flexibility and national discretion in implementation. As long as Member States uphold prescribed deadlines and meet the overall environmental objectives headed towards good water status, the Directive is considered to be adhered to.³⁷ The key instruments prescribed in the WFD in order to fulfill environmental objectives are ‘programmes of measures’³⁸ and ‘river basin management plans’³⁹. A programme of measures specifies operative measures in order to fulfill environmental objectives, whilst a management plan is intended to provide an overview of current water status and provide focus for future work in a particular ‘river basin district’. River basin districts are identified in the WFD as the main units for the management of river basins.⁴⁰

The new governance ideas of the WFD have challenged traditional water management in a number of ways in most EU Member States, including Sweden. *Firstly*, the division into river basin districts and an ‘integrated river basin management approach’⁴¹ means that related administrative arrangements must be based on waters’ natural boundaries, i.e. ecosystem-based. Traditional divi-

³⁴ L. Krämer, *The Environment and the Ten Commandments*, Journal of Environmental Law, 2008, 20:1, p. 6.

³⁵ COM 670 final, 2012, pp. 6–8; see also Case 32/05, Commission v Luxembourg [2006], ECR I-11323, in which Luxembourg was condemned for not transposing WFD environmental objectives into binding national law correctly and in due time.

³⁶ Art. 1.b, Dir 2000/60/EC.

³⁷ M. Lee, n. 8, pp. 27–35.

³⁸ Art. 11, Dir 2000/60/EC.

³⁹ Art. 13, Dir 2000/60/EC.

⁴⁰ Art. 2.15, Dir 2000/60/EC.

⁴¹ Art 3.1, Dir 2000/60/EG.

sions, built for example on administrative or geographical boundaries such as counties and municipalities, are hence no longer acceptable. *Secondly*, the WFD prescribes an adaptive management system, to be carried out in six-year cycles.⁴² Adaptive management requires a process that is open to ecosystem changes due to the fact that knowledge of the complex and dynamic nature of ecosystems is constantly growing. The key components in adaptive management are, thus, to plan, follow up and adjust management strategies and operative measures in accordance with new [scientific] knowledge, discoveries and environmental conditions.⁴³ The key elements of adaptive management in the WFD are to: a) characterise current water status, b) define and establish proper environmental objectives, programmes of measures and river basin management plans, c) monitor progress and d) evaluate and report back to the EU Commission.⁴⁴ *Thirdly*, the WFD prescribes 'a procedural approach',⁴⁵ which consists of binding procedures regarding aspects such as planning, measurements, reporting, information and participation by stakeholders including the public.⁴⁶ In sum, implementation of the WFD has demanded significant changes in the administration of water within EU Member States.

The environmental objectives prescribed in WFD Article 4 are essential to fulfilling the scope of the Directive, which makes the question of meeting those requirements central in national implementation. The environmental objectives of WFD Article 4 are vaguely formulated, with several exceptions and derogations, leaving the construction of concrete targets and limit values to daughter Directives, soft-law guidance documents and the EU Member States.⁴⁷ In order to be achieved, environmental objectives must be 'operationalized',⁴⁸ in this case transformed into practical measures of action and duties through programmes of measures. Member States legal systems have a fundamental role in operationalization, because national legislators are obliged, under EU law and its principle of effectiveness in general, and by the WFD in particular,⁴⁹ to ensure that every

⁴² Art. 11.8 and 13.7, Dir 2000/60/EG.

⁴³ C.S. Holling (ed.), *Adaptive environmental assessment and management* (Johan Wiley and Sons, 1978); G. Michanek and A. Christiernsson, *Adaptive Management of EU Marine Ecosystems – About Time to Include Fishery*, (Uppsala University, 2013), p. 9.

⁴⁴ Art. 4, 8, 11, 13, 15, Dir 2000/60/EC.

⁴⁵ I. von Homeyer, n. 8, p. 17.

⁴⁶ The importance of procedure is also highlighted by a new possibility for the EU Commission, in accordance with Article 260.3 TFEU, to directly request the imposition of a lump monetary sum or penalty payment in the context of infringement cases concerning non-communication of implementing measures, as introduced through the Treaty of Lisbon, see H. H. B. Vedder, *Treaty of Lisbon and European Environmental Law and Policy*, *Journal of Environmental Law*, 2010, 22:2, pp. 296–297.

⁴⁷ J. H. Jans and H. H. B. Vedder, n. 28, p. 396.

⁴⁸ L. Gipperth and R. Elmgren, *Adaptive Coastal Planning and the European Union's Water Framework Directive: A Swedish Perspective*, *Ambio*, 2005, 34 (2), p. 158.

⁴⁹ Art. 4.3, TFEU and art. 4.3, Dir 2000/60/EC.

threat against achieving the environmental objectives of the WFD is effectively prevented by national legislation.⁵⁰ Another important aspect in meeting WFD environmental objectives is pollution prevention and control. In this regard the WFD relies on ‘a combined approach,’⁵¹ which means setting ‘emission limit values,’ demanding best available technology for known point sources of emissions, and setting common ‘environmental quality standards’ for certain prioritised and hazardous substances in the water environment.⁵²

The open and flexible framework legislation of the WFD is supplemented by a great amount of informal guidance in the form of a non-binding ‘Common Implementation Strategy’ (CIS).⁵³ The CIS consists of an administrative network of representatives from the EU Commission, national administrative authorities, non-state actors and stakeholders, and provides that the parties within the network work together when implementing the WFD. At present, several work programmes and thirteen thematic information guidelines have been elaborated within the network, all of which have had significant impact on State implementation in practice, despite their informal status. According to a study on judicial enforcement of the WFD in 2014, the majority of implementation problems and interpretation of unclear rules, concepts and obligations are handled within the CIS network instead of by the Court of Justice of the European Union (CJEU), meanwhile basically all cases brought to the CJEU concern formalities and breaches of procedural commitments.⁵⁴ Only one out of the eighteen WFD infringement cases heard by the CJEU when the study was undertaken concerned concept litigation. This statistic implies that a harmonised understanding of key concepts is not being delivered by the CJEU. Examining this reality brings into question the role of the CJEU as the authoritative interpreter of the content of EU law as prescribed in Article 19 of the Treaty on the European Union (TEU).⁵⁵

The increased adaptation of trans-governmental administrative networks such as the CIS has been described as ‘an informal “back-door” for the EU Commission to advance administrative integration and harmonisation of regulatory practices within the EU.’⁵⁶ Furthermore, the processes of the informal

⁵⁰ O.O. Green, A.S. Garmestani, H.F.M.W. van Rijswijk, A.M. Keessen, *EU Water Governance: Striking the right balance between regulatory flexibility and enforcement?*, Ecology and Society, 2013, 18 (2:10).

⁵¹ Art. 10, Dir 2000/60/EC.

⁵² 2008/105/EC, amended by Dir 2013/39/EU.

⁵³ The Strategy and its related documents can be found at http://ec.europa.eu/environment/water/water-framework/objectives/implementation_en.htm (2014-12-18).

⁵⁴ E. Korkea-aho, *Watering Down the Court of Justice? The Dynamics between Network Implementation and Article 258 TFEU Litigation*, European Law Journal, 2014, 20 (5), pp. 649–666.

⁵⁵ According to Article 344 TFEU, EU Member States are, as a general rule, even prohibited from solving disputes concerning the interpretation or application of the Treaties.

⁵⁶ M. Martens, *Administrative Integration through the Back Door? The Role and Influence of the*

CIS network 'seem to operate completely beneath the legal radar, invisible to ordinary as well as constitutional law.'⁵⁷ This indicates a strong EU Commission influence within these informal networks, primarily based upon national officials' perception of the EU Commission as an institution endowed with the knowledge, credibility and overview of the EU system.

3.2 Swedish implementation of the WFD

From a Swedish perspective it has been argued that governance ideas are not something completely new. The Swedish decentralised administrative system has incorporated a high degree of autonomy and self-organisation amongst various administrative authorities, as enshrined by the Swedish Constitution.⁵⁸ Municipalities and other local authorities in Sweden have also experienced, for quite some time, a high degree of trust from the central Government due to 'the principle of local self-government.'⁵⁹ The 'new' governance in the Swedish context is, therefore, more related to the role of the State and, more specifically, to the degree and character of governmental steering. This is so especially in regards to formal guidance, such as detailed and precise legislation having decreased in favour of softer steering instruments, further decentralisation and less control by the central Government.⁶⁰ These changes are even more apparent when it comes to the implementation of EU law.⁶¹

The ultimate responsibility for implementing EU Directives rests with the Swedish Parliament and Swedish Government. Together these governance bodies have decided upon a new water administration in Sweden through amendments to the Swedish Environmental Code⁶² 1998, and the Swedish Ordinance for County Administrative Boards⁶³ 2007, as well as the instatement of a Swedish Water Quality Management Ordinance (WQMO).⁶⁴ The central authority appointed at the national level, the Swedish Agency for Marine and Water Management (SwAM), has the general mandate of managing Sweden's

European Commission in Transgovernmental Networks within the Environmental Policy Field, European Integration, 2008, 30 (5), p. 636.

⁵⁷ J. Scott and J. Holder, *Law and New Environmental Governance in the European Union*, In G. de Búrca and J. Scott, n. 13, p. 236.

⁵⁸ Instrument of Government, Chapter 12, Section 2.

⁵⁹ Instrument of Government, Chapter 1, Section 1 and Chapter 14.

⁶⁰ G. Hedlund and S. Montin (eds), *Governance på svenska* (Santerus, 2009), pp. 13–14.

⁶¹ See e.g. T. Bull, L. Halje, M. Bergström, J. Reichel and J. Nergelius, *Arvet från Oxenstierna – reflektioner kring den svenska förvaltningsmodellen och EU*, (SIEPS, 2012:2); D. Mattson, *Implementering av Europarätten i Sverige – Några reflektioner om utvecklingen*, ERT 2009, pp. 417–426.

⁶² *Miljöbalken* (1998:808).

⁶³ *Förordning (2007:825) med länsstyrelseinstruktion*.

⁶⁴ *Förordning (2004:660) om förvaltning av kvaliteten på vattenmiljön*.

marine and freshwater resources. To implement the WFD's integrated river basin management approach the country has been divided into five river basin districts.⁶⁵ In each district, a County Administrative Board has been designated river basin district authority (hereafter Water Authority),⁶⁶ with overall responsibility for the management of water resources in the district. Within the scope of the Water Authorities' responsibilities lies, *inter alia*, the characterisation of current water status,⁶⁷ the establishment of environmental objectives and quality standards,⁶⁸ and the construction of programmes of measures⁶⁹ and management plans,⁷⁰ in a participatory process involving other administrative authorities, municipalities and stakeholders including the public.⁷¹ The Water Authorities are also responsible for monitoring progress, following up on prescribed actions,⁷² and reporting to the central administrative authority, SwAM.⁷³ To each Water Authority the Swedish Government has appointed a decisive organ, Water District Boards. The Boards consist of up to eleven expert delegates assigned by central Government, representing the County Administrative Boards, municipalities and different stakeholder groups, and the County Governor sits as Water District Board Chairperson.⁷⁴ The Board Members decide upon environmental quality standards, programmes of measures and management plans for each district.⁷⁵

The operative responsibilities for actions and measures decided upon are assigned to the administrative authorities in Sweden, for example national Agencies, County Administrative Boards and municipalities. At the regional level, all twenty-one County Administrative Boards have major responsibilities regarding practical implementation, including monitoring of water quality and supervision of water activities. Most of the work related to the WFD is carried out by an advisory group secretariat, mandatory in all County Administrative

⁶⁵ Environmental Code, Chapter 5, Section 10.

⁶⁶ Environmental Code, Chapter 5, Section 11.

⁶⁷ WQMO, Chapter 3, Section 1.

⁶⁸ WQMO, Chapter 4, Section 1. The environmental objectives have in the Swedish legislation misleadingly been categorised as 'environmental quality standards', a term that has a considerably narrower definition in the EU context, see further L. Gipperth, *Miljö kvalitetsnormer – en rättsvetenskaplig studie i regelteknik för operationalisering av miljömål*, (Uppsala University, 1999); C. Ohlson Lundh, *Environmental Quality Requirements or Environmental Quality Standards? Reflections on a report on Sweden's implementation of the Water Framework Directive*, Nordic Environmental Law Journal, 2014:2, pp. 61–94.

⁶⁹ WQMO, Chapter 6, Section 1.

⁷⁰ WQMO, Chapter 5, Section 1.

⁷¹ WQMO, Chapter 2, Section 4.

⁷² WQMO, Chapter 7, Section 1.

⁷³ WQMO, Chapter 9, Section 2.

⁷⁴ Ordinance for County Administrative Boards, Section 25.

⁷⁵ Ordinance for County Administrative Boards, Section 24.

Boards, with the task of assisting the Water Authorities in the practical implementation of the WFD.⁷⁶

The responsibilities of the Water Authorities also include the creation of collaborative groups meant to represent broad participation within each district.⁷⁷ For that purpose, about 125 Water Boards now actively engage in this informal collaboration within Sweden. The main functions of the Water Boards are to contribute local knowledge regarding water conditions and to provide a forum for dialogue with water stakeholders in each district. The Water Boards are voluntary and open to anyone who is interested in participating; however, their function is solely consultative.⁷⁸ In addition to collaboration with the Water Boards, all related materials and information must be communicated to the administrative authorities, municipalities, and general public before important decisions about environmental objectives and quality standards, programmes of measures and management plans are made. The purpose of this procedural component is to give everyone who is interested an opportunity to voice opinions about the suggested plans and measures, so as to make the process as transparent and legitimate as possible.⁷⁹ This traditional ‘circulation for comments’ is an important collaborative element of the Swedish political system.

3.3 Identified WFD implementation hurdles in the case of Sweden

There are many different actors involved in the current multi-level water administration in Sweden, and conflicts between traditional water management, built on already-established routines, and the new governance approaches of the WFD are causing problems in implementation. The main critique expressed when it comes to the Swedish water administration is related to the minimal State involvement and lack of formal steering, not least in terms of legal distribution of power and responsibilities between the various authorities involved.⁸⁰ The absence of clear and precise decisions is commonly criticised in regards to systems inspired by new governance ideas, as such absence makes degrees of steering difficult to establish.⁸¹ In the Swedish case, due to the fact that the organisation is multifaceted, fragmented and sectorised with a patchwork quilt of administrative authorities, associations and stakeholder groups

⁷⁶ Ordinance for County Administrative Boards, Section 27, Paragraph 1.

⁷⁷ WQMO, Chapter 2, Section 4.

⁷⁸ Government bill 2003/04:157, p. 12.

⁷⁹ Government bill 2003/04:2, pp. 24–25.

⁸⁰ State Government Official Report, SOU 2014:50, pp. 287–301.

⁸¹ P. Hall and K. Löfgren, n. 15, p. 204.

involved, a lack of formal steering is causing the water administration to have difficulties in overview, coordination and reform.⁸²

The most significant example of absence of formal steering is the lack of a proper mandate for the Water Authorities, notwithstanding their key role in Swedish water management. The Water Authorities were established in an already-existing administrative structure without sufficient clarification of their role in relation to the pre-existing administration.⁸³ Moreover, there is no budget allocated from central Government to the Water Authorities. National Agencies are regulated through an annual 'appropriation direction,' [regleringsbrev] describing the goals they are to meet and under which budget those goals reside. There is no such appropriation direction addressed to the Water Authorities as, formally, they are not considered a central Agency. Instead, the Water Authorities fall partly under the appropriation direction of the County Administrative Board they are located within, and whose budgets are not specified at all, and partly under the appropriation direction of the SwAM, which can allocate a non-specified amount of its budget to the five Water Authorities.⁸⁴ Thus, the Swedish Water Authorities have significant responsibilities in the management of water and practical implementation of the WFD, but no specified budget allocated to them for handling that assignment. The lack of resources for operative measures is an issue that is often highlighted by the operative authorities within the Swedish water administration.

In addition, the Water Authorities are without proper mandate to enforce decisions against other actors in the water organisation, even if such steps are deemed necessary in order to achieve decided environmental objectives and quality standards. The role of the Water Authorities is, according to themselves, foremost to serve as coordinators in the water administration and provide action-based recommendations for the WFD's environmental objectives to be met.⁸⁵ Overall, the Water Authorities, as well as their decisive organs the Water District Boards, are quite invisible in terms of formal steering and governmental control related specifically to the implementation of the WFD. This lack of formality in the water administration constitutes one example of how an increased use of new governance approaches, such as informal in lieu of formal steering, can cause negative ripple effects in terms of actually achieving results headed towards good water status.

⁸² J. Pierre and G. Sundström, n. 12, p. 131; see also the Water Authorities proposals for 'Management Plans 2015–2021' where the need for clearer roles and responsibilities within water administration is identified as a key obstacle in achieving a good water status.

⁸³ Government bill 2003/04:2, p. 27 and Government bill 2003/04:57, p. 10.

⁸⁴ See the appropriations directions to the CABs (published 2013-12-19) and the SwAM (published 2014-09-04), <http://www.csv.se/Verktyg--stod/Statsliggaren/> (2014-11-04).

⁸⁵ www.vattenmyndigheterna.se (2015-01-30).

In an often-cited article from 2004, Swedish political scientist Lennart Lundqvist foresaw that the Swedish proposal for implementing the WFD could potentially cause problems. He predicted these problems would result mostly from unclear roles and distribution of responsibilities and authority amongst the different levels in the proposed multi-level water administration.⁸⁶ Since then, the debate regarding organisational difficulties within the Swedish water administration has been extensive. Several Government Commissions have been appointed to the matter, and numerous reports from the involved administrative authorities have been published.⁸⁷ The EU Commission has also questioned aspects of the Swedish implementation in their communication with Sweden concerning the practical implementation of the WFD.⁸⁸

In the Swedish implementation of the WFD, environmental quality standards and programmes of measures are the key instruments appointed so as to achieve the environmental objectives of WFD Article 4.⁸⁹ These instruments were incorporated into Swedish legislation through the instatement of the Swedish Environmental Code in 1999, but the formulation of legislation regarding these instruments has been questioned and debated ever since the first incorporation decision.⁹⁰ All in all, until it can be guaranteed that every threat against achieving the environmental objectives of the WFD is effectively prevented by the Swedish legal system, the WFD cannot be considered fully implemented in Sweden.

4. A LEGAL PERSPECTIVE ON NEW GOVERNANCE

Many unifying features connect a legal perspective with the traditional view on governmental steering, for example conformity to law, hard rules, hierarchy, control, formality and a strong central Government. In new governance systems, including modern water management, these values are downgraded and

⁸⁶ L. J. Lundqvist, *Integrating Swedish Water Resource Management: a multi-level governance trilemma*, Local Environment, 2004, 9 (5), pp. 421–422.

⁸⁷ See eg the reports and materials published within the Swedish Government Commission 'Miljömålsberedningen,' Dir. M 2010:04, available at <http://www.sou.gov.se/sb/d/17400> (2014-11-21); B. Sjöberg, *WFD implementation in a European perspective*, Journal of The Royal Swedish Academy of Agriculture and Forestry, 2006, 145 (8) nr. 8, pp. 14–19; and the State Government Official Reports SOU 2008:11, SOU 2008:62, SOU 2008:118, SOU 2010:8, SOU 2014:50.

⁸⁸ See eg Commission Staff Working Document, SWE(2012) 379 final.

⁸⁹ WQMO, Chapter 4 and 6.

⁹⁰ See eg SOU 2002:107, SOU 2005:59, SOU 2005:113; L. Gipperth, n. 68; M. Ekelund Entson and L. Gipperth, *Mot samma mål? Implementeringen av EU:s ramdirektiv för vatten i Skandinavien* (University of Gothenburg, 2010); J. Söderberg, *EU:s ramdirektiv för vatten och dagvattenförörening – Klarar Sverige kraven?*, Nordic Environmental Law Journal, 2011:1, pp. 3–30.

considered rather obsolete in favour of softer values such as flexibility, decentralisation and participation as guiding components. As a result, in new governance systems there exists a built-in conflict between law and governance. This conflict forms a premise that constitutes the overall challenge of new governance from a legal perspective: to adjust relevant legal solutions to a more goal-oriented structure in lieu of a rule-oriented structure, in order to support the bottom-up steering techniques emphasised in new governance.⁹¹

One of the key challenges in governance systems identified in previous research is to find proper balance between formality, such as the use of legal means and strong, governmental steering, and informality, such as dialogues and softer steering instruments.⁹² A clear legislative framework serves as a foundation when implementing a new, often multi-level governance organisation wherein each actor is properly empowered and supported by formal rules and an administrative system.⁹³ Along those lines, decentralised management requires clearly-defined roles and responsibilities, including formalised rules for decision-making. The role of central Government is foremost to coordinate and organise complex governance networks rather than on steering and controlling lower-level authorities.⁹⁴ Important to note, however, is that some degree of governmental steering is needed to support organisations built upon governance ideas.⁹⁵ In other words, new governance does not equate to zero governmental involvement. By providing a multi-level organisation with a proper institutional framework that includes clear delegation of responsibilities and authoritative mandates, the chances of achieving designated goals will increase significantly. The fact that administrative arrangements and distribution of responsibilities in order to implement an EU-Directive falls under the institutional autonomy of the particular Member State, does not prevent governmental measures in this regard.⁹⁶

In environmental governance, the role of the State has been described as tripartite, with the State providing definitional guidance, participatory incentives and enforcement capability.⁹⁷ Definitional guidance means defining governance arrangements, for example in terms of scope and anticipated outcomes,

⁹¹ C.f. K. A. Armstrong, *The Character of EU Law and Governance: From 'Community Method' to New Modes of Governance*, Current Legal Problems, 2011, 64, pp. 184 and 212.

⁹² See e.g. P. Björk et al, n. 14, p. 124; G. Hedlund and S. Montin (eds), n. 60, pp. 13–14.

⁹³ See e.g. L. J. Lundqvist, n. 86, pp. 414 and 421; A.W. Hall, 'Water and governance,' In: G. Ayre and R. Callway (eds.), *Governance for sustainable development – a foundation for the future* (Earthscan, 2005), pp. 119–124.

⁹⁴ G. Hedlund and S. Montin (eds), n. 60, pp. 13–14.

⁹⁵ Same opinion J. Pierre and G. Sundström, n. 12, p. 14; P. Hall and K. Löfgren, n. 15, p. 203.

⁹⁶ For a closer discussion of the institutional autonomy of EU member states see M. Bergström, n. 1, p. 998.

⁹⁷ N. Gunningham, *Environmental law, Regulation and Governance: Shifting Architectures*, Journal of Environmental Law, 2009, 21 (2), pp. 207–208.

extent of participation and funding arrangements. Participatory incentives refer to the State's ability to organise and fund such arrangements. Enforcement capability refers to the mechanisms necessary to ensure that obligations are fulfilled by all actors involved.⁹⁸ In this light, environmental governance within EU Member State legal systems must also provide sufficient control measures and proper feedback functions, so as to ensure practical implementation of actions decided upon.⁹⁹

As mentioned above, legal solutions need to serve as a foundation in water management, not least due to the fact that, in many cases, such a foundation is the best way to actually achieve results in the form of improved environmental performance. A combination of different instruments is, thus, most effective: mixing, *inter alia*, information-based strategies with traditional regulation and legal enforcement, since 'many, less interventionist strategies are far less likely to succeed if they are not underpinned by direct regulation.'¹⁰⁰ With this backdrop I hold that the fundamental role of legal rules in any management system must be re-established, so as to support flexible governance solutions and decentralised decision-making without jeopardising effective enforcement of prescribed actions headed towards set environmental objectives.

5. CONCLUSIVE REMARKS

In this article I have argued that the shift from 'government' to 'new governance' in EU environmental law and policy is causing problems in national implementation of the WFD and other EU framework legislation. I have reasoned that, somewhat simplified, EU Member States have been previously accustomed to legally-binding, top-down regulation focusing on specific environmental problems and currently what EU Member States face are long-term, vague objectives within the scope of framework Directives, supplemented with non-legally-binding guidance concerning implementation. One solution to the existing gap between environmental objectives and performance, due to this shift in steering from the EU, is that EU Member States must pick up where the EU has left off, specifying vague EU framework legislation through clear Member State rules. In most Member States this re-nationalisation process, occurring primarily under the flag of subsidiarity and partially under a sustainable development paradigm, has not yet resulted in the necessary adaptation of existing legal frameworks and water administrations.

⁹⁸ Ibid.

⁹⁹ See L. Gipperth and R. Elmgren, n. 48, p. 161.

¹⁰⁰ N. Gunningham, n. 97, p. 208; See also K. Bosselmann, *Losing the Forest for the Trees: Environmental Reductionism in the Law*, Sustainability, 2010:2, p. 2427.

In the case of the WFD, much of the related practical implementation is delegated to experts and officials of administrative authorities within EU Member States, and the process is strongly guided by the informal administrative CIS network. This situation creates a highly-professionalised management culture, which, in part, can explain the lack of formal rules supporting water administrations at the Member State level, as shown by the Swedish case. From a legal perspective, these informal administrative networks can be questioned; their legal foundation is virtually non-existent, whilst their practical implications are quite significant. A system that circumvents central national authority in this way has the potential to lack legitimacy, transparency and accountability. However, most importantly it raises questions of legality and objectivity; can such important legal values be guaranteed in a system that leaves to administrative authorities the very task of interpreting their own responsibilities, under the flag of decentralisation and flexibility? In light of such uncertainties, perhaps it is time for legitimate, transparent EU Member State Governments to recapture their primary responsibilities and due control.

As a suggestion, a fundamental role of the legal system is to provide formal, institutional arrangements and legal solutions to fall back on when and if informal structures, such as dialogues and collaborative processes, are not working satisfactorily in terms of achieving designated goals. In the situation of the WFD, this would be in the form of the achievement of environmental objectives headed towards good water status, which currently are not happening in a satisfactory way in Sweden. A solution to the implementation problem at hand involves the creation of a formal system that is precise enough to both solve potential conflicts of interests and ensure that prescribed measures are enforced through clear legal means, such as intermediate targets upheld by legal sanctions. In summary, there seems to be a need for a renaissance in the fundamental role of national legal orders alongside an increase in traditional, centralised Government solutions in the context of the European Union and new governance systems, which is particularly evident in water management.

Paper II

Before and After the CJEU *Weser* Case: Legal Application of the WFD Environmental Objectives in Sweden[†]

Johanna Söderasp* and Maria Pettersson**

ABSTRACT

The EU Water Framework Directive (WFD) prescribes environmental objectives and an adaptive water governance system. This paper analyses the Swedish implementation of the WFD through a review of high-profile court cases regarding the application of the WFD environmental objectives in individual authorisation processes for water operations. The selection of court cases represents both the time before and after the CJEU *Weser* case in 2015. The results indicate an inertial tendency in the legal application of the WFD environmental objectives in Swedish courts, including a reluctance to fully apply EU law as interpreted by the CJEU. The overall conclusion is that traditional legal certainty aspects often trump flexibility and a high level of environmental protection as desired in the adaptive water governance system of the WFD. This raises questions about judicial preconceptions and the procedural autonomy of the Member States vis-à-vis the ‘*effet utile*’ of EU law through judicial implementation.

KEYWORDS: water framework directive, environmental objectives, environmental quality standards, legal application, loyal interpretation, judicial implementation.

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* Corresponding author. LLD Student in Environmental and Natural Resources Law, Division of Social Sciences, Legal Science Unit, Luleå University of Technology. Contact: Johanna Söderasp, Luleå University of Technology, 971 87 Luleå, Sweden, +46 920 49 31 18. Email: johanna.soderasp@ltu.se

** Professor in Environmental and Natural Resources Law, Division of Social Sciences, Legal Science Unit, Luleå University of Technology. Email: maria.pettersson@ltu.se

1. INTRODUCTION

The main purpose of the European Union Water Framework Directive (2000/60/EC) ('WFD') is to improve water quality and secure water quantity for human needs through a holistic and adaptive freshwater governance system.¹ The basic idea is to achieve environmental objectives through integrated water resource management at river basin level, concentrating on wide consultation, learning, experimentation and constant evaluation of the planned and taken measures.² This entails an adaptive water governance system that allows for – and takes into account – changing environmental conditions as well as public participation and stakeholder involvement. The WFD's demand for transparent and adaptive regulatory governance constitutes a considerable challenge for the existing legal frameworks in the Member States. While property rights and legal certainty aspects, such as predictability and stability, give the legal system a conservative character, the WFD calls for a high level of environmental protection and a system of rules that allows for flexibility and adjustments to changed circumstances.

The environmental objectives in article 4 of the WFD imply two main obligations for the EU Member States: to *prevent deterioration* of the status of all surface and groundwater bodies within the Union, and to *protect, enhance and restore* all water bodies in order to achieve 'good water status', originally by the end of 2015 and with full implementation by 2027. The overall objective of good water status is clarified as good ecological status or potential and good chemical status for surface water, and good quantitative and chemical status for groundwater. In case C-461/13 *Bund v Germany*³ (hereinafter the '*Weser*' case), decided in 2015, the CJEU clarified how the environmental objectives of the WFD shall be interpreted and applied in individual authorisation processes. First, the CJEU established that all environmental objectives of the WFD are legally binding and equally important to follow in individual processes.⁴ Secondly, the CJEU held that the Member States are required to refuse authorisation for individual projects that might result in deterioration or jeopardise the attainment of a good surface water status or potential, *unless* the particular project can be motivated under the derogation regime of article 4(7) of the WFD. The derogation regime thus provides EU Member States with important flexibility, where for example sustainable development projects, such as hydropower production, under certain circumstances can be allowed despite their negative impacts on the water environment.⁵

Sweden makes an interesting case study, since the Swedish legal situation was firmly challenged by the CJEU clarifications in *Weser*, unveiling an insufficient transposition of the WFD in at least two regards. *First*, the environmental objectives were not given sufficient legal status when transposed into Swedish law. Indeed, the WFD environmental objectives were transposed partly as a requirement for non-deterioration and partly through the introduction of

¹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy [2000] OJ L327/1 ('WFD'), art 1 and the recital.

² *ibid*, arts 3, 4, 8, 11, 13 and 14.

³ Case C-461/13 *Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland* [2015] ECR I-433 ('*Weser*').

⁴ *ibid*, para 50.

⁵ WFD, art 4(7).

environmental quality standards ('EQSs') related to the achievement of good water status.⁶ However, the legislator chose to declare only the EQSs for chemical status of surface water as legally binding under Swedish law. *Second*, the important derogation regime of article 4(7) of the WFD was transposed in a way that made it inapplicable in individual processes. In practice, as this article will show, this resulted in court assessments that are questionable from an EU legal perspective, as the Swedish courts seem to have struggled to reach a 'fair' result for the applicant or permit holder, in lieu of applying the non-deterioration requirement and the derogation regime as intended in the directive.

Under the principle of sincere cooperation in article 4(3) of the Treaty on European Union ('TEU'),⁷ in conjunction with the general requirements of EU legal acts in article 288 of the Treaty on the Functioning of the European Union ('TFEU'),⁸ national courts (and administrative authorities) are obliged to loyally interpret and fully apply national law in conformity with EU provisions. This 'judicial implementation obligation' has been incrementally developed in case law by the CJEU, to a large extent through the preliminary reference procedure.⁹ The doctrines of primacy, consistent interpretation and direct effect serve as principal tools for the effective and uniform application ('*effet utile*'¹⁰) of EU law in the Member States.¹¹ It follows also from the principle of *jura novit curia* that national courts must consider EU law of their own motion (*ex officio*), and, for example, interpret national law in line with EU provisions, and, when necessary, refuse to apply any conflicting provisions of national law.¹² Courts may even choose to apply sufficiently clear and precise provisions of a directive directly even where no individual has invoked them.¹³

However, the relative endurance and change-resistance of the law has implications for the implementation of new ideas and changes in policy,¹⁴ and both the interpretation and

⁶ Swedish Water Quality and Management Ordinance (2004:660), c 4, ss 2, 4, 4a, 5 and 6.

⁷ Consolidated Version of the Treaty on European Union [2012] OJ C 326/01.

⁸ Consolidated Version of the Treaty on the Functioning of the European Union [2012] OJ C 326/01.

⁹ Bruno de Witte and others (eds), *National Courts and EU law: New Issues, Theories and Methods* (Edward Elgar 2016) 2.

¹⁰ The principle of *effet utile* suggests that EU law shall be interpreted so as to achieve the purpose of the particular legislation – it is a legal judicial means allowing the court to 'develop a coherent body of case law' [...] which stabilises the law and 'convey[s] an impression of doctrinal continuity, effectiveness and relevance.', see Urška Šadl, 'The Role of *Effet Utile* in Preserving the Continuity and Authority of European Union Law: Evidence From the Citation Web of the Pre-accession Case Law of the Court of Justice of the EU' (2015) 8(1) EJLS 18, 42-43. See also Sacha Prechal, *Directives in EC Law* (2 edn, OUP 2005); Robert Schütze, *European Constitutional Law* (2 edn, CUP 2016), for thorough accounts of all these doctrines.

¹¹ Bruno de Witte and others (n 9) 3. While primacy primarily entails an obligation for the judiciary to *set aside* conflicting norms of national law, the doctrines of consistent interpretation (ie an obligation to interpret national law as far as possible in the light of EU provisions) and direct effect (ie the direct application of EU provisions in national proceedings) may be viewed primarily as instruments for enforcing primacy of EU provisions, see eg Michael Dougan, 'When Worlds Collide! Competing Visions of the Relationship Between Direct Effect and Supremacy' (2007) 44 CML Rev 931; and Bruno de Witte, 'Direct Effect, Primacy and the Nature of the Legal Order' in Paul Craig and Gráinne de Búrca (eds), *The Evolution of EU Law* (2 edn, OUP 2011) 340-41.

¹² See eg case C-119/05 *Ministero dell'Industria, del Commercio e dell'Artigianato v Luccini SpA* [2007] ECR I-06199, paras 60-61.

¹³ See eg Joined Cases C-87/90, C-88/90, and C-89/90 A. *Verholen and others v. Sociale Verzekeringsbank Amsterdam* [1991] ECR I-3757, paras 13-16.

¹⁴ Eg Douglass North, *Institutions, Institutional Change and Economic Performance* (CUP 1990); Richard Posner, *Frontiers of Legal Theory* (Harvard UP 2001) 145-69; James Mahony and Kathleen Thelen, 'A Theory of Gradual Institutional Change', in James Mahony and Kathleen Thelen (eds), *Explaining Institutional Change. Ambiguity, Agency, and Power* (CUP 2010); and Joyeeta Gupta and others, 'The Adaptive Capacity Wheel: a Method to Assess the Inherent Characteristics of Institutions to Enable the Adaptive Capacity of Society' (2010) 13 Environmental Science & Policy 459.

application of the WFD will therefore be impacted by existing practices and traditions as well as by the distribution of roles and responsibilities between different actors.¹⁵ The practices in the courts, the interpretation of substantive rules, and what conditions are imposed on actors and activities all constitute ‘(...) aspects of the national systems of judicial protection [that] could somehow prejudice the effective and/or uniform application of Community law (...)’.¹⁶ Furthermore, the procedural autonomy of the Member States means that EU norms are ‘unavoidably distorted by judicial preconceptions and styles of judgment, and by the pre-existing structure of each national legal system.’¹⁷

Against this backdrop, the aim of this article is to analyse the Swedish implementation of the WFD through a review of high profile court cases concerning the application of the WFD environmental objectives. More specifically the study addresses the following questions: how have the environmental objectives of the WFD been interpreted and applied by Swedish courts in authorisation processes for water operations, before and after the CJEU *Weser* case, and can the courts’ assessments be considered to comply with the general legal obligations under EU law, such as loyal interpretation and full application of EU provisions as interpreted by the CJEU? All reviewed cases deal with the authorisation of water operations whose effects on the WFD environmental objectives have been a key contested issue, and cover both new water operations and the expansion of existing operations.

The way in which the national legal system is impacted by the CJEU clarifications is thus examined through a critical analysis of judicial decisions aimed at discovering if and, if so, in what way national courts address the issue. The selection of cases is therefore representative of both the time before and after the CJEU *Weser* case in 2015, covering the period from the year 2012 up until the year 2017. Without claiming comprehensiveness, the fairly large selection of cases can be considered a representative sample of how the Swedish courts have interpreted and applied the WFD environmental objectives during the period covered by the review.¹⁸ In addition to primary legal sources, secondary sources in the form of academic literature on the WFD, the general legal obligations under EU law, and adaptive water governance have been used.

2. THE WFD ENVIRONMENTAL OBJECTIVES AND THE CJEU CASE LAW

The early stages of implementing the WFD held uncertainty and divided opinions on how the environmental objectives of the WFD should be viewed, which led to different implementation strategies in the Member States.¹⁹ The main point of debate was whether the Member States

¹⁵ Carina Keskitalo and Maria Pettersson, ‘Implementing Multi-level Governance? The Legal Basis and Implementation of the EU Water Framework Directive’ (2012) 22 *Environmental Policy and Governance* 90.

¹⁶ Michael Dougan, ‘Remedies and Procedures for Enforcing Union law’ in Craig and de Burca (eds) (n 11) 410.

¹⁷ de Witte (n 11) 358.

¹⁸ However, an important and clarifying national case was decided in June 2018, ie after the period covered by the review. See MÖD, Case M 5186-17, ‘*Ställoppet*’, 2017-06-12. The case is briefly discussed in n 131, but is not included in the analysis in this study.

¹⁹ See eg Chris Backes and Marleen van Rijswijk, ‘Ground Breaking Landmark Case on Environmental Quality Standards? The Consequences of the CJEU ‘*Weser-judgement*’ (C-461/13) for Water Policy and Law and Quality Standards in EU Environmental Law’ (2015) 12 *JEEPL* 363; Andrea Keessen and others, ‘European River Basin Districts: Are They Swimming

were obliged to consider the objectives as legally binding in each step of implementation and, for example, refuse to authorise projects that would result in deterioration or jeopardise the attainment of a good water status, or whether they could treat them as mere management planning objectives, and as such unrelated to the authorisation of individual projects.²⁰

The WFD requires EU Member States to: 1) implement all necessary measures to prevent deterioration of the status of all bodies of surface water and groundwater, and 2) to protect, enhance and restore such bodies with the aim of achieving ‘good water status’, originally by the year 2015.²¹ The overall objective of good water status is clarified as good *ecological* and *chemical status* of surface water,²² good *ecological potential* and good *chemical status* for artificial and heavily modified surface waters,²³ and good *quantitative* and *chemical status* of groundwater.²⁴ However, there are several exceptions and derogations contained within article 4, such as extended deadlines until 2021 or (at the latest) 2027 for achieving the ultimate goal of good water status,²⁵ and/or less stringent environmental objectives for water bodies so affected by human activity that the ordinary objectives would be infeasible or disproportionately expensive to achieve.²⁶

While the above mentioned possibilities for derogation all deal with the *current* state of the environment due to past and existing impact and activities, the derogation regime of article 4(7) targets *new* activities and modifications to the water environment. This regime holds that, under certain circumstances, Member States will not be in breach of the WFD even though they fail to meet the objectives of the directive. This is the case when failure to achieve good groundwater status, good ecological status or potential or to prevent deterioration of water bodies is the result of ‘*new modifications* to the physical characteristics of a surface water body or *alterations to the level* of bodies of groundwater’, or in the case of failure to prevent deterioration from high status to good status, is the result of ‘*new sustainable human development activities*’. However, a number of additional conditions must be met for the derogation regime to apply, namely that: (a) all practical steps are taken to mitigate adverse impacts; (b) the reasons for modifications are explained in the river basin management plan and reviewed every six years; (c) the new modifications are of overriding public interest and/or outweigh the benefits of achieving the WFD objectives; and (d) the beneficial objectives served by the new modifications or alterations cannot be achieved by other means for reasons of technical feasibility or disproportionate costs.²⁷

in the Same Implementation Pool?’ (2010) 22 JEL 197; and Lasse Baaner, ‘Programmes of Measures Under the Water Framework Directive – A Comparative Study’ (2011) 1 Nordic Environmental Law Journal 31.

²⁰ See *Weser* (n 3) Opinion of AG Jääskinen, paras 29 and 33–35, where completely opposing views of several national governments are presented.

²¹ WFD, art 4(1).

²² *ibid*, art 2(18).

²³ *ibid*, arts 4(1)(a)(iii) and (3).

²⁴ *ibid*, art 2(20). Annex V to the WFD specifies biological quality elements by which Member States shall assess the ecological quality of surface waters, while common limit values are prescribed for chemical substances (ie EQSs) in both surface and groundwater, see eg Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy [2013] OJ L 226/1.

²⁵ WFD, art 4(4).

²⁶ *ibid*, arts 4(5) and 5(1). However, several additional conditions must be met, for example, no further deterioration is allowed, *ibid* [art 4(5)(c)].

²⁷ *ibid*, art 4(7).

Article 4(7) of the WFD thus provides important flexibility as Member States may allow for new physical modifications or sustainable human development projects, *even if* such projects cause deterioration or threatens the status or potential of a body of water, under the strict and cumulative conditions described above.

2.1 The ‘*Weser*’ Case, C-461/13

In the *Weser* case,²⁸ a preliminary ruling requested by the Bundesverwaltungsgericht in Germany, the CJEU finally clarified that the WFD environmental objectives are to be viewed as legally binding, and oblige Member States to act to that affect.²⁹ More specifically, the CJEU maintained that ‘Article 4(1)(a) of Directive 2000/60 does not simply set out, in programmatic terms, mere management-planning objectives, but has binding effects (...) at each stage of the procedure prescribed by that directive.’³⁰ Authorisations of new projects or modifications are thus covered by the general obligations of the WFD, for example the obligation to prevent deterioration.³¹ Consequently, the Member States are obliged ‘to refuse authorisation for a project where it is such as to result in deterioration of the status of the body of surface water concerned or to jeopardise the attainment of good surface water status,’ *unless* the project can be motivated under the derogation regime of article 4(7).³² Important to note is also that when determining whether the WFD environmental objectives are met in a specific case, ‘the non-deterioration principle includes no weighing and balancing of interests whatsoever, unlike the derogation regime.’³³ Such considerations can thus only be taken in the assessment on whether a derogation should be granted.³⁴

In *Weser*, the CJEU also examined the meaning of the ‘obligation to prevent deterioration’ contained in article 4 of the WFD. The CJEU held that the concept of deterioration must be interpreted by reference to a (single) quality element (ie relating to waters’ ecological status or potential) or a substance (ie relating to waters’ chemical status).³⁵ Furthermore, deterioration of the status of a body of water occurs ‘as soon as the status of at least one of the quality elements (...) falls by one class,’ and, ‘if the quality element concerned, is already in the lowest class, (...) any deterioration *of that element* constitutes a “deterioration

²⁸ *Weser* (n 3). See also Tiina Paloniitty, ‘The *Weser* Case: Case C-461/13 *Bund v Germany*’ (2016) 28 JEL 151; and Backes and van Rijswijk (n 18), for further details of the circumstances of the case.

²⁹ *Weser* (n 3) para 31. See also Jasper van Kempen, ‘Countering the Obscurity of Obligations in European Environmental Law: An analysis of Article 4 of the European Union Water Framework Directive’ (2012) 24 JEL 499, for a thorough analysis of the complexity of the obligations under the WFD.

³⁰ *Weser* (n 3) para 43.

³¹ *ibid*, para 48.

³² *ibid*, para 50. The CJEU refers only to the status of *surface* water because of the design of the questions from the referring court, as this was a preliminary ruling and not an infringement case. The statement from the CJEU should therefore be considered applicable also in situations that threaten the status of *groundwater* bodies. Neither did the CJEU specify which kind of operations or activities that are covered by ‘the refusal rule.’ However, by holding that the Member States are obliged to implement *all necessary measures* to prevent deterioration, it is likely that ‘the refusal rule’ applies in all authorisation processes, eg permissions for hazardous activities and water operations, as well as in all other situations aimed at implementing the programmes of measures, such as inspections and spatial planning decisions, *ibid* [paras 31-32].

³³ Paloniitty (n 28) 157.

³⁴ *Weser* (n 3) para 68.

³⁵ *ibid*, para 66.

of the status” of a body of surface water’.³⁶ In other words, in situations where a quality element that is already in the lowest class will be deteriorated by a particular project, Member States are prohibited, under ‘the refusal rule’ following from the obligation to prevent deterioration, from authorising the project unless a derogation under article 4(7) can be motivated.

2.2 The ‘*Schwarze Sulm*’ Case and Adjoining Case Law

About a year after *Weser*, in case C-346/14 *Commission v Austria*³⁷ (hereinafter ‘*Schwarze Sulm*’), the CJEU shed more light on the Member States’ discretion when applying the derogation regime of article 4(7) of the WFD. More specifically, the CJEU interpreted the concept of ‘overriding public interest’ and clarified, to some extent, when derogation from ‘the refusal rule’ can be motivated. The main issue in the case was whether the contested project - an authorisation to construct a new hydropower plant in the Schwarze Sulm River - was liable to deteriorate the status of the water body concerned, and, if so, whether the authorisation of the project could be motivated under the derogation regime.³⁸

After finding that the contested project was liable to cause deterioration, the CJEU investigated whether the project could still be motivated under the derogation regime. In general terms, the CJEU argued that the construction of a hydropower plant *may be* of such an overriding public interest referred to in article 4(7), and that ‘the Member States must be allowed a certain margin of discretion’ in this assessment.³⁹ In the particular case, the CJEU held that the Republic of Austria was entitled, under their margin of discretion, to consider the contested project as ‘an overriding public interest’ and, in addition, that all of the remaining conditions of article 4(7) were met in the present case.⁴⁰ Since the Commission had ‘failed to establish the infringement as alleged’, the action of the Commission was dismissed as unfounded.⁴¹

It thus follows from *Schwarze Sulm* that it is left to the Member States to decide, in each individual case, if a (hydropower) project is considered of overriding public interest and/or if the benefits of the project, in the light of sustainable development, outweigh the benefits of achieving the WFD objectives. However, each derogation decision must be well-founded, and all of the conditions of article 4(7) thoroughly examined.

Whether an authorisation of eg a hydropower plant is motivated under the derogation regime, is also significant for the operator’s legal protection against future demands for measures to remedy water damages caused by the operation of the facility, under the ‘environmental liability directive’ (2004/35/EC).⁴² In ‘*Gert Folk*’, the CJEU namely held that that directive applies *ratione temporis* to water damages caused by the operation of a facility

³⁶ *ibid*, para 69 (emphasis added).

³⁷ Case C-346/14 *Commission v Republic of Austria* [2016] ECR I-322 (‘*Schwarze Sulm*’).

³⁸ *ibid*, para 52.

³⁹ *ibid*, para 70.

⁴⁰ *ibid*, paras 74 and 80-81.

⁴¹ *ibid*, para 83.

⁴² Directive 2004/35/EC of the European Parliament and of the Council of 21 of April 2004 on environmental liability with regard to the prevention and remedying of environmental damage [2004] OJ L 143. The directive eg provides for environmental NGO’s and for persons affected or likely to be affected by environmental damage to ask the competent authority to take action, as well as be able to appeal such decisions, *ibid* [arts 12-13].

after 30 April 2007, even if the project was authorised and put into operation prior to that date.⁴³ However, such ‘adverse effects’ which have been motivated under the derogation regime of the WFD art 4(7) are exempted.⁴⁴

3. INTRODUCING THE SWEDISH CASE

3.1 Special features in Swedish water law

The WFD prescribes a range of instruments for attaining the environmental objectives. Such instruments include programmes of measures, river basin management plans, monitoring of the water status, registering protected areas, and a ‘combined approach’ for handling discharges to water, entailing both EQSs and emission requirements, such as the use of Best Available Technology (BAT), to set limits for all activities that affect the particular environment.⁴⁵ While most of these instruments are not novel in the context of Swedish environmental law, the scope of the new water management approach, in particular river basin management, certainly implies a major challenge, not least in relation to existing and new water operations.⁴⁶

Swedish water law traditionally builds on a private law approach or ‘riparianism’, where ‘the riparian who owns the shore of a lake or a watercourse has the right to use the water contiguous to his shore.’⁴⁷ In other words, landowners also own the right to control the water within their properties.⁴⁸ While regulations regarding water rights dates back to the 1300s, the first more comprehensive Swedish water legislation was the Water Act of 1918.⁴⁹ Even though the first Water Act also eventually contained certain protective measures, eg regarding discharges of sewage in order to protect water from contamination, the Act was clearly oriented towards exploitation of water resources, mainly for the purpose of hydropower production for societal benefits and for economic reasons.⁵⁰

In the subsequent Water Act from 1983,⁵¹ the legislator maintained the strong purpose of hydropower production whilst simultaneously safeguarding also other public interests, such as planning, fishery and nature conservation.⁵² However, the substantive and procedural rules did not change enough to actually achieve a conceptual, normative and methodological change in

⁴³ Case C-529/15 *Gert Folk* [2017] EU:C:2017:419 (*‘Gert Folk’*), para 25.

⁴⁴ Dir 2004/35/EC (n 41) art 2(1)(b); and *ibid*, para 28.

⁴⁵ WFD, arts 6, 8, 10, 11 and 13.

⁴⁶ Gabriel Michanek, ‘EU:s Adaptiva Vattenplanering och Svenska Miljörättsliga Traditioner’ in Hans C. Bugge and others (eds), *Lov, Liv og Laere, Festskrift till Inge Lorange Backer* (Universitetsforlaget Oslo 2016) 355.

⁴⁷ Eva Jakobsson, ‘Industrialization of Rivers: A Water System Approach to Hydropower Development’ (2012) 14(4) *Knowledge, Technology & Policy* 41, 48.

⁴⁸ The right contains both surface water and groundwater within the property, see Government Bill 1981/82:130, 78.

⁴⁹ (1918:523). To regulate the right to water was also the main purpose of the water right regulation from 1880, which preceded the more comprehensive Water Act from 1918. See also Jakobsson (n 47) 41-56; Swedish Government Official Report, 1977:27, 126-38; and Government Bill 1981/82:130, 64-94, for historical overviews of Swedish water legislation.

⁵⁰ Swedish Government Official Report, 1977:27, 124; and Government Bill 1981/82:130, 65. As explained by Jakobsson, previous water regulations had rather prohibited alterations of the water flow in order to protect the interests of riparian landowners (promoting the natural flow of waters), but the industrialisation of rivers demanded a changed legislation which instead promoted the right to regulate and alter the water flow as long as the benefits were significantly greater than the damages caused, known as ‘the principle of reasonable use’, see Jakobsson (n 47) 48-53.

⁵¹ (1983:291).

⁵² Government Bill 1981/82:130, 66-67.

the interpretation and application of the law.⁵³ In 1998, when the Environmental Code was adopted, the 1983 Water Act was partially integrated into the Code, to a large extent with unaltered substantive and procedural provisions.⁵⁴ As a consequence, certain special and partially outdated rules for water operations as well as earlier preparatory works and case law, continued to apply also after the Environmental Code entered into force, which have hampered the impact of modern environmental requirements and principles in the area of water law.⁵⁵

Traditionally, water permits have been considered ‘immovable with ever-lasting validity’⁵⁶ as they have no time-limit and need to be reviewed in a court of law to be modified. It has therefore proved difficult to enforce modern environmental legal requirements on the (many) existing hydropower plants, which run on old permits with often outdated, if any, environmental conditions.⁵⁷ One example of this, which will be further illustrated in sections 3.3 and 3.4, is that in situations where an operator has applied for an extended license for increased hydropower production, the authorisation process is limited to include only the sought changes or expansions. In case law established by the Land and Environment Court of Appeal [Mark- och miljööverdomstolen] (hereinafter ‘MÖD’) in 2010,⁵⁸ the court held that it is sufficient to consider only the changed or additional measures in processes for extended water operations, ie without assessing the overall environmental impact of the entire operation. According to this case, ‘legal support is [in principle] required for existing permits to be subject to a new assessment’, and, moreover, that the rules aiming to implement the WFD ‘do not imply any immediate restrictions’ for existing permits.⁵⁹ This has resulted in the authorisation of quite substantial increases in current hydropower operations without a full assessment of all environmental impacts.⁶⁰

⁵³ For example, the traditional separation between permissibility rules and rules of consideration were maintained in authorisation processes for water operations which was a special, and unjustified, feature of water law compared to the authorisation process for environmental hazardous activities, see Gabriel Michanek, *Den Svenska Miljörättens Uppbyggnad* (Iustus förlag 1985) 78-79, 107 and 112. See also the Swedish Government Official Report 2014:35.

⁵⁴ Bertil Bengtsson and others, ‘Legislative Commentaries to the Environmental Code’ (Zeteco 2017). The adoption of the Swedish Environmental Code was generally criticised for being somewhat of a scribble and not meet the quality requirements that should apply to a legal Code, see eg Carl Spangenberg, ‘De Bärande Balkarna’ in Lena Gipperth and Charlotta Zetterberg (eds), *Miljörättsliga Perspektiv och Tankevändor, Vänbok till Jan Darpö & Gabriel Michanek* (Iustus förlag 2013) 476. The criticism concerned not least the partial integration of the Water Act into the Environmental Code, where the Council on Legislation specifically pointed to the lack of sufficient analysis regarding the legal consequences of transferring older substantive rules from the Water Act into a modern environmental legislation, see Government Bill 1997/98:45, Part I, s 4.16 and Part II, app I, 446-47, 478 and 518.

⁵⁵ Maria Pettersson and Susana Goytia, ‘The Role of the Precautionary Principle and Property Rights in the Governance of Natural Resources in Sweden’ (2016) 1 Nordic Environmental Law Journal 107, 116. These difficulties also led to the Swedish Government appointing a special Water Operations Investigation in 2012, with the main task of reviewing Swedish water law in order to more clearly take account of and implement modern environmental requirements, see Government Dir 2012:29, 6, and 9-13. The investigation’s final report was published in 2014 (Swedish Government Official Report 2014:35), which formed the foundation for a new Government Bill (2017/18:243) that will enter into force on January 1st 2019. As a result of the new Bill, most of these outdated and for water law specific substantive and procedural rules will be repealed for facilities that produces hydroelectricity.

⁵⁶ Swedish Government Official Report 2014:35, 132.

⁵⁷ Pettersson and Goytia (n 55) 116-17. See also Swedish Government Official Report 2013:69, 208-09, stating that a clear majority of existing water operations run on old permits today.

⁵⁸ MÖD 2010:52. For an overview of the Swedish court system in environmental matters see (n 88).

⁵⁹ *ibid*.

⁶⁰ See eg MÖD, Case M 2650-16 ‘Långbjörn’, 2017-04-21, 13; MÖD, Case M-2649-16 ‘Lasele’, 2017-04-21, 14, both described in more detail in s 3.4.3. By contrast, the settled case law for environmental hazardous activities is to include an assessment of the environmental impacts of the activity as a whole, also in situations where expansions or changes are applied

Whilst it is legally possible to review existing permits in order to improve the water status,⁶¹ the legal structure contains systematic problems that for example result in expensive and complicated procedures (not least for the authorities) and further bring little incentive for the water operators to participate.⁶² For example, the review process is limited as the imposed conditions may not be so intrusive that the activity can no longer be pursued or is significantly hampered.⁶³ In addition, water operators can be entitled to compensation up to a certain level for the decline in production value under the Environmental Code.⁶⁴ Thus, the administrative resources necessary to carry through a review are considerable, and, as a result, only a fraction of the large number of old water permits has yet been reviewed and updated in light of modern environmental requirements.⁶⁵

Alongside the complicated review process, other legal structures are of importance when it comes to balancing traditional legal principles, such as legal certainty and stability for permit holders, with modern environmental requirements in water law. One such factor is the legal structure with ‘permissibility rulings’, frequently occurring in water case law. This structure entails that a decision on the permissibility of a particular project, involving an assessment of whether an activity or operation may be conducted on a specific location, is taken *before* the actual licensing procedure where specific precautionary measures are prescribed.

Traditionally in Swedish case law, a permissibility ruling meant a guaranteed permit for the activity or operation, regardless of when such a ruling had been announced.⁶⁶ However, this case law was changed in 2013 when the Supreme Court announced a new precedent through the ‘*Bunge*’ case,⁶⁷ entailing that regardless of a previous permissibility ruling, a full assessment of the total environmental effects of a project must be made in the subsequent licensing procedure, if required under EU law. Such an assessment might even result in the project ultimately not being authorised, if necessary due to changed circumstances in light of ensuring the effectiveness of EU law, through its full application and interpretation by national courts.⁶⁸ The Swedish Supreme Court thus used the general principle of *effet utile*, in order to disregard the legal force of a previously announced permissibility ruling in the subsequent licensing

for, see eg MÖD 2006:6; MÖD 2006:57; MÖD 2007:50; and NJA 2008 s. 748. Darpö means that there is a special legal culture within Swedish water law that allows for these kinds of narrow assessments, despite newer precedent concerning environmental hazardous activities, see Jan Darpö, ‘Tradition och Förnyelse på Vattenrättens Område. Om Mötet mellan Gamla Tillståndssystem och Moderna Miljökrav’ (2014) 2 Nordic Environmental Law Journal 101, 104.

⁶¹ Environmental Code, c 24, s 5, para 1.

⁶² Darpö, ‘Tradition och Förnyelse på Vattenrättens Område’ (n 60) 103; Swedish Government Official Report 2009:42, s 4.18; and Peter Rudberg, ‘Constant Concessions under Changing Circumstances: the Water and Renewable Energy Directives and Hydropower in Sweden’ (Stockholm Environment Institute 2011) 12-15.

⁶³ Environmental Code, c 24, s 5, para 5.

⁶⁴ Environmental Code, c 31, ss 20 and 22.

⁶⁵ Only 78 out of a total of 3654 hydropower permits, see Swedish Government Official Report 2014:35, 270. The Report estimates that it will take about 800 years to update all of the remaining hydropower permits at current rate. Michanek argues, that the perceived legal certainty of the binding effect of a previous ruling is mainly due to the fact that the possibility of legal review rarely is used in practice, see Michanek ‘EU:s Adaptiva Vattenplanering och Svenska Miljörättsliga Traditioner’ (n 46) 364.

⁶⁶ See eg MÖD, Case M 5040-05, 2006-06-15; and MÖD, Case M 5256-08, 2009-08-25.

⁶⁷ Swedish Supreme Court, NJA 2013 s. 613, ‘*Bunge*’. The case concerned the commissioning of a limestone quarry on the Baltic Sea island of Gotland, Sweden, planned to be located in close proximity to two Nature 2000 areas. For a closer review of the case, see Jan Darpö, ‘Direkt Effekt och Processuell Autonomi – Omigen om Bunge-Domen och EU-Rättens Genomslag’ (2014) SvJT 735; and Darpö, ‘Tradition och Förnyelse på Vattenrättens Område’ (n 60).

⁶⁸ *Bunge* (n 67) paras 20-24.

procedure. Although the precedent specifically dealt with the impact of EU-law in relation to protecting a ‘Natura 2000-area’, it most likely applies also in relation to safeguarding the WFD environmental objectives, under the general principle of *effet utile* of EU law.⁶⁹

Thus, already before the CJEU *Weser* case, it was doubtful whether the Swedish legal system could handle the significant changes that were likely to result from the implementation of the WFD. Now, the authorities must relate their decisions to the interpretation of the CJEU, since, after the implementation deadline of a directive has run out, ‘national courts must give precedence to consistent interpretation over all other possible readings of national law.’⁷⁰ This can require setting aside both provisions of national substantive and procedural law as well as methods and principles of interpretation that would otherwise jeopardise the full effect of the consistent interpretation obligation ‘post-term’.⁷¹ Among other things, this entails that it may be difficult to authorise hydropower installations, unless they can be motivated under the derogation regime of article 4(7) of the WFD, since such installations will most likely result in a deterioration of the status of the water body concerned.⁷² At the same time, physical impact on surface waters, for example through hydropower production, have been identified by the Water Authorities as a key issue for achieving good ecological status or potential in accordance with the WFD.⁷³

3.2 The Original Swedish Transposition of the EU WFD

Besides the requirement of non-deterioration, the Swedish implementation of the WFD included the adoption of EQSs for water related to the achievement of good water status or potential.⁷⁴ The rules applicable to EQSs are found in chapter 5 of the Environmental Code, dividing them into four different categories: 1) *limit values*, which may not be exceeded; 2) *target values* to aim for and which should not be exceeded; 3) *indicators*, which use the occurrence of organisms in surface water and/or groundwater as indicators of the status of the environment; and finally, 4) *other standards*, which comprises all other types of environmental requirements derived from EU-law, that cannot clearly be classified under points 1-3.⁷⁵

The manner in which EU requirements for environmental quality are categorised when transposed into Swedish legislation is crucial for their legal status and consequences. While requirements placed under categories 2-4 fall only under the regular application of the so called general consideration rules in chapter 2 of the Environmental Code,⁷⁶ requirements categorised

⁶⁹ Gabriel Michanek and Charlotta Zetterberg, *Den Svenska Miljörätten* (4th edn, Iustus Förlag 2017) 431.

⁷⁰ Marcus Klamert, ‘Judicial Implementation of Directives and Anticipatory Indirect Effect: Connecting the Dots’ (2006) 43 CML Rev 1251, 1274.

⁷¹ *Ibid*, 1274.

⁷² Melina Malafry, *Biodiversity Protection in an Aspiring Carbon-Neutral Society* (Uppsala University 2016) 202.

⁷³ Government Dir 2012:29, 7-8.

⁷⁴ Swedish Water Quality and Management Ordinance (2004:660), c 4, ss 2, 4, 4a, 5 and 6.

⁷⁵ Environmental Code, c 5, s 2.

⁷⁶ The general rules of consideration are the core of the Swedish Environmental Code. The rules apply to virtually all activities and measures that impact the environment and contain eg precautionary requirements and an obligation to use the best available technology. The rules are concretised through conditions in the individual permits for eg water operations. As a rule, the environmental requirements set in accordance with c 2 are subject to a cost-benefit assessment aiming to ensure that the requirements are well-balanced and do not imply unnecessary costs for the operator; the requirements must be environmentally motivated. The cost-benefit rule does however not prevent the requirements necessary to comply with EQSs, and activities that

as limit values under point 1 receive a legal status that can clearly affect authorisation decisions of new or expanded/modified projects.⁷⁷ A categorisation as limit values also means that it is possible to maintain stricter environmental requirements than may otherwise be considered unreasonable as a consequence of the cost-benefit assessment that must be performed in accordance with chapter 2, section 7, para 1 of the Environmental Code.⁷⁸

The ambiguous legal status of the Swedish EQSs, related to the different categories described above, caused difficulties in the transposition of the WFD environmental objectives. The Swedish legislator namely transposed article 4 of the WFD into different categories of EQSs under chapter 5 of the Environmental Code.⁷⁹ Only the EQSs for surface waters' and heavily modified waters' *chemical* status were categorised as *limit values* under point 1, and are as such legally binding under Swedish law.⁸⁰ All other EQSs for water, ie EQSs for *ecological* status or potential as well as groundwater's chemical and quantitative status, were categorised as *other standards* under point 4, thus lacking the abovementioned legal effects. Uncertainty in the legal transposition also applied to the obligation to prevent deterioration, especially in regard to its legal effects in individual authorisation processes, since it was neither categorised as an EQS nor as a separate obligation.⁸¹

The Swedish transposition of the WFD thus entailed that only negative effects on the EQSs for surface waters' chemical status would have the capacity to directly prevent authorisation of new or expanded environmentally hazardous activities or water operations,⁸² unless the courts interpret and apply (and when necessary set aside conflicting provisions of) Swedish law in accordance with the CJEU clarifications in *Weser* and *Schwarze Sulm*.⁸³ The consequences of the unclear legal transposition has, however, been substantial when applied in court decisions, as shown especially in the case law representing the time pre *Weser* in section 3.3.

As was also pointed out by the European Commission in a letter of formal notice against Sweden in September 2016, the Swedish transposition of the derogation regime in article 4(7) of the WFD lacked both clarity and enforceability.⁸⁴ This is because the derogation regime was completely separated from the individual licensing process and therefore could not be applied by the licensing authorities when a particular project was found to cause deterioration or

threaten to adversely impact such a norm may only be permitted under certain circumstances, see c 2, s 7, paras 2-3 and Government Bill 2009/10:184, 48.

⁷⁷ Environmental Code, c 2, s 7, para 3.

⁷⁸ The paragraph states that the rules of consideration laid down in c 2, ss 2 to 5 and 6, para 1 'apply to the extent where compliance with the rules cannot be deemed unreasonable.' Particular consideration shall be paid in this connection to the benefits of protective measures and other precautions in relation to their cost.

⁷⁹ Government Bill 2009/10:184, 41-42.

⁸⁰ Swedish Water Quality and Management Ordinance (2004:660), c 4, s 8b. The categorisation is based on the WFD daughter Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council [2008] OJ L 348/84, adopted under art 16(7) of the WFD and expressing the EQSs as maximum concentration allowed, ie limit values.

⁸¹ Instead, under Swedish law, the non-deterioration requirement was included as part of the Water District Authorities' work on setting quality requirements, see Swedish Water Quality and Management Ordinance (2004:660), c 4, s 2.

⁸² Environmental Code, c 2, s 7, para 3; and Government Bill (2009/10:184) 43.

⁸³ In the case law post *Weser*, the MÖD has concluded that c 2 of the Environmental Code can be interpreted in light of the CJEU clarifications; see eg MÖD, Case M 6574-15, '*Näckån*', 2016-09-15.

⁸⁴ Formal Notice against Sweden, Infringement Procedure 2007/2239 (2016) 19-20.

jeopardise the attainment of good water status or potential. Instead, the derogation regime was transposed as a possibility for the ‘Water District Authorities’ to prescribe derogations from established EQSs or the non-deterioration requirement for a specific water body.⁸⁵ Such derogation is possible only as a consequence of a new activity or operation and under strict cumulative conditions, which are essentially in line with the WFD, aside from the condition to update the programme of measures and the management plan accordingly.

Applying the derogation regime was, however, extremely difficult for the ‘Water District Authorities.’ It would require either extremely long-term planning, ie in the beginning of each six-year long management cycle in connection with the adoption of EQSs, programmes of measures and management plans, or a review of the same documents during an on-going management cycle.⁸⁶ The use of the derogation regime was further complicated by the fact that decisions by the ‘Water District Authorities’ constitute so called ‘general standard decisions’, which are not designed to address circumstances in individual cases. Their decisions can neither be appealed nor reconsidered by the licensing authority in an individual process.⁸⁷ As a result, the intended flexibility of the derogation regime was missing under Swedish law, at the time for the case law analysis presented in the following sections.

3.3 Application of the WFD Environmental Objectives in Swedish Case Law Before the CJEU *Weser* Case

In this section, a selection of high-profile court cases from the time before *Weser* are analysed.⁸⁸ As mentioned in section 1, all cases concern the application of the WFD environmental objectives in individual authorisation processes for water operations. The reviewed cases are summarised in Table 1.

⁸⁵ Swedish Water Quality and Management Ordinance (2004:660), c 4, s 11.

⁸⁶ If necessary, it is legally possible for the Swedish Government (with the possibility to delegate the decision to a suitable authority) to reconsider EQSs and programmes of measures during a management cycle, see Environmental Code, c 5, s 2, para 2 and c 5, s 6, para 3. According to Government decision 1:9, 2016-10-06, M2015/01776/Nm m.fl., 4, this could apply if new knowledge calls for revised EQSs.

⁸⁷ The decisions made by the ‘Water District Board’, ie the decisive organ of the Water District Authority in each district, are final and cannot be appealed. They are taken under direct delegation from the Swedish Government in accordance with the Environmental Code c 5, s 1, para 2; Swedish Water Quality and Management Ordinance (2004:660), c 2, s 3a; Ordinance (2017:868) with instructions for the County Administrative Boards, s 15; and Ordinance (2017:872) on the Water District Boards.

⁸⁸ In this context, the relationship between the different courts in the Swedish environmental law system should be explained. In five of the Swedish district courts there are also land and environment courts (‘MMDs’) that handle eg permit applications for large-scale environmentally hazardous activities. Decisions by the MMDs can be appealed to the Land and Environment Court of Appeal (MÖD), and, if leaves to appeal are granted, to the Supreme Court. This is however rare. Cases for which the County Administrative Board is the first instance, eg permit applications for less intrusive environmentally hazardous activities, can be appealed to the MMDs, and subsequently, if leaves to appeal are granted, to the MÖD, which, in these cases, constitutes highest instance. While the decisions from the MÖD do not constitute precedents in the same way as decisions from the Supreme Court, the decisions are considered to be guiding, in particular for matters that cannot be taken to higher instance. The cases reviewed in this article are considered high-profiled, partly because of their status as guiding for future decisions, both by lower instances and by the MÖD itself, and partly because of the controversial nature of the decisions.

Table 1: Case law prior to the CJEU Weser case

Court, case and year	Legal matter	Effects on WFD environmental objectives	Judicial decision	Ratio decidendi
Land and Environment Court (MMD), M 1427-07, 'Eldforsen' (2011).	Authorisation of a new hydropower plant. The project had been ruled permissible in 1989.	Will cause deterioration/negatively affect EQSs.	Authorisation granted.	Neither the WFD nor the EQSs for water have sufficient legal status to suspend a previously announced permissibility ruling.
Land and Environment Court of Appeal (MÖD), M 568-11, 'Ladvattenån' (2012).	Authorisation of a new hydropower plant.	Not sufficiently investigated.	Dismissed due to an insufficient EIA with regard to the EQS for ecological status.	All EQSs are legally binding and shall be applied in authorisation processes. The EIA must sufficiently consider the effects on EQSs.
MÖD, Case M 10108-11, 'Laxån' (2012).	Authorisation to modernise and increase production in an existing hydropower plant.	No clear negative impact, albeit somewhat uncertain.	The project was deemed permissible.	EQSs for ecological status lack the legal effects of limit values, and the project does not hinder any future measures necessary to achieve good ecological status until 2021.
MÖD, Case M 8255-14, 'Långforsen I' (2015).	Restoration and modernisation of an inactive hydropower plant (originally licensed 1918).	No significant impact, if precautionary measures are undertaken.	Authorisation granted.	Assessment of the environmental impact shall be based on the state of the environment as it were according to the first authorisation decision (from 1918).

Overall, the reviewed cases reveal that the environmental objectives, especially non-deterioration of the water status and EQSs related to ecological water quality, have hardly impacted decisions in the first years of implementing the WFD. Illustrative of this is the 'Eldforsen' case from 2011.⁸⁹ The case concerned a project to construct a new hydropower plant which had been deemed permissible in a separate ruling in 1989. The Land and Environment Court [Mark- och miljödomstolen] (hereinafter 'MMD') granted the authorisation, even though the plant clearly conflicted with the EQSs for water as well as with the obligation to prevent deterioration. The grounds for the decision were that neither the WFD nor the EQS for water's ecological status were considered to have such legal status that they could challenge the legal force of a previously announced permissibility ruling. Instead, it was deemed sufficient that the conditions imposed were in accordance with the general consideration rules in the Environmental Code.⁹⁰

⁸⁹ MMD, Case M 1427-07, 'Eldforsen', 2011-01-28. Important to note is that the ruling was announced before the Supreme Court precedent regarding the legal effects of permissibility rulings in *Bunge* (n 67).

⁹⁰ The ruling was appealed, but neither the MÖD nor the Supreme Court granted leaves to appeal.

3.3.1 The ‘Ladvattenån’ case (2012)

A step towards a changed view on the legal status of the WFD environmental objectives was taken by the MÖD in *Ladvattenån* in 2012.⁹¹ The court held that all environmental objectives, including the EQSs for ecological water status or potential and the obligation to prevent deterioration, are legally binding and consequently must be applied in authorisation processes under the Environmental Code. The requirement was considered to fall under the general obligation for authorities (including courts) and municipalities to follow EQSs in authoritative decision-making.⁹² The MÖD also clarified that it is essential that the EIA clearly accounts for how the activity or operation under consideration will affect relevant EQSs, and that the licensing authority must dismiss applications that do not fulfil that requirement.⁹³ The application was then dismissed on those very grounds.

3.3.2 The ‘Laxån’ case (2012)

In the ‘*Laxån*’ case⁹⁴, the circumstances were similar but the outcome completely the opposite. Here, a large hydropower company that had applied for authorisation to modernise and streamline the production at an existing hydropower plant was refused by the first instance, MMD. The river was subject to an extended time limit (2021) due to poor ecological quality. Several national and regional water and environmental authorities acted as adversary parties, and argued for a refusal of the project due to an incomplete documentation of the environmental effects in the EIA, especially with regard to the EQSs for water and the obligation to prevent deterioration.

In second instance, the MÖD initially reiterated the statement made in *Ladvattenån*, ie that the EQSs are legally binding and thus must be applied in authorisation processes under the Environmental Code. However, since the EQSs for ecological status were not categorised as limit values, only the general requirements pursuant to the consideration rules in chapter 2 were deemed applicable and not section 7, paras 2-3, which meant that the EQSs did not prevent the court from reducing the environmental requirements as a result of the cost-benefit assessment in s. 7 para 1.⁹⁵ In other words, the court adhered to the letter of the law and concluded that EQSs for ecological status lacked the legal effects of limit values, for example the capacity to completely prevent the authorisation of new or expanded projects. Regarding the quality of the EIA, the MÖD considered the documentation to be sufficient, despite the fact that an explicit description of how the project would affect the EQSs for water was entirely missing.⁹⁶ The project was deemed permissible and referred back to the MMD for the granting of authorisation and determination of appropriate conditions, since ‘the contested extension of the power station

⁹¹ MÖD, Case M 568-11, ‘*Ladvattenån*’, 2012-01-24.

⁹² Environmental Code c 5, s 3 in conjunction with the application of the general rules of consideration in c 2, s 7, para 1. More specifically, the court stated that authorities and municipalities shall set forth necessary precautionary requirements in each individual procedure, so that the relevant EQSs are met within set timeframes and deterioration of the water status is avoided, see *Ladvattenån* (n 91) 4-5.

⁹³ *Ladvattenån* (n 91) 5.

⁹⁴ MÖD, Case M 10108-11, ‘*Laxån*’, 2012-09-13.

⁹⁵ *ibid*, 12.

⁹⁶ *ibid*, 13.

does not seem likely to prevent or hinder any future measures deemed necessary by the Water District Authorities in order to achieve good ecological status by the year 2021.⁹⁷

3.3.3 The ‘*Långforsen I*’ case (2015)

In the ‘*Långforsen I*’ case⁹⁸ from 2015, a hydropower company had applied for authorisation to modernise and restore an existing but *inactive* hydropower plant, originally licensed in 1918. The facilities were to some extent rundown due to the inactivity so that the natural environment was at least partially restored. The matter of legal dispute between the applicant and the litigant authorities and NGOs was which *starting point* the assessment of the environmental impacts should have in cases such as these, where there is already an existing ruling, without time limitation, authorising the project.⁹⁹ The MÖD held that the basis for the assessment of the project’s environmental impacts, should be ‘the state of the environment *as it was* at the time of the originally authorised facility and operation’,¹⁰⁰ and not, as the litigant parties had requested, the state of the environment *as it is at the time of application at hand*. With that starting point, the MÖD deemed the environmental impacts on the water environment to be ‘insignificant’ and authorised the project.¹⁰¹

In conclusion, it can thus be noted that the uncertainty as regards the legal status of the EQSs that characterised the legal situation in Sweden before the CJEU *Weser* case led to restrictive black letter interpretations and thus, at least in retrospect, outcomes in conflict with the WFD.

3.4 Application of the WFD Environmental Objectives in Swedish Case Law after the CJEU *Weser* Case

Since *Weser*, Swedish courts have referred to the case in their decisions and argumentations. Nevertheless, the assessments made by the MÖD in several of the reviewed cases must be considered legally dubious in light of what was established by the CJEU in *Weser*, and later *Schwarze Sulm*. This section contains a review and critical analysis of a representative selection

⁹⁷ *ibid*, 15. One of the judges however had a dissenting opinion regarding the quality of the EIA and wanted the appeal to be rejected on those grounds, *ibid* [17].

⁹⁸ MÖD, Case M 8255-14, ‘*Långforsen I*’, 2015-06-12.

⁹⁹ Authorisation of the project in first instance had been appealed eg by the Legal, Financial and Administrative Services Agency (Kammarkollegiet) and the confederation for protecting rivers (Älvräddarna), and their action was supported by several expert water and environmental authorities at both national and regional level.

¹⁰⁰ *Långforsen I* (n 98) 20 (emphasis added).

¹⁰¹ *ibid*, 22. The court thus restricted the judicial review to include only the modernisation and restorations now applied for, and, in that review, taking as the point of departure the assumption that the operations were running in accordance with the originally announced ruling from 1918. The case was appealed to the Supreme Court, who decided in spring 2017 not to grant a leave of appeal. In the absence of a clarification from the Supreme Court, the ruling from the MÖD can even be considered to be guiding for future decisions. Interesting to note is also that in parallel to the authorisation process, the Legal, Financial and Administrative Services Agency had initiated a process to *revoke* the old licence under the Environmental Code, c 24, s 3, but that request was denied, see MÖD, Case M 6028-14, ‘*Långforsen II*’, 2015-06-15. The court held eg that the company had not neglected its maintaining obligations in such a way that could constitute ground for revocation, and further that the EQS for ecological status in precedent, MÖD 2010:52 (n 58), had been found not to cause any immediate consequences for previously announced rulings.

of court cases from the time post-*Weser*. As in the previous section 3.3, all cases concern the application of the WFD environmental objectives in individual authorisation processes for water operations. The most interesting facts of each case are summarised in Table 2.

Table 2: Case law after the CJEU *Weser* case

Court, case and year	Legal matter	Effects on WFD environmental objectives	Judicial decision	Ratio decidendi
MÖD, M 9616-14, ' <i>Norviks port II</i> ' (2015).	Authorisation to construct a port and run port operations. The project had been ruled permissible in 2010.	Potential risk of negative effects on the chemical status, due to risk of spreading contaminated sediments through vessel movements and emergency anchoring. The court however assessed the risk to be insignificant.	Authorisation granted.	The water course is of great volume and any eventual spreading of contaminated soil will be area limited and short in time, and thus not negatively affect the status of the water course as a whole.
MÖD, M 6574-15, ' <i>Näckån</i> ' (2016).	Authorisation of a new hydropower plant.	Will cause deterioration/negatively affect EQS for ecological status	Authorisation granted.	The EQS will most likely have to be changed in the future, due to flood risk mitigation. Current EQS is therefore set aside.
MÖD, M 2649-16, ' <i>Lasele</i> ' (2017); MÖD, M 2650-16, ' <i>Långbjörn</i> ' (2017) (joint cases).	Authorisation to increase water diversion and production in existing hydropower plants.	Will cause deterioration of single biological quality elements that are already in the lowest class.	Authorisation granted.	The deterioration of one biological quality element, that are already in the lowest class, must have a real impact in the biological quality of the water as a whole, in order for the obligation to prevent deterioration to ensue.

3.4.1 The '*Norviks port II*' case (2015)

The '*Norviks port II*' case¹⁰² from 2015 concerned an authorisation to construct a new port and run port operations in the Mysingen water course, where the ecological status had been assessed as being of 'moderate quality' and good chemical status was not yet achieved due to high levels of anthrac and flouranth in the sediments, as well as presence of mercury in the water course. The proposed EQSs for the next management cycle were therefore 'good ecological status until 2021' and 'good chemical status until 2027'. The project had been ruled permissible by the MÖD in 2010¹⁰³ and the legal matter now was to assess if the project could (still) be authorised in view of 'changed requirements as a result of environmental quality standards and the risk of spreading contaminated sediments [...] due to planned ship traffic that could affect the water environment.'¹⁰⁴

¹⁰² MÖD, Case M 9616-14, '*Norviks port II*', 2015-10-30.

¹⁰³ MÖD, Case M 10319-09, '*Norviks port I*', 2010-12-22.

¹⁰⁴ *Norviks port II* (n 102) 24.

Initially, the MÖD reiterated what the CJEU established in *Weser*, ie that Member States are prohibited from authorising projects that negatively affect the water environment or jeopardise the achievement of good water status, and, most notably, that ‘deterioration occurs as soon as the status of at least one of the [biological] quality elements in Annex V deteriorates with one class.’¹⁰⁵ Thereafter, the court opined that a matter of importance in the case, which ‘the CJEU *does not* provide a clear answer to in *Weser*’, is whether the obligation to prevent deterioration also applies to certain *parts* of a water course, and, if so, what extent such sub-areas may have.¹⁰⁶ The question was of importance since the affected water body holds a very large volume, and thus, according to the court, it would require ‘a significant impact of one quality element for the status of Mysingen as a whole to deteriorate.’¹⁰⁷

Considering the precautionary principle, the adversary authorities (including the Swedish Agency for Marine and Water Management) and NGOs suggested remediation of the sediments before authorisation of the port was granted, and also argued that the environmental risks were insufficiently investigated.¹⁰⁸ The MÖD, however, assessed the risk that the activity would spread hazardous substances to be ‘insignificant’, and added that ‘if such a disruption of the sediments after all would happen, the environmental effects will be limited to a small area for a short period of time.’¹⁰⁹ The project was thus authorised, without any specific requirements of precaution regarding the contaminated sediments.¹¹⁰

In this context it is worth recalling that the WFD is adopted under (current) art 192(1) of the TFEU, stating that EU environment policy should be based on the precautionary principle and that preventive action should be taken for the protection and improvement of environmental quality, which is also prompted in the WFD.¹¹¹ Furthermore, the WFD aims at a high level of environmental protection through maintaining and improving the aquatic environment in the EU, and for that purpose Member States are obliged to define and implement *all necessary measures* in order to achieve and maintain a good water status.¹¹² However, neither the

¹⁰⁵ *ibid*, 25.

¹⁰⁶ *ibid*, 25 (emphasis added).

¹⁰⁷ *ibid*, 26. Considering the uncertainty regarding interpretation of the WFD in this respect, the MÖD preferably should have requested a preliminary ruling for clarification of how the obligation to prevent deterioration shall be interpreted regarding voluminous water bodies, where only a small part is at risk of being significantly deteriorated by a certain activity but not (necessarily) the status of the water body as a whole.

¹⁰⁸ The Swedish Agency for Marine and Water Management was the appellant in a parallel case against the operator of the oil refinery that had caused the contamination, in which the Agency clearly expressed that the area had to be remediated, and that the operator needed to further investigate what future activities could cause a contamination in order to, amongst other things, provide the authorities with material to designate the contaminated area as an environmental hazardous zone. In relation to the WFD environmental objectives the Agency specifically stated that: ‘Regardless if a possible spreading of the pollutants has the potential to negatively affect the EQS for chemical status in the water course as a whole, the sediments are very toxic and should not, in light of the precautionary principle, risk spreading to the environment.’, see MÖD, Case M 6642-14, 2015-10-30, 5.

¹⁰⁹ *Norviks port II* (n 102) 27.

¹¹⁰ *ibid*, 28. The MÖD also stressed that authorisation of the port in the long term will contribute to the overarching goal of sustainable development, since more transports in the region can be carried out in an environmentally friendly way, *ibid* [27]. While this certainly is the kind of argument that could motivate *derogation* from the obligation to achieve good ecological status under the WFD art 4(7), it is, however, as held by the CJEU, not a valid argument for allowing a particular project *without* investigating the possibilities for derogation, since ‘such an interpretation does not respect the difference established by the directive between the obligation to prevent deterioration and the grounds for derogation laid down in art 4(7) of the directive, since only the latter involve some weighing up of interests’, see *Weser* (n 3) para 68.

¹¹¹ WFD, recital 11.

¹¹² *ibid*, recitals 25-26.

precautionary principle nor the general scope of a high level of environmental protection in the WFD were entirely adhered to in the *Norviks port II* case.

3.4.2 The ‘Näckån’ case (2016)

In the ‘Näckån’ case¹¹³ from 2016, regarding the construction and operation of a new hydropower plant, the main contested issue was the project’s impacts on the EQS for ecological status. The appealing authority and NGO had petitioned to request a preliminary ruling from the CJEU regarding the question of direct effect of article 4 of the WFD. The petition was however denied by the MÖD under the motivation that chapter 2 of the Environmental Code (the general consideration rules) can be interpreted in accordance with the obligations under the WFD and the CJEU clarifications in the *Weser* and *Schwarze Sulm* cases.¹¹⁴ A consistent interpretation in accordance with EU law was thus considered possible. However, the MÖD did not clarify if a consistent interpretation is possible also in relation to the (inaccurately transposed) derogation regime of article 4(7) of the WFD, and if so, how it would be done.¹¹⁵

The appellants argued that the authorisation of the project would make it impossible to achieve the EQS for ecological status in the Näckån water course, and that the project would most certainly cause a deterioration of the water status.¹¹⁶ The MÖD, however, authorised the project despite the negative effects that the hydropower operation would have on the water environment, and also without applying the derogation regime of article 4(7), since ‘the current EQS for ecological status would probably have to be reconsidered’ in the next review of the water management plan.¹¹⁷ The MÖD motivated its decision in that there already was an existing dam in Näckån with the purpose of protecting a downstream society from flooding, and that it was therefore unlikely that ‘good ecological status’ would be achieved by 2021.¹¹⁸

The conclusion as well as the motivation from the MÖD in *Näckån* raise some legal concerns and are not very convincing in light of *Weser* and *Schwarze Sulm*. The MÖD basically rejected any legal effects of the current EQS for ecological status by disregarding the issue in the individual proceeding. However, it is not the task of the licensing authority to reconsider and/or repeal qualified standard decisions on EQSs for water made by independent ‘Water District Authorities’, taken under direct delegation from the Swedish Government.¹¹⁹ Rather,

¹¹³ *Näckån* (n 83).

¹¹⁴ *ibid*, 30.

¹¹⁵ The possibility of applying the derogation regime of art 4(7) of the WFD in this particular case has been thoroughly analysed by Olsen Lundh, who comes to the conclusion that Swedish law most likely can be interpreted in accordance with, and thus give effect to, art 4(7), if eg c 4, s 10 of the Swedish Water Quality and Management Ordinance (2004:660) is set aside and the grounds for the decision is explained in the next review of the management plan. However, she is highly critical to the Court’s argumentation, and questions eg the decision by the MÖD to not ask the CJEU for a preliminary ruling, in light of the complexity of the issue and the many legal uncertainties that the Swedish transposition has entailed, see Christina Olsen Lundh, ‘Norm är Norm – Om Flytande Normprövning och Implementeringen av Ramdirektivet för Vatten’ (2016) 3 *Nordic Environmental Law Journal* 57, 70-77.

¹¹⁶ *Näckån* (n 83) 21.

¹¹⁷ *ibid*, 28-29.

¹¹⁸ Under the assumption that the current EQS for ecological status will be changed in the future the project was thus considered not to hamper the possibilities to reach the ‘goal of water management’, and prescribed precautionary measures were deemed sufficient to ensure a non-deterioration of the water status, see *ibid*, 28-29.

¹¹⁹ s 3.2; and Olsen Lundh (n 115) 70.

an interpretation of Swedish law in consistency with EU law should in this case have led to a refusal of the project on the grounds that it would deteriorate the water status.¹²⁰ The only possibility to allow the project, in the light of *Weser* and *Schwarze Sulm*, would have been to investigate whether the project could (still) be motivated under the derogation regime of article 4(7). However, this possibility was not at all discussed by the MÖD.¹²¹

3.4.3 The ‘*Lasele*’ and ‘*Långbjörn*’ cases (2017)

Also the *Lasele*¹²² and *Långbjörn* cases,¹²³ raise some legal concern. These cases were decided jointly by the MÖD in 2017, since both concerned authorisation for increased water diversion for hydropower production at existing plants in the Åsele river. The river had been classified as heavily modified with lower qualitative objectives due to existing hydropower production, and is thus comprised by the express prohibition to prevent *all* further deterioration in article 4(5)(c) of the WFD.¹²⁴

The regional County Administrative Board as well as the Swedish Agency for Legal, Financial and Administrative Services appealed the authorisation decisions by first instance (MMD) due to the projects’ negative impact on the water environment. According to the appellants, the established deterioration of the water status made the authorisation of the projects impossible, since no derogation for the individual projects had been made in the management plan. However, both permits were granted by the MÖD, even though the projects would in fact cause deterioration of single quality elements that *were already in the lowest class*, and without applying the derogation regime of article 4(7).

The MÖD first examined how the obligation to prevent deterioration should be interpreted, in light of the *Weser* case, including the opinion of AG Jääskinen.¹²⁵ Initially, and seemingly in consistency with the CJEU statement in *Weser*, the court held that: ‘for that or those quality elements that already are in the lowest class, further deterioration is not allowed.’¹²⁶ Then, the court concluded that one of the hydromorphological quality elements that *would* be negatively affected by the contested projects *already was in the lowest class*, and thus that further deterioration was not allowed.¹²⁷ However, instead of examining if the projects still could be motivated under the derogation regime of article 4(7), the MÖD added a supplementary statement that made it possible to allow for the projects without such derogations being made. For both cases the MÖD held:

¹²⁰ See also Olsen Lundh (n 115) 76; and The Swedish Agency for Marine and Water Management, ‘Följder av Weserdomen – Analys av Rättsläget med Sammanställning av Domar’ (Report 2016:30) 17.

¹²¹ In this regard, it would have been desirable if the MÖD had taken the opportunity to discuss eg whether or not art 4(7) of the WFD can be considered to be clear and precise enough to be applied directly by Swedish courts and other administrative licencing authorities, despite the inaccurate transposition into Swedish law, or, alternatively, requested a preliminary ruling from the CJEU regarding the question of direct effect. In situations where the legislator has failed in transposition, it is vital that the national courts correct the wrongs through judicial implementation, pending the necessary legislative changes.

¹²² *Lasele* (n 60).

¹²³ *Långbjörn* (n 60).

¹²⁴ See s 2 and *Weser* (n 3), paras 63-64, where the CJEU indicates that these water bodies rather calls for particular attention in water management.

¹²⁵ *Weser* (n 3), Opinion of AG Jääskinen.

¹²⁶ *Lasele* (n 60) 18; *Långbjörn*, (n 60) 17.

¹²⁷ *Lasele* (n 60) 18; *Långbjörn* (n 60) 17.

However, there must be a deterioration [of one biological quality element] that has *a real impact* on the biological quality elements in order for the deterioration prohibition to ensue (...), [since] for the water course *as a whole*, the *limited deterioration* of the hydromorphological quality elements that the applied operation entails, *does not* constitute such a deterioration of the ecological status of the water environment that is prohibited [under the WFD].¹²⁸

These statements seem to stand in contrast to what the CJEU held in *Weser*, namely that ‘(...) if the quality element concerned...*is already in the lowest class*, any deterioration of *that element* constitutes a “deterioration of the status” of a body of surface water, within the meaning of Article 4(1)(a)(i).’¹²⁹ In addition, according to article 4(5)(c) WFD as interpreted by the CJEU, *all* further deterioration is prohibited for heavily modified waters subject to lower qualitative objectives, as was the case here.¹³⁰ It can thus be argued that authorisation of the projects should not have been granted, unless motivated under the derogation regime of article 4(7), which, admittedly, was inapplicable to the Swedish courts at the time of the rulings due to the incorrect Swedish transposition. Just as in *Näckån*, a discussion regarding the primacy of EU law, including the possibility of interpreting Swedish law in consistency with the WFD and setting aside any conflicting norms of national law, would indeed have been more desirable.¹³¹

Also, in light of what the CJEU held in *Gert Folk*, if the authorisation decisions in all of the reviewed cases post *Weser* had been motivated under the derogation regime of the WFD, the operators would have been protected, at least as regards the ‘adverse effects’ allowed for in the decisions, against potential future demands to remedy water damages caused by the operation of the facility under the environmental liability directive.¹³²

4. CONCLUSIONS

In this study, the interpretation and application of the WFD environmental objectives by Swedish courts in individual authorisation processes for water operations have been reviewed and critically analysed. The aim of the study was to clarify if the Swedish implementation of the WFD can be considered to be in compliance with EU law as interpreted by the CJEU in *Weser* and *Schwarze Sulm*, focussing on judicial implementation through loyal interpretation and full application by national courts. The results indicate an interpretation and application of the WFD environmental objectives that seem more faithful to the Swedish legislator and (national) traditional legal principles than in complete consistency with EU law. This in turn raises questions about judicial preconceptions and the procedural autonomy of the Member States *vis-à-vis* the *effet utile* of EU law through judicial implementation.

¹²⁸ *Lasele* (n 60) 18-19; *Långbjörn* (n 60) 17 (emphasis added).

¹²⁹ *Weser* (n 3) para 70 (emphasis added). See also CIS Guidance Document No. 36, 26-28.

¹³⁰ *ibid*, para 64.

¹³¹ In a case decided in June 2018, the MÖD rectified this dubious interpretation of the non-deterioration requirement and held that *Weser* cannot be interpreted in any other way than as to mean that deterioration of any quality element by one class is prohibited. Here, the MÖD also motivated authorisation of a project under the derogation regime in article 4(7) of the WFD for the first time, by using the instrument of consistent interpretation. See MÖD, Case M 5186-17, ‘*Ställoppet*’, 2017-06-12.

¹³² See s 2.2, in particular (nn 41-43).

As accounted for in the paper, it follows from *Weser* and *Schwarze Sulm* that the environmental objectives of WFD are legally binding in every stage of implementing the directive, and that the Member States are required to refuse authorisation of new projects that are liable to cause deterioration or jeopardise the attainment of good water status or ecological potential, *unless* the project can be motivated under the strict and cumulative conditions of the derogation regime in article 4(7). While the Member States are allowed a certain margin of discretion when applying the regime, the final decision has to be well-founded and in compliance with all requirements, including that all practicable measures to mitigate the adverse impact on the water status have been taken and that the benefits of the project outweighs the benefits of achieving the environmental objectives. Thus, while the threshold for whether a project is considered to cause deterioration must be low, further considerations, including weighing and balancing of interests, can be taken in the subsequent assessment on whether derogation shall be granted.

As the study has shown, the clarifications by the CJEU are problematic from a Swedish perspective. Due to the inaccurate Swedish transposition of the WFD into Swedish law, Swedish licensing authorities, including the courts, have been prevented from applying the derogation regime in individual authorisation processes as intended in the directive. Therefore, if a project is found to infringe on the WFD environmental objectives, the licensing authorities are obliged to use other means in order to give primacy to EU law. The first option would be to interpret and apply Swedish legislation in consistency with EU law, including the CJEU clarifications, and, if necessary, set aside conflicting norms and principles of national law. The second option could be to investigate if it is possible to apply article 4(7) of the WFD directly, also in this case disregarding conflicting national provisions. In situations where uncertainty about the interpretation of EU law arises, a preliminary reference should be sent to the CJEU.¹³³

However, in the cases reviewed after *Weser* neither of these options were clearly discussed or applied by the Swedish courts. Rather, the analysis indicates a reluctance to fully apply EU law as interpreted by the CJEU. Although the MÖD takes the *Weser* and *Schwarze Sulm* cases into consideration in the decisions, the contested projects, including completely new ports and hydropower plants, were all authorised without the derogation regime of the WFD being applied. Thus, whilst the courts' line of argumentation has changed, the *outcome* of the cases decided after *Weser* is the same as before the CJEU's clarifications. However, the concern here is not that the authorisations were in fact granted, but that they were granted on the basis of dubious legal arguments that appear to be in violation with EU law. These arguments seem to be, at least partly, a result of the incorrectly transposed derogation regime of article 4(7), where the court seemingly has attempted to reach a fair result for the applicant or permit holder, albeit in lack of the intended flexibility of the directive. In a way, the MÖD have tried to fit a square peg in a round hole.

In light of the judicial implementation obligation, the Swedish courts should have rather made an effort to clarify: *first*, if the Swedish transposition of the derogation regime outside the authorisation process for water operations really is consistent with EU law; *second*, whether the

¹³³ For a discussion on judicial dialogue and the role of preliminary rulings in Swedish case law see Sanja Bogojević, 'Judicial Dialogue Unpacked: Twenty Years of Preliminary References on Environmental Matters Initiated by the Swedish Judiciary' (2017) 29 JEL 263. In the article, Bogojević categorises and analyses different ways in which the Swedish courts address the response on a preliminary ruling from the CJEU and concludes that this practice is far from consistent in Sweden.

derogation regime enshrined in article 4(7) of the WFD is clear and precise enough to be applied directly by national courts; and, *third*, how the obligation to prevent deterioration should be interpreted and applied in situations where only a limited part of a water body of great volume is at risk of being significantly impaired by a certain activity and/or for a shorter period of time. While the answer to the first question, in light of the CJEU clarifications on how the derogation regime must be applied, most likely is negative, questions two and three are more difficult to answer. Here, clarifications from the CJEU through the preliminary reference procedure would have been advantageous.¹³⁴

On a more general level, the analysis reveals a relatively high degree of inertia in the interpretation and application of the WFD environmental objectives by Swedish courts. Judging by the courts' reasoning in the reviewed cases, traditional values, such as stability and legal certainty, have played a significantly greater role in the decisions than requirements for flexibility and a high level of environmental protection and precaution as desired in the adaptive water management system of the WFD. This applies in particular to activities with existing (outdated) permits that become subject to reexamination due to for example modernisation or production increase, as well as to operations that have been ruled permissible prior to the licensing process.¹³⁵ For example, in the *Långforsen I* case announced prior to *Weser*, the starting point for assessing the environmental impacts of the activity was held by the MÖD to be *the state of the environment at the time of the original authorisation*, which in this case was 1918. Hereby, the court completely disregarded crucial aspects of the WFD adaptive water governance system, which calls for learning, experimentation, and continuous evaluation of planned and taken measures in light of the current state of the environment. A consistent inertia in the interpretation and application of the WFD environmental objectives also post-*Weser* is indicated in the *Näckån* case, where the legal effects of the current EQS for ecological status were completely disregarded, as well as in the *Lasele* and *Långbjörn* cases, where the obligation to prevent deterioration was interpreted in a doubtful way. None of these decisions can be considered to be in full compliance with EU law, in light of *Weser* and *Schwarze Sulm*.

Thus, while it is clear that current and past case law of the MÖD limit the *effet utile* of EU law, an interesting question is perhaps *why* the court takes such a conservative stance. In

¹³⁴ However, in case C-664/15 *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation v Bezirkschauptmannschaft Gmünd* [2017] EU:C:2017:987 ('*Protect*'), the CJEU interpreted the environmental objectives of art 4 of the WFD to have direct effect, however without clarifying whether the whole of art 4 is comprised or merely the initial obligations. The CJEU held that: 'It would be incompatible with the binding effect conferred by Article 288 TFEU on a directive to exclude, in principle, the possibility that the *obligations* which it imposes *may be relied on by the persons concerned*. The effectiveness of Directive 2000/60 and its aim of protecting the environment, (...), require that individuals or, where appropriate, a duly constituted environmental organisation *be able to rely on it* in legal proceedings, and that the national courts *be able to take that directive into consideration* as an element of EU law in order, inter alia, to review whether a national authority that has granted a permit for a project that may have an effect on the water status has complied with its *obligations under Article 4* of the directive, in particular preventing the deterioration of bodies of water, and has thus kept *within the limits of the discretion granted to the competent authorities by that provision*.'; see *Protect* para 34 (emphasis added). In light of *Schwarze Sulm* (n 36), where the Member States' discretion under art 4(7) was a key issue, the statement may be interpreted as including an assessment of whether a derogation should have been granted. However, regardless of whether the WFD art 4(7) may be directly *invoked* by individuals, there is no formal hindrance for national courts to apply EU provisions directly as long as no individual is negatively affected by such an action, see (nn 10-13). In the Swedish cases reviewed after *Weser* (n 3), applying the derogation regime of art 4(7) directly, would have rather protected the operators from potential future measures to remedy damages in light of *Gert Folk* (n 43).

¹³⁵ In the words of Pettersson and Goytia (n 55) 117: 'In the inevitable trade-off between uncertainty and caution, on the one hand, and legal certainty and economic development, on the other, the latter seem to be the ruling norm.'

our view, at least part of the explanation lies in the fact that neither the Water Act from 1983 nor the adoption of the Environmental Code in 1998, sufficiently changed the substantive or procedural rules in order to fully implement a new and modern environmental approach in water law. It rather seems that the legislator has, by maintaining the legal arrangements that originally was based on riparian rights and the economic importance attributed to the exploitation of water resources, also upheld ‘an order where the interest of exploiting the resources holds a much stronger position than the interests of protecting human health and the environment.’¹³⁶ Perhaps the forthcoming legislative changes can remedy this, but that still remains to be seen.

¹³⁶ Pettersson and Goytia (n 55) 118.

Paper III

The Water Framework Directive and Spatial Planning in Sweden – Time for Legal Integration!

Johanna Söderasp

Abstract

Spatial planning activities play a crucial role in the implementation of the EU WFD and achievement of its environmental objectives. In Sweden, spatial planning is regulated foremost through the Planning and Building Act (2010:900). In this article, the lack of legal integration of the integrated and adaptive water governance system of the WFD into Swedish spatial planning law is addressed, and legislative changes are discussed. The obligations for the municipalities in this regard are analysed in light of the general legal obligations under EU law, particularly as interpreted by the Court of Justice of the European Union (CJEU). In *Weser*, the WFD's environmental objectives, including the obligation to prevent deterioration, were declared as legally binding at each stage of implementation. This entails that in each decision-making situation, including spatial planning decisions or local building permits that might have adverse impact on the aquatic environment, the WFD environmental objectives must be complied with. The result, however, reveals a clear lack of legal integration between the freshwater governance system and the legal framework for spatial planning in Sweden. As a consequence, water quality aspects are at great risk of being ignored in planning activities at the local or regional levels, which make the WFD's environmental objectives more difficult to achieve under the current legal framework.

1. Introduction

The European Union Water Framework Directive (WFD)¹ aims at sustainable water governance through an integrated planning² and adaptive management³ approach at river basin level

¹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

² For the sake of clarity throughout this article, the terms 'integrated' and 'integrated planning' will be used also when referring to authors who use a different terminology. In particular, the term 'programmatic approach' is often used more or less synonymous to these terms in European literature, not least in relation to the implementation of Environmental Quality Standards in general, see e.g. Marlon Boeve and Berthy van der Broek, 'The Programmatic Approach; a Flexible and Complex Tool to Achieve Environmental Quality Standards' (2012) 8 *Utrecht Law Rev* 74; Frank Groothuijse and Rosa Uylenburg, 'Everything according to plan? Achieving environmental quality standards by a programmatic approach' in Peeters Marjan and Uylenburg Rosa, *EU Environmental Legislation. Legal Perspectives on Regulatory Strategies* (Edward Elgar 2014) 116.

³ An adaptive management approach to natural resource management generally requires a learning process, through monitoring ecosystem response and incrementally adjusting management strategies based on what is learned from that monitoring. Participation of local stakeholders and the public is often lifted as essential, as local knowledge is viewed as key to finding effective management strategies, adjusted to local conditions. See e.g. Crawford S. Holling (ed.), *Adaptive environmental assessment and management* (Wiley 1978) 137-139; Ellinor Ostrom, *Understanding Institutional Diversity* (Princeton University Press 2005) 281; and Dave Huitema and others, 'Adaptive Water Governance: Assessing the Institutional Prescriptions of Adaptive (Co-)Management from Governance Perspective and Defining a Research Agenda' (2009) *Ecology and Society* 14(1):26.

(hydrologically/ecosystem based)^{4,5} The integrated and adaptive governance system⁶ of the WFD entails coordination in implementation with other EU water directives and national water law ('vertical integration'), as well as with legal frameworks and policies in other fields ('horizontal integration'), such as energy, agriculture, regional policy and spatial planning.⁷ This article addresses the issue of horizontal integration in Sweden, focusing primarily on integration of environmental/water law transposing the water planning and management system of the WFD and spatial planning law regulated foremost through the Planning and Building Act (2010:900) (PBA).

Successful horizontal integration has been identified as a crucial aspect for effective implementation of the WFD in the Member States and the achievement of its environmental objectives;⁸ to prevent deterioration and attain good chemical and ecological status or potential of surface water, and good chemical and quantitative status of groundwater.⁹ Since land and water use is closely related to the physical, chemical and ecological water quality through the hydrological system,¹⁰ it is particularly important to examine the extent of horizontal integration into policies concerning land use, such as spatial planning law.¹¹ Previous research shows that an important task for successful implementation of an integrated approach in water governance is to properly link the scales together, meaning that processes and activities on the regional and local scales are taken into account, and local knowledge is sufficiently integrated into

⁴ A river basin is defined as "the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta." See WFD art 2(13).

⁵ See e.g. David Grimeaud, 'The EC Water Framework Directive: An Instrument for Integrating Water Policy' (2004) 13 RECIEL 27, 34; and Lasse Baaner, 'The Programme of Measures of the Water Framework Directive – More than just a Formal Compliance Tool?' (2011) 8(1) JEEPL 82, 92.

⁶ 'Integrated and adaptive governance' is used in this article as a summarising term for the governance model prescribed by the WFD.

⁷ WFD recs 9 and 16. As one of the central principles in EU environmental law 'integration' has long been advocated as a way to promote sustainability and environmental protection requirements when defining and implementing policies. The 'integrative' approach of the WFD is multifaceted and targets both procedural and substantive elements, aiming primarily at integrating the environmental objectives of the directive into all stages of implementation. From a legal perspective, integration primarily entails coordination in implementation with other EU water directives and national water law, as well as with legal frameworks and policies in other policy fields, such as energy, agriculture, regional policy and spatial planning. It thus includes 'vertical integration' between different decision-making levels and actors including involvement by stakeholders and the public within a specific policy field, as well as 'horizontal integration' of the environmental objectives and water governance system of the WFD into other policies, sectors, activities and measures. See e.g. Sigrid Hedin and others, *The Water Framework Directive in the Baltic Sea Region*, (Nordregio 2007:2), 23; and Cora van Oosten, Assumpta Uzamukunda & Hens Runhaar, 'Strategies for achieving environmental policy integration at the landscape level' (2018) 83 *Environmental Science and Policy*, 43, 64.

⁸ Andrea Keessen and others, 'European River Basins Districts: Are they Swimming in the Same Implementation Pool?' (2010) 22 JEL 197, 213. The importance of horizontal (or external) integration is highlighted in WFD rec 16, where e.g. the cooperative project European spatial development perspective (ESDP) is especially mentioned. A general external integration obligation also exists in EU environmental policy, through the integration principle in art 11 of the Treaty on the Function of the European Union (TFEU), consolidated version [2012] OJ C 326/01.

⁹ WFD art 4(1)–(3), see also (n 34) for a thorough description of the environmental objectives.

¹⁰ Beatrice Hedelin, 'Potential Implications of the EU Water Framework Directive in Sweden. A comparison of the Swedish municipalities' current water planning regime with the requirements of the EU Water Framework Directive' (2005) 14 *European Journal of Spatial Development*, 11–13.

¹¹ Other examples are agricultural policy and policies on nature conservation, see Kessen and others (n 8) 213. The importance of full integration of EU environmental policies into other policies, not least on the development of the urban environment, is also one of the priority objectives in the Seventh Environment Action Programme, 'Living well, within the limits of our planet', Decision No 1386/2013/EU of the European Parliament and of the Council [2013] OJ L 354.

management activities at the catchment scale.¹² Previous research also indicates that establishment of robust forms of co-operation between the involved authorities and municipalities are vital in an adaptive governance system,¹³ and that the design of the legal framework can play a crucial role in this regard.¹⁴

In the WFD, the integrated and adaptive governance system is realised through River Basin Management Plans (RBMPs) and Programmes of Measures (PoMs) as key instruments for achieving the overall aims and environmental objectives prescribed by the directive.¹⁵ In 2015, through the landmark *Weser* case (C-461/13), the Court of Justice of the European Union ('CJEU') declared the environmental objectives of the WFD, including the obligation to prevent deterioration, as legally binding at "each stage of implementation".¹⁶ Hence, the Member States must make sure that the environmental objectives are complied with in every decision-making situation that might result in adverse effects on the aquatic environment. In essence, the Member States are prohibited from authorising projects, as well as adopting spatial plans or granting building permits, which might cause deterioration or jeopardise the attainment of the environmental objectives, unless the decision can be motivated under the derogation regime of article 4(7) in the WFD.¹⁷ The reasons for such derogations must also be clearly motivated and explained in the RBMPs.

In Sweden, the environmental objectives of the WFD have been primarily transposed as Environmental Quality Standards (EQSs),¹⁸ and spatial planning activities have been identified as an important tool in the implementation of these EQSs.¹⁹ As illustrated by the example of the

¹² Per Olsson and Carl Folke, 'Local ecological knowledge and institutional dynamics for ecosystem management: A study of Lake Racken River basin, Sweden' (2001) *Ecosystems* 4(2), 85–104; and Hedelin (n 10) 13.

¹³ See e.g. Hedelin (n 10), 11–13, and the references there included.

¹⁴ Inga Carlman, 'The Rule of Sustainability and Planning Adaptivity' (2005) 34 *Journal of the Human Environment*, 163–68; and Johanna Söderasp, 'What About State Implementation? New Governance and the Case of the European Union Water Framework Directive in Sweden' (2015) 18 *ERT* 508, and the references there included.

¹⁵ Directive 2000/60/EC arts 3(1), 10 and 11. See also Marleen van Rijswijk and Chris Backes, 'Ground Breaking Landmark Case on Environmental Quality Standards? The Consequences of the CJEU "Weser-judgement" (C-461/13) for Water Policy and Law and Quality Standards in EU Environmental Law' (2015) 12 *JEEPL* 363, 364; Lorenzo Squintani and Marleen van Rijswijk, 'Improving Legal Certainty and Adaptability in the Programmatic Approach', (2016) 28 *JEL* 443, 456; Voulvoulis Nikolaus, Arpon Dominic and Giakoumis Theodoros, 'The EU Water Framework Directive: From great expectations to problems with implementation' (2017) 575 *Science of the Total Environment* 358, 359.

¹⁶ Case C-461/13, *Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland* [2015] ECR I-433 ('*Weser*') para 47. I agree with Kessen and others who argue in this context that the authorities are bound by the objectives in each decision-making situation, meaning that it is not sufficient that the objectives are merely taken into consideration but also have to be complied with, see Keessen and others (n 8) 213.

¹⁷ *Weser* (n 16) paras 47, 50–51. Even though the particular case concerned authorisation of an individual project, the Court emphasised the structure of the derogation regime in article 4(7), i.e. where failure to comply with the objectives follows *new modifications* to the physical properties of a body of surface water or *new sustainable development projects*, and held that it is impossible to consider a project and the implementation of management plans separately. See also Gabriel Michanek, 'Tillstånd får inte ges om aktuell ytvattenstatus försämrats eller uppnåendet av god ytvattenstatus äventyras – analys av EU-domstolens förhandsavgörande C-461/13' (2016) *JP Miljönet* 4.

¹⁸ Water Quality and Management Ordinance (2004:660) Ch 4.

¹⁹ The Water Authorities, 'Verktyg för bättre vatten. Miljökvalitetsnormer – bakgrund, utformning och användning' (2016); County Administrative Boards, 'Miljökvalitetsnormer om luft i planering och rättstillämpning', Report nr 2013:43 (2013); County Administrative Boards, 'Miljökvalitetsnormer för vatten – en vägledning för fysisk planering i Stockholms län' (2011); National Board of Housing, Building and Planning, 'EU:s påverkan på fysisk planering', Report 2011:11 (2011) and 'Miljökvalitetsnormer i fysisk planering – en orientering för handläggare' (2005). The Water District Authorities have even identified the application of the most important legislation in this regard, the PBA, as a foundation for implementing the EQSs for water. See The Bothnian Bay Water District Authority, 'Förslag till åtgärdsprogram för Bottenvikens vattendistrikt 2015–2021, Samrådshandling' (2015) 7.

northernmost river basin district in Sweden (the Bothnian Bay river basin district), planning of new building projects can have a direct impact on the possibilities to achieve the environmental objectives, as sulphurous land is widespread in the district below the so-called highest coastline. When these soils are worked or drained, most frequently due to new building projects, water is considerably affected by falls in pH, which means that large quantities of heavy metals and aluminium are dissolved and come into circulation in the water environment. In light of this, leaching of metals and acidic substances into the water environment due to new building projects on sulphide rich clay soils have been identified as one of the five key environmental challenges in the district.²⁰

The *Weser* case clarified that Swedish law needed to be amended to clearly reflect the binding effect of the non-deterioration requirement in individual proceedings, as well as to transpose the possibility to grant derogations in line with article 4(7) of the WFD.²¹ As a result, a new legislative proposal amending primarily the Swedish Environmental Code has been adopted and the changes will enter into force on January 1 2019.²² However, due to a narrow formulation of the forthcoming rule that prohibits projects that might deteriorate the water status or negatively impact the possibilities to achieve the EQSs for water,²³ it is uncertain whether municipal planning activities under the PBA will be included in the new provision, even though that was the ambition.²⁴ The new provision stipulates a prohibition to authorise – new or altered – ‘activities’ or ‘measures’, if they can be expected to lead to deterioration or compromise the achievement of the EQSs for water.²⁵ As activities and measures are two concepts that are clearly connected to the Environmental Code, the wording of the provision indicates that it does not cover municipal planning decisions under the PBA.²⁶

Previous studies argue that the current Swedish legal framework cannot guarantee that EQSs are sufficiently taken into account in spatial planning and building decisions under the PBA,²⁷ or in the reviewing of such decisions.²⁸ The local perspective in municipal planning is

²⁰ Small water courses and shallow sea inlets with a poor water exchange run the greatest risks. These areas are also highly important as spawning and growth areas. See Bothnian Bay Water District, Bothnian Bay River Basin Management Plan 2016–2021, English summary (2017) 18, available at <http://www.vattenmyndigheterna.se> (2018–02–23). The Bothnian Sea water district authority also identifies preventive measures in order to reduce the risk of adverse effects on the aquatic environment in up-coming urban developments as a key challenge in the district, see Bothnian Sea Water District, Bothnian Sea River Basin Management Plan 2016–2021 (2017) 3.

²¹ See e.g. Michanek (n 17) 4–7; Ulf Bjällås, Magnus Fröberg & Arvid Sundelin, ‘Hur ska EU-domstolens dom i mål C-461/13 (Weserdomen) tolkas och vad får den för betydelse?’ (Fröberg & Lundholm advokatbyrå, 2015), 21; and the Swedish Agency for Marine and Water Management, ‘Följder av Weserdomen. Analys av rättsläget med sammanställning av domar’ (2016) Report 2016:30, 8–10.

²² Act (2018:1407) and Government Bill 2017/18:243, ‘Vattenmiljö och vattenkraft’ (2018).

²³ Forthcoming as SEC Ch 5 s 4 para 1, Act (2018:1407).

²⁴ Government Bill 2017/18:243 (n 22) 160.

²⁵ Ibid, 191. Forthcoming as SEC Ch 5 s 4 para 1. Compared to the current provision in the SEC Ch 2 s 7 paras 2–3, covering procedures on permissibility, licensing, approvals, exemptions, and inspections, the new provision appears unjustifiably narrow.

²⁶ Generally, the forthcoming amendments targets activities and measures under the SEC, while the issue of horizontal integration into sectoral legislations to a large extent are left unaddressed in the Bill.

²⁷ Martina Ekelund Entsson and Lena Gipperth, *Mot samma mål? Implementeringen av EU:s ramdirektiv för vatten i Skandinavien* (Juridiska institutionens skriftserie 2010, vol 6) 29–50; The Bothnian Bay Water District Authority, ‘Förslag till åtgärdsprogram för Bottenvikens vattendistrikt 2015–2021, Samrådshandling’ (2015) 7; Caroline Hansson, *Miljö kvalitetsnormer för vatten i det kommunala detaljplanearbetet – viktiga faktorer, svårigheter och möjligheter* (Kungliga Tekniska Högskolan, Stockholm 2016).

²⁸ National Board of Housing, Building and Planning, ‘Miljömål i domstolsprövningar enligt plan- och bygglagen’ (2015) Report 2015:5; County Administrative Boards (2013 n 19); Environmental Protection Agency, ‘Har miljö kvalitetsnormer förbättrat utomhusluften?’, Report 5915 (2008).

generally inadequate to ensure a long-term availability of good quality water in sufficient quantity for human needs.²⁹ Studies also indicate that the PoMs adopted under the WFD have not generally become an integrated part of water management activities in Swedish municipalities, and that the legal framework seems to provide for major differences between municipalities in this regard.³⁰ For example, in Hansson's study of how the municipalities in the County of Stockholm take EQSs into account in spatial planning, several of the local officials expressed difficulties in assessing at all whether e.g. a new housing project affects any specific water negatively, due to e.g. lack of knowledge, experience, resources and data.³¹ The local officials also expressed that the PBA is insufficient since it does not seem to provide any legal possibilities to set requirements for purification of the water in order to achieve the EQSs implemented under the WFD.³²

Against this background, the aim of this paper is to analyse and discuss the current Swedish legal framework for spatial planning in light of the legal obligations under the WFD, and, where deficiencies are found, suggest improvements to the current legislation. The paper focuses initially on examining in which ways the legal framework for spatial planning influences the implementation of the directive. The aim is pursued by combining legal analysis of EU and Swedish law with a literature review of the integrated and adaptive governance system of the WFD and spatial planning as a tool for its implementation.

Chapter two first describes the integrated and adaptive governance system of the WFD, focusing on the legal obligations, followed by an examination of the Swedish system and legal framework for spatial planning in chapter three. The findings of chapters two and three are discussed in chapter four, while the main conclusions of the paper are summarised in the paper's fifth and final chapter.

2. The Integrated and Adaptive Governance System of the WFD

2.1 Legal requirements under the directive

The overall purpose of the WFD is to establish a framework for the protection of all surface water and groundwater bodies within the Union.³³ For that purpose, further deterioration of the current water status shall be prevented and all waters must attain environmental objectives in terms of 'good water status', by 2015, 2021 or, at the latest, 2027.³⁴ In order to achieve the

²⁹ For example, the legally binding planning instruments, i.e. detail development plans and area provisions, are limited geographically, thus targeting only a small fraction of the municipal territory and focusing exclusively on the built environment and construction works, see PBA Ch 4 s 1.

³⁰ Mikael Sevå and Annica Sandström, 'Decisions at Street Level: Assessing and explaining the implementation of the European water framework directive in Sweden', (2017) 27 *Environmental Policy and Governance* 74, 84-85. The statistics and survey responses from the municipalities from the surveys carried out by the National Board of Housing, Building and Planning (Boverket) supports this, available at: <https://www.boverket.se/sv/om-boverket/publicerat-av-boverket/oppna-data/plan--och-byggenkaten/> (2018-08-16).

³¹ Hansson (n 27) 38 and 54.

³² Hansson (n 27) 33.

³³ More specifically, all inland surface waters (such as rivers and lakes), transitional waters, coastal waters and groundwater are comprised by the directive, see WFD arts 1 and 2(1)-(7).

³⁴ More explicitly, the environmental objectives prescribed in art 4 in conjunction with the definitions in art 2(18)-(26) of the WFD are to prevent deterioration of all waters, and to achieve good ecological and chemical status of surface waters, good ecological potential and good chemical status of artificial and heavily modified surface waters,

environmental objectives, the WFD provides for an integrated and adaptive water governance system. The adaptive approach of the WFD entails that water governance is conducted in six-year cycles and based on integrated planning at the scale of river basins (ecosystem/hydrologically-based).³⁵ A core idea behind the river basin approach is to enable coordination of measures in surface waters and groundwater belonging to the same ecological, hydrological and hydrogeological system.³⁶ As a start, each Member State had to identify the individual river basins within its territory, and assign them into individual 'river basin districts'.³⁷ They also had to make the appropriate administrative arrangements and identify the competent authority as the initial steps of implementation.³⁸ The river basin districts are thus the main units for implementing the WFD, where the idea is to take the circumstances of a specific district into account and develop customised measures and strategies for each individual river basin district.³⁹

In order to attain good water status in a river basin district, specific environmental objectives for each surface water and groundwater body must be adopted and eventually attained.⁴⁰ An analysis of the characteristics of each district, including a review of the impacts of human activity and an economic analysis of water use, should serve as basis for assessing current status and setting individual objectives.⁴¹ The role of the PoM is to identify the measures needed in each district in order to attain the environmental objectives. In this regard, the WFD specifies 'basic measures' as minimum requirements in the PoMs,⁴² and 'supplementary measures' that are required when monitoring results indicate that the basic measures are insufficient to attain the objectives.⁴³ The RBMP, constituting the master document for a river basin district, shall collect information about all stages of implementation and present that information in an accessible and

good quantitative and chemical status of groundwater, and implement the necessary measures to reduce pollution from priority substances. Beside the possibilities to extend the deadline, there are other exemptions available in art 4, such as temporary deterioration due to force majeure, and less stringent environmental objectives for specific water bodies so affected by human activity, or their natural conditions is such that the achievement of the original objectives would be infeasible or disproportionately expensive (WFD art 4(4)–(6)). In addition, the Member States may allow new modifications or sustainable human development activities, despite such projects' adverse effects on the aquatic environment, when all of the conditions in art 4(7) of the WFD are met. In light of the integrated planning approach of the WFD, all forms of exemptions must be specifically set out and explained in the RBMPs.

³⁵ WFD arts 4, 5, 8, 11, 13 and 15. See also David Grimeaud, 'Reforming EU Water Law: Towards Sustainability?' (2001) *European Environmental Law Rev* 125; and Beatrice Hedelin and Magnus Lindh, 'Implementing the EU Water Framework Directive – Prospects for Sustainable Water Planning in Sweden' (2008) 18 *European Environment* 327–344.

³⁶ WFD rec 33.

³⁷ WFD art 3(1). A river basin district is defined as "the area of land and sea, made up of one or more neighbouring river basins together with their associated groundwater and coastal waters", see WFD art 2(15).

³⁸ WFD art 3(2); Grimeaud (n 35) 125.

³⁹ WFD rec 13. Decisions should in other words be taken "as close as possible to the locations where water is affected and used" and strategies and measures adjusted to the regional and local conditions.

⁴⁰ These specific objectives shall be determined based on an assessment of current conditions, primarily carried out on the basis of the normative definitions of ecological status defined in Annex V, see WFD art 4 and Annex V. See also Henrik Josefsson, 'Good Ecological Status. Advancing the Ecology of Law' (Uppsala University 2015) 52.

⁴¹ WFD art 5(1).

⁴² WFD, art 11. The basic measures include e.g. measures to promote an efficient and sustainable water use in light of achieving the environmental objectives, measures to safeguard water quality for the production of drinking water long-term, and measures to control the abstraction of fresh surface water and groundwater including necessary registers for such protection and control, see WFD art 11(3)(a)–(f). In light of the fact that one of the WFD's ambitions is to reduce and eventually eliminate pollution of water, the basic measures include different measures to control and occasionally even prohibit discharges of pollutants from both point and diffuse sources, comprising e.g. mandatory authorisation procedures and emission limit values for such activities, see WFD art 11(3)(g)–(l).

⁴³ WFD art 11 and Annex VI, which contains a non-exclusive list of such supplementary measures.

transparent manner.⁴⁴ Carried out properly, the RBMPs should serve as a communication tool for everyone that is involved in water governance or have an interest in how water is governed in their district.⁴⁵

The adoption of specific environmental objectives, PoMs and RBMPs for each river basin district is however only the initial step in each six-year cycle. Subsequently, the general measures identified in the PoMs and the overarching information and knowledge about a specific river basin, sub-basin or water course identified in the RBMP, must be taken into account and further operationalised into concrete measures adjusted to regional and local conditions. For example, more detailed programmes and management plans can be adopted in addition to a district's RBMP and PoM, if necessary to deal with particular aspects of water management in, for example, a sub-basin or particular water type.⁴⁶ Reflecting the integrated and adaptive governance approach of the WFD, such a detailed plan or programme should advantageously be developed taking the local perspective and participatory approach of the WFD into account.⁴⁷

A crucial part for effective implementation is thus to make sure that the overarching documents, not least the environmental objectives for each water body, are actually taken into account in subsequent decision-making at all levels and in each situation that might have adverse impact on the aquatic environment. This obligation was stressed by the CJEU in the *Weser* case, where the Court clearly declared the environmental objectives of article 4, including the obligation to prevent deterioration, to be legally binding for the Member States at each stage of implementation.⁴⁸ The Court also held that the Member States are prohibited from authorising projects that are likely to cause deterioration or jeopardise the attainment of the environmental objectives, *unless* the decision can be motivated under the derogation regime of WFD article 4(7).⁴⁹ In that case, the PoMs and RBMPs must be updated accordingly. It thus follows from *Weser* that the WFD environmental objectives must be complied with in each decision-making situation that might have adverse impact on the water environment, such as in licensing procedures for environmental hazardous activities or water operations under the Environmental Code, or when adopting spatial plans or granting local building permits under the PBA.⁵⁰ Interesting to note in this context is that it was a planning decision ("the planning approval") that was contested in the proceedings before the German court in *Weser*, and which led to the German court asking the CJEU for a preliminary ruling.⁵¹

Another crucial step in each six-year cycle is to monitor the water status in a coherent manner covering the whole district, not least in order to evaluate any progress. For this,

⁴⁴ According to WFD Annex VII, an RBMP shall include: a general description of the characteristics of a district, a summary of significant pressures and impact of human activity on waters, identification of protected areas, and results of the monitoring programmes presented in map form. In addition, a list of the environmental objectives and a summary of planned and taken measures, including a report on progress and identification of those waters that run the greatest risk of not achieving the objectives, must be included in an RBMP.

⁴⁵ WFD, Annex VII.

⁴⁶ *Ibid*, art 13(5).

⁴⁷ *Ibid*, art 14 specifies the closer meaning of the participatory approach under the directive.

⁴⁸ *Weser* (n 16) para 43. However, the CJEU had already in a prior case implied that the environmental objectives were to be viewed as legally binding, at least in programmatic terms, stipulating that the directive's provisions require Member States to *take the necessary measures to ensure* that they were attained, see case C-32/05 *Commission v Luxembourg* [2006] ECR I-11323, para 43 with reference to para 39.

⁴⁹ *Weser* (n 16) paras 47, 50-51.

⁵⁰ Keessen and others (n 8) 213; and Michanek (n 17) 4.

⁵¹ *Weser* (n 16) paras 16 and 26.

monitoring programmes must be established,⁵² and management strategies and measures evaluated and adjusted in keeping with the monitoring results.⁵³ In line with this focus on adaptation and learning, and as stated by the CJEU's view in *Weser*, it is crucial that the results of the monitoring are directly linked to an obligation to implement additional measures if the results indicate that the measures taken so far are insufficient to achieve the environmental objectives within the prescribed time.⁵⁴ As a final step of each six-year cycle, an interim report including a description the progress of implementation of planned measures of the PoMs, must be sent to the EU commission.⁵⁵

2.2 Flexibility in implementation and the derogation regime in article 4(7) of the WFD

Integrated planning approaches in EU environmental law have been described as approaches that “enables authorities to balance the negative effects on (a certain component of) the environment with the positive effects of measures that will improve the (relevant component of the) environment on a larger scale than the project itself.”⁵⁶ Boeve and van der Broek, for example, generally stresses the need for flexibility and possibilities for local authorities to adjust their strategies to regional and local conditions under an integrated approach for implementing EQSs.⁵⁷ In their view, as long as a plan, such as the PoMs and RBMPs adopted under the WFD is properly integrated into other policies, it may be used as an instrument “to weigh the sum of polluting projects and the sum of compensatory measures” to increase the possibilities to achieve EQSs in a long-term perspective.⁵⁸

However, previous comparisons of the implementation of the WFD in the Member States show that there are large differences in how the WFD has been horizontally integrated into external policy fields.⁵⁹ In many Member States, horizontal integration has taken place in the context of spatial planning by requiring that the RBMPs as well as the WFD's environmental objectives are complied with when spatial plans are being drafted.⁶⁰ For example, in Spain the constitutional court has ruled the RBMPs to be superior to other plans, and in France as well as

⁵² WFD art 8.

⁵³ Ibid, arts 5(2), 11(8) and 13(7).

⁵⁴ See also Groothuijse & Uylenburg (n 2) 132, who similarly points out such a link as crucial for the effectiveness of an integrated approach in relation to the achievement of EQSs.

⁵⁵ WFD art 15(3).

⁵⁶ Groothuijse and Uylenberg (n 2) 121. As described by the authors, under Dutch law new projects that negatively effects the possibilities to achieve set EQS can be allowed, as long as they are in accordance with a plan where all measures combined is supposed to reach the desired environmental quality. Such projects' compatibility with set EQSs need not either to be reviewed separately. See also Government Official Report (SOU) 2005:113, 'Åtgärdsprogram för miljökvalitetsnormer', 118–20, for a similar discussion of using PoMs as a planning tool that to some extent compensates for deteriorations in the implementation of EQSs, e.g. through a new instrument of 'improvement excesses'.

⁵⁷ Boeve & van der Broek (n 2) 79.

⁵⁸ Ibid.

⁵⁹ See e.g. Keessen and others (n 8); and Baaner, 'Programmes of Measures under the Water Framework Directive – A Comparative Case Study' (2011) 1 Nordisk Miljörättslig Tidskrift 31.

⁶⁰ Keessen and others (n 8) 216.

in Italy, the spatial plans must always be compatible with the RBMPs.⁶¹ In Denmark, the PoMs have been made integrated parts of the legally-binding RBMPs.⁶²

The integrated planning and adaptive management approach of the WFD leaves considerable room for flexibility in implementation, not least with respect to the choice of measures. To some extent, the Member States also have the possibility to balance different environmental, spatial and economic interests at river basin level, through reflection in the PoMs and the RBMPs.⁶³ The latter form of discretion was, however, clearly restricted by the *Weser* ruling where the CJEU emphasised the binding nature of the WFD environmental objectives in every decision-making situation that might have adverse impact on the aquatic environment, *irrespective* of the longer term planning provided for by the PoMs and RBMPs.⁶⁴ The Court also made clear that the only possibility to allow for new modifications and/or plans or projects that are expected to lead to deterioration or jeopardise the achievement of the environmental objectives, is through the derogation regime in article 4(7) of the WFD.⁶⁵

In the *Protect* case⁶⁶ from 2017, the CJEU went one-step further, and declared the WFD environmental objectives to be sufficiently clear and unconditional to have direct effect. In other words, individuals and duly constituted environmental organisations must be able to rely on the objectives before a national court, and national courts must be able to take them into consideration as an element of EU law, regardless of their transposition into the national legal system.⁶⁷ In particular, the environmental objectives of article 4 were deemed to be directly effective in relation to the authorisation of individual projects.⁶⁸

In this context it is important to recognise that a certain degree of uncertainty regarding the potential effects on the aquatic environment of a plan or a project is acceptable in authorisation and planning processes. In particular, when short-term and non-permanent adverse effects on the water environment are expected to be mitigated through planned measures as an *inherent* part of the plan or project, this should not be considered such a deterioration or compromising that requires a derogation under article 4(7) of the WFD.⁶⁹ For example,

⁶¹ Keessen and others (n 8) 216.

⁶² Baaner (n 59) 35.

⁶³ Boeve & van der Broek (n 2) 74.

⁶⁴ *Weser* (n 16) para 50.

⁶⁵ *Ibid.* Furthermore, the CJEU held that deterioration occurs as soon as the status of at least one of the quality elements that are part of the classification of the ecological status or potential, falls by one class, even if that fall does not result in a fall in classification of the body of water as a whole [para 69].

⁶⁶ Case C-664/15 *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation v Bezirkschauptmannschaft Gmünd* ('*Protect*') [2017] EU:C:2017:987.

⁶⁷ *Ibid.*, para 34. In the words of the CJEU: "It would be incompatible with the binding effect conferred by Article 288 TFEU on a directive to exclude, in principle, the possibility that the obligations which it imposes may be relied on by the persons concerned. The effectiveness of Directive 2000/60 and its *aim* of protecting the environment, (...), require that individuals or, where appropriate, a duly constituted environmental organisation are *able to rely on it* in legal proceedings, and that the national courts *be able to take that directive into consideration* as an element of EU law in order, inter alia, to *review whether a national authority that has granted a permit* for a project that may have an effect on the water status *has complied with its obligations under Article 4 of the directive*, in particular preventing the deterioration of bodies of water, and has thus kept within the limits of the discretion granted to the competent authorities by that provision." (emphasis added).

⁶⁸ *Ibid.*, para 34.

⁶⁹ CIS Guidance Document No. 36, 'Exemptions to the Environmental Objectives according to Article 4(7)', 16, 19, and 36-37. In this context, it is important to separate *mitigating measures* from *compensatory measures*. While the first category targets the specific project or activity and aims at reducing its environmental effects, the second category refers to the possibility to prescribe and undertake measures in the water course as a whole, i.e. in order to compensate for the new activity. In other words, compensatory measures primarily becomes relevant in situations

temporary or short-term effects that occur under the building phase of construction works do not need to be addressed, if no long-term adverse consequences to the water environment are expected thereafter.⁷⁰

The time-span and extent of the adverse effects are thus central for determining whether deterioration occurs or if a plan or project jeopardises the attainment of the environmental objectives. In such assessments it is crucial that the documentation is of sufficient quality so that the authority can be relatively sure that the plan or project will not deteriorate the status or compromise the attainment of the environmental objectives long term. It should also be noted that, when uncertainties are assessed and estimated, the precautionary principle must prevail. If there is a great deal of uncertainty in an individual case, the conditions for granting a derogation under article 4(7) of the WFD should be examined instead.⁷¹

For the derogation regime to apply, failure to achieve the environmental objectives must be the result of either new modifications to the *physical* characteristics of a surface water body or alterations to the level of groundwater bodies, or of a new ‘sustainable development activity’, causing deterioration from high status to good status in a particular surface water body.⁷² In addition, all of the conditions prescribed in article 4(7) must be met and the RBMPs and PoMs adjusted accordingly.⁷³ The conditions include that the plan or project must be of an overriding public interest and/or its benefits on, for example, human safety or sustainable development clearly outweighing the benefits of achieving the environmental objectives or preventing deterioration of the water status. Furthermore, all practicable steps to mitigate the adverse impact on the water environment must be taken and the reasons for derogation evidently explained in the RBMP.⁷⁴

In relation to the application of the derogation regime, scholars have questioned whether the CJEU’s interpretation of the non-deterioration requirement in *Weser* also includes increased emissions of nutrients and hazardous substances.⁷⁵ In particular, it is questioned if it is reasonable to include these emissions in the non-deterioration requirement, in view of the fact that it is difficult to motivate projects that will lead to increased emissions under the derogation regime in article 4(7) of the WFD.⁷⁶ The fact that one of the ambitions of the WFD is to reduce and eventually eliminate pollution of water – not only by hazardous substances and priority hazardous

where a project or an activity has been permitted by use of the derogation regime in article 4(7) of the WFD. See CIS Guidance Document No. 36, Chapters 4-5.

⁷⁰ Ibid, 22. To compare, a permanent or long-term effect could e.g. be deterioration of the water status due to an increased and continuous discharge of nutrients and/or pollutants.

⁷¹ See also CIS Guidance Document No. 36, ‘Exemptions to the Environmental Objectives according to Article 4(7)’, 36.

⁷² WFD art 4(7).

⁷³ Ibid, art 4(7)(a-d); and *Weser* (n 16) 46.

⁷⁴ According to CIS Guidance Document No. 36, 63, the core rationale behind the requirement to explain the derogation in the management plan is to encourage public participation and ensure that the use of exemptions is transparent and traceable. The importance of transparency in cases concerning application of the WFD provisions was also stressed by the CJEU in case C-664/15 *Protect* (n 66) paras 71-75, and 81.

⁷⁵ Bjällås, Fröberg & Sundelin, (n 21) 30-31. As the authors point out, such substances are included in the physical and chemical factors that determine the characteristics and status of a water, and are as such likely to fall within the assessment of whether or not the status of the water deteriorates due to increases emissions of significance.

⁷⁶ Ibid, 30-31. This is due to the narrow design of the derogation regime in article 4(7) of the WFD, where the first indent only includes modifications to the *physical characteristics* of a surface water, thus excluding projects that only entail increased (direct) emissions of pollutants and/or nutrients. In addition, the second indent only include projects that cause the ecological status to deteriorate from high status to good status, i.e. providing a small sample of water courses in which the derogation can apply.

substances, but also other substances that otherwise prevent Member States from achieving the environmental objectives – suggests that increased emissions of nutrients and hazardous substances *are* included in the obligation to prevent deterioration as interpreted by the CJEU in *Weser*.⁷⁷ Hence, the Member States are obliged to refuse authorisation of also these projects if they risk to deteriorate the water status, and sufficient conditions of precaution (i.e. mitigating measures) cannot be prescribed to eliminate that risk.⁷⁸

About a year after *Weser*, in the *Schwarze Sulm* case (C-346/14),⁷⁹ the CJEU delivered further insight on the importance of a correct application of the derogation regime for new activities and/or modifications affecting the water environment, and the discretion granted to the Member States in this regard. The case was an infringement procedure against the Republic of Austria, where the main issue was whether a decision to authorise construction of a new hydropower plant in the Schwarze Sulm river had been adopted in compliance with the requirements under the derogation regime of article 4(7) of the WFD.

The Court first held in general terms that the Member States must be allowed “a certain margin of discretion” in the assessment of, for example, what constitutes an overriding public interest, since the WFD – as a framework directive adopted under article 192 (175) TFEU – does not seek to achieve complete harmonisation of the rules concerning water in the Member states.⁸⁰ Under this margin of discretion, the Court alleged that the Republic of Austria was entitled to motivate the project under the derogation regime, emphasising that all of the conditions seemingly had been carefully examined in the basis for the decision.⁸¹ For example, the reasons behind the project had been specifically set out and explained in the RBMP, and measures to mitigate the project’s negative impact had been planned.⁸² On those grounds, the action of the Commission was dismissed as unfounded.

It follows from *Schwarze Sulm*, that it is crucial to update the PoMs and RBMPs when new modifications leading to adverse effects on the aquatic environment are authorised. By such adjustments on the river basin or even river basin district level, the negative impact on the aquatic environment of allowing the new project might be compensated, or balanced, by other measures taken in the same or adjacent water courses in a district.⁸³ Planned compensatory measures should favorably reflect the river basin approach, where measures can be taken either upstream or downstream in the concerned water body, for the purpose of improving the water status of that

⁷⁷ See WFD rec 45 and arts 11(3)(k), 11(6), 16, and 17; and *Weser* (n 16) paras 47–48, 50, 55, 66–67 and 69. See also Werner Brack and others, ‘Towards the review of the European Union Water Framework Directive: Recommendations for more efficient assessment and management of chemical contamination in European surface water resources’ (2017) 576 *Science of the Total Environment* 720–737. They stress e.g. that the problems with chemical pollution of the water environment need to be significantly more prioritised when implementing the WFD in the future.

⁷⁸ As implied by the foregoing, the only other possibility is to motivate the project under the derogation regime in article 4(7) of the WFD, which, as said, is very difficult when it comes to projects causing increased emissions under the current design of the regime.

⁷⁹ Case C-346/14 *Commission v Republic of Austria* (‘*Schwarze Sulm*’) [2016] ECR I-322.

⁸⁰ *Ibid*, para 70. See also case C-32/05 *Commission v Luxembourg* [2006] ECR I- ECR I-11323, para 41 and case C-525/12 *Commission v Germany* [2014] ECLI:EU:C:2014:2202, para 50.

⁸¹ *Schwarze Sulm* (n 79) paras 74, 80–81.

⁸² *Ibid*, paras 68 and 77.

⁸³ This latter condition is also a general condition for applying all of the derogations and exemptions contained within art 4 of the WFD. See WFD art 4(8) stipulating that the use of exemption may not permanently exclude or compromise the achievement of the environmental objectives in other water bodies within the same river basin district or hamper implementation of other EU environmental legislations.

water body, despite allowing the project. This adjustment obligation under the derogation regime can thus be viewed as an important feature of the integrated and adaptive approach of the WFD.⁸⁴

To conclude, the Member States are not prevented from adopting a rather flexible integrated planning approach at river basin level, where the adverse effects of new modifications and/or projects are balanced to other measures in the river basin district as a whole. Important to note, however, is that flexibility primarily lies in the choice of measures to be adopted on regional and local levels, adjusted to the local and regional conditions at hand. Following *Weser*, each new modification, plan or project, including new urban developments, that might have adverse impact on the aquatic environment, must be assessed not only in light of the planning provided by the PoM and the RBMP, but also on the basis of *its specific impact* on the relevant environmental objectives (or EQSs). In case of adverse effects that may not be mitigated as an integral part of the project, the project must instead be motivated under the derogation regime. In light of *Schwarze Sulm*, the Member States are allowed a certain degree of discretion in this latter assessment, as long as all of the conditions are met and well documented and justified in the grounds for the decision.⁸⁵

According to the EU Commission and in light of article 14 of the WFD and the *Protect* case, it is also crucial to provide for public consultation in relation to the authorisation of a new project, in particular when applying the derogation regime.⁸⁶ Failing to carry out such consultation prior to authorisation risks the connection between the specific project and other water uses in the district being lost.⁸⁷ The legal framework must thus provide sufficient measures and limits of discretion for subsequent decision-making at all levels to implement the legally binding environmental objectives under WFD. In the words of Jacobsen and others: “Flexibility in WFD implementation is, thus, not the same as relying on soft or voluntary measures. Rather, it is necessary to adopt adequate measures that are suitable for a flexible application at local level.”⁸⁸

3. The Swedish System for Spatial Planning

3.1 Introducing the PBA

In Sweden, spatial planning for the use of land and water areas is primarily a municipal concern, regulated foremost through the PBA and, to some extent, the Swedish Environmental Code

⁸⁴ See also CIS Guidance Document No. 36, 66–67, accentuating the importance of considering the inter-relations with existing pressures from other uses when applying a derogation in accordance with article 4(7) of the WFD.

⁸⁵ See also Case C-43/10, *Nomarchiaki Aftodioikisi and Others* [2012] ECLI:EU:C:2012:560, paras 67 and 69, where the CJEU similarly emphasised the importance of such flexibility in the application of the derogation regime for the Member States when implementing the WFD. According to CIS Guidance Document No. 36, 64, it is normally sufficient to set out and explain the reasons for derogation in the next review of the RBMP, if a derogation is granted during an ongoing six-year cycle.

⁸⁶ See EU Commission, ‘Streamlining environmental assessment procedures for energy infrastructure Projects of Common Interest (PCIs)’, 2013, 2, available at https://ec.europa.eu/energy/sites/ener/files/documents/20130919_pci-en-guidance.pdf.

⁸⁷ *Ibid.*, 12.

⁸⁸ Brian H. Jacobsen and others, ‘Implementing the water framework directive in Denmark – Lessons on agricultural measures from a legal and regulatory perspective’ (2017) 67 Land Use Policy 104.

(1998:808) (SEC). As mentioned in chapter 1, the environmental objectives in article 4 of the WFD has been primarily transposed as EQSs for water and spatial planning has been identified as an important tool in the implementation of the EQSs for water under the WFD. However, the legal framework for implementing EQSs for water in Sweden has long been criticised for being too weak to ensure compliance in subsequent decision-making, not least in planning matters under the PBA.⁸⁹ In the recent Bill regarding the water environment and hydropower, adopted primarily to better transpose certain requirements of the WFD into the Swedish legal framework, the Swedish government also acknowledges that the handling of EQSs in municipal planning under the PBA needs to be officially investigated,⁹⁰ and no amendments were introduced.

Under Swedish law, the purpose of EQSs is to sustainably protect human health and/or the environment, alternatively to remedy damage or harm to human health or the environment.⁹¹ Decided EQSs are, however, legally binding only for the authorities and the municipalities, and thus not for individuals.⁹² Accordingly, public authorities and municipalities must ensure that EQSs are complied with in subsequent decision-making, but there are no sanctions or enforcement mechanisms available to guarantee such compliance. Similarly, the key instrument for implementing EQSs in Sweden, PoMs, are stated to be legally binding on the relevant public authorities and municipalities,⁹³ but, without being combined with clear mechanisms for control or enforcement. The primary control measure in this regard is that the government may ask an individual municipality to present how they intend to implement a PoM in municipal planning activities or otherwise ensure compliance with decided EQSs in municipal undertakings.⁹⁴

Sweden has a strong decentralised system for development planning and planning of land and water use, regulated foremost in the PBA.⁹⁵ Under the Act and pursuant to the general principle of local self-government, the municipalities have an almost exclusive responsibility for the planning of land and water areas on their respective territories, known as the municipal planning monopoly.⁹⁶ Certain State interests must however be considered when applying the PBA, mainly through consideration of the provisions on management of land and water areas in

⁸⁹ See e.g. Government Official Report (SOU) 2005:113, 'Åtgärdsprogram för miljökvalitetsnormer'; Ekelund Entsson & Gipperth (n 27) 29-50; and Gabriel Michanek and others, *Genomförande av det svenska systemet för miljökvalitetsnormer, lärdomar från forskningsprogrammet SPEQS* (Havsmiljöinstitutet, 2016), 28 ff.

⁹⁰ Government Bill 2017/18:243 (n 22) 161.

⁹¹ SEC Ch 5, s 1 para 1.

⁹² SEC Ch 5 s 3.

⁹³ SEC Ch 5 s 8.

⁹⁴ SEC Ch 5 s 13. As described in section 3.2, the other primary control mechanism in this regard is the possibility for the County Administrative Boards to review and if necessary repeal municipal planning decisions that infringe on EQSs under the PBA Ch 11 ss 10-11.

⁹⁵ This main responsibility for local land and water use planning was first formally assigned to the municipalities through the adoption of the first PBA (1987:10) in 1987, even though the municipalities already prior to this, in particular through a reform in 1959, had had influence over the land and water use planning in their municipality. A main purpose with the PBA of 1987 was however, to clearly decentralise the decision-making in spatial planning and significantly decrease the State influence and control in this regard. In line with this, the previous requirement for County Administrative Boards to approve on municipal plans were abolished. See Government Bill 1985/86:1, 'Med förslag till ny plan- och bygglag' (1986) 1, 59-68, and 76-78. The PBA of 2010 (2010:900) made no changes in this regard.

⁹⁶ PBA Ch 1 s 2 and the Instrument of Government (1974:152) Ch 14 s 2. See also Government Bill 1985/86:1 (n 95) 76-77.

Chapters 3–4 of the SEC and the provisions on EQSs in SEC Chapter 5.⁹⁷ Such considerations include conservation of nature, facilities for energy development or military defence, as well as EQSs for water, air or noise. The PBA does not distinguish between the different categories of EQSs under the SEC in this regard; they are all to be followed in the municipal spatial planning. Due to the *Weser* case, discussed in section 2.2, this general obligation for the municipalities can be said to have been strengthened considerably as regards EQSs for water.

However, as implied above in the introduction, the latest amendments to the Swedish legal framework does not clearly reflect such an understanding of the *Weser* case. For example, the wording of the new provision that stipulates a non-deterioration requirement and a general prohibition to infringe on the EQSs for water in individual proceedings, only refer to new or altered activities and measures.⁹⁸ The government argue in the Bill that municipal planning decisions should fall within the application of the new provision, due to the general requirement in the PBA to comply with EQSs adopted under the SEC, and that accordingly no changes in the PBA are necessary.⁹⁹ The limitation to activities and measures in the provision is, however, problematic in this regard for mainly two reasons. *First*, the use of terminology (i.e. activities or measures) is clearly associated with the SEC, *but not* with planning decisions under the PBA.¹⁰⁰ Another clear indication of this is that in the specific ‘statute comment’ for the new provision, authorisation, notification and supervision of activities and measures are listed, while planning decisions under the PBA are not.¹⁰¹ *Second*, the general obligation for the municipalities to comply with EQSs adopted under the SEC, cannot be considered to automatically include all provisions in Chapter 5 of the SEC and it is therefore highly uncertain whether the new prohibiting rule will have an impact on the application of the PBA.¹⁰²

In addition, unlike in situations when authorities and municipalities try cases under the SEC – where they as a result of the forthcoming legislative changes will be obliged to request an opinion from the Water District Authorities when considering to apply a derogation in accordance with article 4(7) of the WFD –¹⁰³ no corresponding possibility for the municipalities when applying the PBA is introduced, even though the government recognises that such a possibility might be necessary to introduce in planning and building processes under the PBA.¹⁰⁴ This further indicates that the new prohibiting obligation does not cover municipal planning decisions under the PBA. Hence, for clarity, and in order to impose clear legal obligations on the municipalities in this regard, municipal planning and building decisions under the PBA should have been explicitly included in the new provision. With the current formulation of the

⁹⁷ PBA Ch 2 ss 3 and 10.

⁹⁸ Forthcoming as SEC Ch 5 s 4 para 1, Act (2018:1407).

⁹⁹ See PBA Ch 2 s 10; and Government Bill 2017/18:243 (n 22) 160–61.

¹⁰⁰ As expressed by the Swedish government in the preparatory works for the SEC, the term *activity* is used primarily to describe something that is on-going and risks to adversely affect the environment or human health, such as environmental hazardous activities or water operations, see Government Bill 1997/98:45, ‘Miljöbalk’ (1998) 201–07. In addition, when it comes to the provisions on Environmental Impact Assessments under the SEC, a clear distinction is made between *activities and measures* and *plans or programs*, which further indicates that plans or programmes are not included in the term *activity* under the SEC, see SEC Ch 6 s 1 para 1.

¹⁰¹ Government Bill 2017/18:243 (n 22) 191–95.

¹⁰² This is also stressed by the National Board of Housing, Building and Planning, see Government Bill 2017/18:243 (n 22) 159.

¹⁰³ Ibid, 208–09 and 211–14, forthcoming as SEC Ch 19 s 5 in conjunction with SEC Ch 22 s 13 para 2, Act (2018:1407).

¹⁰⁴ Government Bill 2017/18:243 (n 22) 161.

provision, there is a significant risk that the municipalities will disregard the requirements in the municipal planning and building decisions.

3.2 Main instruments in the PBA for implementing EQSs for water

The PBA is said to promote a good and equal societal progress and a sustainable environment for present and future generations,¹⁰⁵ but the Act does not favour ecological sustainability above economic or social sustainability. Rather, the all three pillars of sustainable development are to be equally promoted.¹⁰⁶ Both public and private interests are also to be considered in the application of the PBA, but priority must be given to usages that promotes good management in the public interest.¹⁰⁷ Furthermore, many different values and often conflicting interests must be balanced by the municipalities when applying the Act, including natural and cultural values, environmental and climate aspects, inter-municipal and regional conditions, social factors, sustainable governance of land and water areas, economic growth, as well as housing construction and development of the housing stock.¹⁰⁸ Another fundamental requirement is that the built environment and construction works must be located on land that is suited for that purpose, based on for example land, rock and water conditions, possibilities to provide for water supply and other community services, and the possibilities to prevent water and air pollution.¹⁰⁹ As a result of the wide discretion granted and the many conflicting interests of the Act, the PBA has, in previous studies, proven to be insufficient when it comes to achieving environmental objectives by using the instruments of the Act.¹¹⁰

The plans are the main instruments for implementing the EQS for water. The PBA enables planning on three different levels: on the regional level through ‘regional plans’,¹¹¹ comprehensive local planning level through ‘comprehensive plans’,¹¹² and on an in-depth local level through ‘detail development plans’ or ‘area provisions’.¹¹³ Due to the municipal planning monopoly, the most common planning levels are the latter two.¹¹⁴

The legislative instrument regional plan means that the government decides to institute a regional planning body for municipal cooperation, and the instrument is foremost to be used if the ordinary planning dialogue amongst municipalities, under the control and influence of the

¹⁰⁵ PBA Ch 1 s 1.

¹⁰⁶ Government Bill 2009/10:170, ‘En enklare plan- och bygglag’ (2010) 414; Gabriel Michanek and Charlotta Zetterberg, *Den svenska miljörätten* (2012) 457.

¹⁰⁷ PBA Ch 2 ss 1 and 2.

¹⁰⁸ PBA Ch 2 s 3.

¹⁰⁹ PBA Ch 2 s 5.

¹¹⁰ See e.g. National Board of Housing, Building and Planning (n 28); Swedish Environmental Protection Agency, ‘Miljömålen – Årlig uppföljning av Sveriges Miljökvalitetsmål och etappmål 2016’. Rapport 6707, Mars 2016, 164.

¹¹¹ PBA Ch 7.

¹¹² PBA Ch 3.

¹¹³ PBA Chs 4–6.

¹¹⁴ Regional cooperation is primarily left to the municipalities with minimal State involvement. Government Bill 1985/86:1 (n 95) 189; and Government Bill 2009/10:170 (n 106) 253–54. However, legislative changes in this regard will enter into force in January 1 2019. The adopted legislative changes initially concern the Counties of Stockholm and Skåne exclusively, and the main purpose is to increase cooperation in those regions in order to better secure the supply of housing. In light of this, the legislative changes mainly concern issues on significance for the physical environment. Such a regional plan must however also present how EQSs decided under Ch 5 of the SEC, including EQSs for water, have been complied with in the region, see Government Bill 2017/18:266, ‘Regional planering’ (2018) 11, 59, 83, and 90.

County Administrative Boards is deemed insufficient or if there is an intractable conflict in the region.¹¹⁵ Adopted regional plans are however not legally binding for subsequent decision-making in the municipalities.¹¹⁶ As these plans are rare at present, they currently do not play an important role in implementing EQSs for water. However, considering the river basin district perspective required under the WFD to reflect the hydrological flow of water, regional plans could potentially be used as important tools in this regard. Such plans could, for example, provide crucial guidance for future municipal planning of such waters that flow in several adjacent municipalities.

The comprehensive plans are also not legally binding for the municipalities, which means that such plans only have indicative effects for future planning on a more detailed level.¹¹⁷ The municipalities are, however, obliged to have an up-to-date comprehensive plan that covers the entire territory of the municipality.¹¹⁸ The comprehensive plan shall indicate the orientation for the long-term development of the physical environment, as well as provide guidance for decisions on how land and water areas, including the built environment, are to be used, developed and protected.¹¹⁹ In line with this, the plan must, for example, declare how the municipality intends to streamline the comprehensive plan with relevant national and regional goals, plans, and programmes of significance for sustainable development within the municipality.¹²⁰ The plan must also indicate how the national interests of Chapters 3–4 of the SEC are to be safeguarded and explicitly present how EQSs (for water) are to be followed in municipal activities under the Act.¹²¹

Guidance provided by a comprehensive plan can thus play a crucial role for the implementation of EQSs for water. A comprehensive plan can, for example, provide information on which water courses that are currently of insufficient quality due to existing and previous pressures, and therefore shall be protected from further exploitation. Many of the guiding provisions in the SEC and the PBA referred to above are, however, generally designed and thus provide insufficient guidance to ensure that such information is actually provided by the comprehensive plan.¹²² The municipalities also have substantial discretion in deciding which national and regional planning documentation that are most relevant to consider in comprehensive planning on the local level.¹²³ As a result of this discretion, the PBA does not list neither the PoMs nor the RBMPs as mandatory to consider in municipal comprehensive planning, and neither in planning on the more detailed level under the Act. Such planning, conducted through detail development plans and area provisions, are primarily related to city development planning and construction works. In certain prescribed situations, it is mandatory

¹¹⁵ PBA Ch 7 s 1; and Government Bill 1985/86:1 (n 95) 190–91.

¹¹⁶ PBA Ch 7 s 6 para 1. This is further clarified in the new Bill, see Government Bill 2017/18:266 (n 114) 11.

¹¹⁷ PBA Ch 3 ss 2–3.

¹¹⁸ PBA Ch 3 s 1. In line with this, it is also mandatory for the municipalities to review the topicality of their comprehensive plan at least once every four years, see PBA Ch 3 s 27.

¹¹⁹ PBA Ch 3 ss 2 and 5.

¹²⁰ PBA Ch 3 s 5 para 4.

¹²¹ PBA Ch 3 s 5 para 3.

¹²² This applies not least to the provisions of Chs 3–4 of the SEC, which also was especially emphasised by the Council of Legislation when the provisions were first adopted into Swedish law, see Government Bill 1985/86:3, 'Förslag till lag om hushållning med naturresurser m.m.' (1986) 223–26.

¹²³ This discretion was stressed by the government of Sweden when the new PBA was adopted in 2010, holding that the municipalities are best suited to decide which national and regional plans, programmes and strategies to be most relevant to consider when planning the environment on the local level. See Government Bill 2009/10:170 (n 106) 177.

to adopt a detail development plan, for example when it comes to planning for built environment and construction works in densely populated areas.¹²⁴

As described in section 3.1, alongside the municipal interests of for example employment, housing, and recreational opportunities, certain national and regional interests must be considered by the municipalities. The County Administrative Boards are responsible for monitoring and coordinating such national and regional interests in municipal planning activities, where, among others, national interests according to Chapters 3–4 of the SEC as well as EQSs are to be especially monitored.¹²⁵ To this end, all municipal decisions on detail development plans and area provisions must be sent to the designated County Administrative Board for control and potential re-examination.¹²⁶ In such a re-examination process, the County Administrative Board is only able to repeal decisions on detail development plans or area provisions if they are found to be in violation with any of the specially designated national or regional interests, such as EQSs for water or national interests of Chapters 3–4 of the SEC.¹²⁷ The possibilities for national authorities to control the municipalities under the PBA are thus limited to certain specified national and regional interests.¹²⁸ In addition, environmental NGOs and concerned individuals are in certain circumstances able to appeal decisions on detail development plans (and for individuals also area provisions), where the plaintiff of the appeal indirectly may challenge the lack of consideration of EQSs for water.¹²⁹

The substantial discretion of the municipalities in application of the PBA has repeatedly been confirmed in case law, often to the detriment of environmental aspects (such as negative implications on the possibilities to achieve EQSs), as well as of individual landowners' interests. EQSs have generally not been given any decisive weight in judicial reviews of municipal plans, even in cases where EQSs risk to be negatively affected by the planning decision.¹³⁰ In one of the rare court cases concerning EQSs for air in relation to spatial planning, the Land and Environment Court of Appeal held that the assessment of whether or not a detail development plan complies with the EQSs is complex and dependent on many factors, which makes it difficult to assess the impact of a single plan.¹³¹ The particular plan was not repealed.¹³² In general, the

¹²⁴ PBA Ch 4 s 2.

¹²⁵ PBA Ch 3 ss 10 and 16, and Ch 5 ss 14 and 22.

¹²⁶ PBA Ch 11 s 10.

¹²⁷ PBA Ch 11 s 11. No changes in the original municipal decision are thus possible, due to the municipal planning monopoly.

¹²⁸ Moreover, the government's right to issue a 'planning injunction' against a municipality does not apply for EQS, see PBA Ch 11 s 15.

¹²⁹ PBA Ch 13 ss 2a, 8, 11 and 12. The possibility to appeal for NGOs is restricted to detail development plans that may cause 'significant environmental impact', in view of the plan's future use, see PBA Ch 4 s 34. The review procedure due to appeals from individuals as well as NGOs is also limited in such a way that the court may only repeal planning decisions that are contradictory to legal provisions, i.e. a judicial review of decisions, see PBA Ch 13 s 17 paras 1–2.

¹³⁰ See e.g. the National Board of Housing, Building and Planning, 'Miljömålen i domstolsprövningar enligt Plan- och bygglagen (Report 2015:5) 14; Supreme Administrative Court, RÅ 2007 not. 26 and RÅ 2008 not. 13; Land and Environment Court of Appeal, Case P 10254-11, 2012-09-21, 7; and Land and Environment Court of Appeal, Case P 6594-12, 2013-04-10. All of these cases concern EQSs for air, whereas EQSs for water in relation to planning decisions under the PBA yet are absent in Swedish case law, at least as regards the higher courts, a circumstance that is quite remarkable in itself.

¹³¹ Land and Environment Court of Appeal, Case P 10254-11, 2012-09-21, 7.

¹³² According to a study by Peggy Lehrman and Anders Hedlund in 2013, not a single municipal plan had to that date been repealed with clear reference to EQSs for air, see County Administrative Boards, 'MKN om luft i planering och rättstillämpning' (2013) 75.

wide discretion for the municipalities have been confirmed by the courts. For example, the Land and Environment Court of Appeal confirmed in 2013, that the municipalities have wide discretion on whether or not land should be built, as long as the decisions are objectively substantiated and the public interest can be considered to outweigh the interest of individual landowners.¹³³

The discretion provided by the PBA allows municipalities to consider EQSs for water when applying the Act, and thus avoid inappropriate planning and building decisions if sufficient will and knowledge exist. The national control and enforcement mechanisms under the Act also mean that in certain prescribed situations municipal planning decisions can be *stopped*, for example if they are found to infringe on EQSs for water. When it comes to *actively* using the provisions of the PBA for improving the water quality and the possibilities to achieve EQSs for water, however, the Act does not provide any particular provisions for the municipalities.¹³⁴

The municipalities are in this regard limited by the substantive considerations for the content of detail development plans in the PBA. Generally, all content in a detail development plan must be consistent with the provisions in Chapter 4 of the Act.¹³⁵ This generally means that such plans may not be more detailed than what is motivated in light of its purpose.¹³⁶ While Chapter 4 of the PBA allows municipalities to define specific protective measures to counteract for example ground pollution, accidents and flooding, as well as disturbance through air pollution, noise, vibration or light in detail development plans, considerations relating to water quality or pollution of water are currently not comprised within the wording of Chapter 4.¹³⁷ As a result, it is currently not possible for the municipalities to determine specific protective measures to counteract deterioration of water quality in detail development plans, which must be considered a major shortcoming in using the Act to actively implement the EQSs for water.¹³⁸ If the Act were supplemented with such a provision it would enable municipalities to, for example, specify requirements for the handling of polluted storm water in detailed plans.

3.3 The Strategic Environmental Assessment of municipal plans

Even though the PBA provides insufficient opportunities to actively implement EQSs for water through substantive provisions in the legally-binding detail development plans, there is nothing to prevent that aspects related to water quality, such as the risk that the implementation of the plan causes water pollution, are reported in a Strategic Environmental Assessment (SEA) of the plan prior to its adoption. The PBA requires such assessments of comprehensive and detail

¹³³ Land and Environment Court of Appeal, Case P 1666-13, p. 5. The Supreme Court similarly held in a precedent from 2016, that the municipalities as a general rule are entitled, without prejudice to the general proportionality principle, to deny an individual request on advance notice to build on their property, solely on the grounds that the area first should undergo detail development planning, see NJA 2016 s. 868, paras 22-23. See also Supreme Administrative Court, RÅ 2010 ref. 90.

¹³⁴ Jonas Christensen, *Planbestämmelser för dagvattenhantering* (Ekolagen Miljöjuridik, 2012) 8.

¹³⁵ PBA Ch 4 s 1.

¹³⁶ PBA Ch 4 s 32 para 3.

¹³⁷ See in particular PBA Ch 4 s 12. See also Christensen (n 134) 9-12, 17-18.

¹³⁸ Possibly, the provision in PBA Ch 4 s 12 could be interpreted in light of the WFD, and thus include aspects of water quality, but to interpret provisions of the PBA in consistency with the directive is unreasonable to ask of the local officials who apply the PBA.

developments plans in certain situations,¹³⁹ and the general provisions in Chapter 6 of the SEC were clarified in this regard in 2017.¹⁴⁰ As a rule, municipalities are now required to assess whether a new or altered plan under the PBA is likely to have 'significant environmental impact' ('screening'), unless it is specifically stated that such screening is not required.¹⁴¹

The screening process includes identification of potential environmental impact of the plan, among other things due to negative impact on EQSs for air and water, in consultation with other authorities and municipalities concerned.¹⁴² If the screening shows, or it otherwise is clear from regulations, that the implementation of the plan is likely to have significant environmental impact, a specific Strategic Environmental Assessment (SEA) for the plan is required.¹⁴³ The SEA process includes consultation and participatory elements, as well as a specific documentation of the direct and indirect environmental impacts on for example water quality; an Environmental Impact Assessment (EIA) documentation must be established.¹⁴⁴ In certain situations, the EIA must also specifically include information about planned measures in order to avoid negative impact on EQSs.¹⁴⁵ The Land and Environment Court of Appeal has in case law, for example, held that the lack of description of the impact that a project may have on the ecological status in a water body meant that the EIA was inadequate in such an essential respect that the application could not be approved.¹⁴⁶

In the Common Implementation Strategy (CIS) developing informal guidance on implementing the WFD in the Member States, the importance of thoroughly assessing the potential negative effects on the water environment prior to adopting plans or authorising projects is emphasised. It is also recommended in this strategy to conduct such assessments on the quality element level (referring to the ecological status of surface waters), in order to facilitate a potential later assessment of whether or not the particular plan or project can be motivated under the derogation regime in article 4(7) of the WFD.¹⁴⁷ The SEA procedure thus provides opportunities for integration of the environmental objectives of the WFD (in Sweden EQSs for water) into other policies and decision-making procedures, and the general requirements under Ch 6 of the SEC also allow for such specific aspects being reflected in an EIA.¹⁴⁸ However, as established by the Swedish Environmental Protection Agency in 2015; Sweden is generally far behind other EU Member States when it comes to performing environmental assessments of municipal plans under the PBA.¹⁴⁹ It thus remains to be seen if, and if so, the extent to which specific considerations regarding EQSs for water will be incorporated in SEA procedures for future municipal plans in Sweden.

¹³⁹ PBA Ch 3 s 8 and Ch 4 s 34 para 1 in conjunction with SEC Ch 6.

¹⁴⁰ Government Bill 2016/17:200, 'Miljöbedömningar' (2017). The background for the legislative changes was i.a. that environmental assessments of plans and programs did not take place to the extent required by Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment ('SEA Directive'), and further that only a few of the environmental assessments that were conducted actually met the formal requirements. See Swedish Environmental Protection Agency, 'Mot en hållbar stadsutveckling' (Report 6664, 2015) 41-43, 47-50.

¹⁴¹ SEC Ch 6 s 5.

¹⁴² SEC Ch 6 s 6 para 1; and Ordinance (2017:966) on Environmental Assessments s 5 point 8.

¹⁴³ SEC Ch 6 s 3 para 1.

¹⁴⁴ SEC Ch 6 ss 9-12.

¹⁴⁵ PBA Ch 4 s 34 para 2 in combination with SEC Ch 6 s 35 point 6.

¹⁴⁶ Land and Environment Court of Appeal, MÖD 2012:19.

¹⁴⁷ CIS Guidance Document No. 36 (2017) 44-47.

¹⁴⁸ SEC Ch 6 s 11 in combination with SEC Ch 6 s 2.

¹⁴⁹ Swedish Environmental Protection Agency (n 140) 41-43, 47-50.

Finally, while respecting the Swedish tradition with strong and decentralised administrative authorities and municipalities, more transparency in municipal spatial planning would be beneficial, for example by explicitly accounting for the trade-offs between different interests in spatial planning decisions.¹⁵⁰ The current PBA certainly leaves room to impose additional requirements on the municipalities in this regard. Such an explicit account of the trade-offs made in the planning process could, for example, be required in the special report that must be compiled after the exhibition of a comprehensive or detail development plan.¹⁵¹ Such an account could improve the conditions to achieve environmental quality objectives in general and the EQSs for water in particular, especially when considering the difficulties that local planners in previous studies have expressed to experience in assessing the potential negative impact of plans and/or building projects on the aquatic environment.¹⁵²

3.4 The crucial role of PoMs to implement EQSs for water

PoMs are the key instrument for implementing the EQSs for water adopted under the WFD and the municipalities have several responsibilities in this regard. The first PoMs for Swedish water governance, adopted in 2009, contained several measures that connected the water governance system on river basin district level to different municipal activities, including spatial planning activities and municipal supervision of environmentally hazardous activities. For example, measure 36 of the PoMs from 2009 entailed that “local authorities need to develop their planning and assessment so that EQSs for water are achieved and not infringed”.¹⁵³ However, the measure as well as the design of the PoMs in general, were criticised for their vagueness.¹⁵⁴ In particular, the municipalities requested additional guidance on how to assess and apply EQSs for water in spatial planning activities.¹⁵⁵ As a result of the critique against the first PoMs, the Water District Authorities made an effort in the PoMs for the current six-year cycle (2016–2021)¹⁵⁶ to specify the programmes by, for example, providing explanations for each measure prescribed as well as suggest examples of more specific measures for how to address them.¹⁵⁷

¹⁵⁰ The need for increased transparency in decision-making and balancing of interest under the PBA has also been acknowledged by the Swedish Environmental Council in their annual follow-ups of the work with attaining the national environmental objectives, see www.miljomal.se for information regarding this work.

¹⁵¹ PBA Ch 3 s 17 and Ch 5 s 23. An important limitation however, is that such a requirement only activates in new planning procedures initiated by the municipalities themselves.

¹⁵² See Hansson (n 27).

¹⁵³ The Water Authorities, ‘Programmes of measures for the Bothnian Bay River Basin District 2009–2015’ (2009) measure 36.

¹⁵⁴ See e.g. Michanek and others (n 89) 39 ff.

¹⁵⁵ See e.g. the Bothnian Bay Water District Authority, ‘Förslag till åtgärdsprogram för Bottenvikens vattendistrikt 2015–2021, Samrådshandling’ (2015) 7. See also Hansson (n 27) 38 and 54.

¹⁵⁶ The programmes of measures for 2016–2021 entered into force in January 2017, approximately a year after the original deadline, since the Water Authorities asked the government’s opinion on the programmes of measures in accordance with Ch 6 s 4 of the Swedish water quality management Ordinance (2004:660). The decision by the Swedish government was announced in October 2016 (Government Decision 1:9, 2016-10-06, M2015/01776/Nm m.fl.), entailing that the Water District Authorities shall decide on the PoMs, after revision in accordance with points a–h in the government decision, i.a. clearer justifications of selected measures and clearer separation of the economic impacts for municipalities, authorities, operators and individuals.

¹⁵⁷ The Bothnian bay Water District Authority, ‘Summary of Management Plan and Programme of Measures in Bothnian Bay Water District, Consultation 1 Nov. 2014 – 30 April 2015’ (2015) 63.

Another ambition of the new PoMs was to more clearly link the prescribed measures directed to different authorities and municipalities together, described as the “blue thread” of the PoMs.¹⁵⁸ For example, as regard spatial planning activities the National Board of Housing, Building and Planning are responsible for developing guidance regarding spatial planning activities under the PBA in view of achieving the EQSs for water.¹⁵⁹ The measure includes developing of guidance for when a County Administrative Board shall re-examine and repeal detail development plans and area provisions in violation with the EQSs for water.¹⁶⁰ Guidance shall also be developed for how the municipalities shall integrate EQSs for water in their comprehensive planning, and, more generally, how to integrate relevant regional planning documentation into planning and building activities under the PBA.¹⁶¹

The measures directed to the national Agency are to a certain degree a prerequisite for the County Administrative Boards to carry out their measures, which in this respect primarily concern to guide the municipalities in municipal comprehensive and detail development planning activities, so that the EQSs for water are complied with.¹⁶² In particular, the County Administrative Boards shall monitor that EQSs for water are sufficiently reflected and integrated into the comprehensive plans for each municipality,¹⁶³ and that municipalities make use of the relevant regional planning documentation in local planning activities.¹⁶⁴ In addition to these monitoring measures, the County Administrative Boards are also responsible for developing specific ‘action plans’ (åtgärdsplaner) for each catchment within their region, with a particular focus on such bodies of water where measures must be undertaken to ensure that the EQSs for water are achieved in time.¹⁶⁵

The measures directed to the municipalities in the context of spatial planning are, in turn, connected to the above-described measures for the County Administrative Boards. The municipalities must, for example, carry out their comprehensive and detail development planning and decision-making under the PBA so that EQSs for water are complied with.¹⁶⁶ The municipalities must also establish water conservation areas in order to ensure a long-term supply of drinking water.¹⁶⁷ Related to this, the municipalities must update their current comprehensive plans in view of any regional water supply plans, as well as develop water and wastewater treatment plans and plans for the handling of storm water.¹⁶⁸ All these areas are crucial for ensuring a long-term protection of water of good quality as required under the WFD, and are

¹⁵⁸ The Water District Authorities, ‘Sammanställning av myndigheternas och kommunernas rapportering av genomförda åtgärder 2017’ (2018) 5.

¹⁵⁹ The Water District Authorities, ‘Programme of Measures 2016–2021’ (2017) National Board of Housing, Building and Planning, measure 1.

¹⁶⁰ Ibid, measure 1a.

¹⁶¹ Ibid, measures 1b–1c.

¹⁶² The Water District Authorities (n 159) County Administrative Boards, measure 9.

¹⁶³ Ibid, measure 9a.

¹⁶⁴ Ibid, measure 9b–c.

¹⁶⁵ Ibid, measure 5.

¹⁶⁶ The Water District Authorities (n 159) Municipalities, measure 6.

¹⁶⁷ Ibid, measure 5.

¹⁶⁸ Ibid, measures 5, 7, and 8. In other words, the PoMs reflect that the municipalities also in other aspects have a key role in implementing the WFD at the local level, being responsible not only for spatial planning of the use of land and water within the municipality, but also for the protection of drinking water, provision of water services such as water supply and wastewater treatment, handling of (polluted) storm water in urban areas, and authorisation and control of individual sewer systems. All these areas are crucial for attaining the environmental objectives of the WFD and can in one way or the other be connected to the planning of land and water use under the PBA.

also connected to the general planning of land and water use of the municipal territory under the PBA.

Thus, the current PoMs reflect that spatial planning and related activities can impact the implementation of EQSs for water. As a result, the PoMs provide measures for how to better ingrate EQSs for water into municipal planning activities at comprehensive as well as detail planning levels. However, the two latest follow-ups from the administrative authorities and municipalities indicate that even though measures and reporting incrementally lead forward, the pace is slow and substantial work still remains.¹⁶⁹ For example, in the latest report, the National Board of Housing, Building and Planning states that no additional guidance for the County Administrative or the municipalities has yet been developed.¹⁷⁰ Similarly, only three out of 21 County Administrative Boards report that they have developed such specific action plans for the catchment areas in their region in accordance with the PoMs.¹⁷¹ On a more positive note, a clear majority of the County Administrative Boards report that some guiding activities related to municipal planning have been undertaken as a result of the PoMs.¹⁷² Data provided for by the National Board of Housing, Building and Planning, based on an annual survey addressed to the County Administrative Boards and the municipalities, similarly suggests that the County Administrative Boards to a certain degree also monitor EQSs for water in municipal comprehensive planning processes.¹⁷³ The same data, however, also reveals that it is still very rare that detail development plans are *reviewed* due to their potential negative impact on EQSs for water.¹⁷⁴ To be exact, this only happened on three occasions in 2017¹⁷⁵ and not on any of these three occasions was the contested plan also subsequently repealed due to its negative impact on water-related EQSs.¹⁷⁶

Regarding the municipalities, it should first be noted that – despite the PoMs for 2016–2021 clearly stating that it is mandatory for all public authorities and municipalities to annually report to the Water District Authorities on the measures undertaken as a result of the PoMs – only 255 out of a total of 290 municipalities responded.¹⁷⁷ The responding municipalities generally declared that water issues have become increasingly important in municipal activities and that the PoMs have helped them to pay attention to water issues.¹⁷⁸ For example, the protection of current and future drinking water catchments have increased to a certain extent,¹⁷⁹

¹⁶⁹ The Water District Authorities, 'Sammanställning av myndigheternas och kommunernas redovisning av genomförda åtgärder 2015' (2016) 3 ff; and The Water Authorities, 'Sammanställning av myndigheternas och kommunernas rapportering av genomförda åtgärder 2017' (2018), 4–6.

¹⁷⁰ The Water District Authorities (2018 n 169) 9. However, previous guidance is available, see e.g. National Board of Housing, Building and Planning, *EU:s påverkan på fysisk planering*, (2011) Report 2011:11.

¹⁷¹ The Water District Authorities (2018 n 169) 60.

¹⁷² The Water District Authorities (2018 n 169) 62.

¹⁷³ See the National Board of Housing, Building and Planning *Open data* (2018), available at <https://www.boverket.se/sv/PBL-kunskapsbanken/Allmant-om-PBL/uppfoljning/Statistik/oppna-data/> (2018–08–21).

¹⁷⁴ *Ibid.*

¹⁷⁵ *Ibid.*, in total, 30 detail development plans were reviewed under the PBA Ch 11 s 10 in 2017.

¹⁷⁶ *Ibid.*, in total, 11 detail development plans were repealed under the PBA Ch 11 s 11 in 2017.

¹⁷⁷ The Water District Authorities (n 159) measure 1, addressed to all public authorities and the municipalities. As a frame of reference, all national agencies and all 21 County Administrative Boards reported to the Water District Authorities in 2018, and 262 municipalities responded in 2016.

¹⁷⁸ The Water District Authorities (2018 n 169) 5–6. See also the Water Authorities (2016 n 169) 51.

¹⁷⁹ In 2016, as many as 158 of the responding municipalities reported on unsatisfactory regulations for the protection of drinking water, see the Water Authorities (2016 n 169) 54–56.

and in several of the Counties, regional water supply plans have been developed in cooperation between the County Administrative Boards and the municipalities.¹⁸⁰

When it comes to spatial planning activities, however, a clear majority of the municipalities request additional guidance for *how* to work with achieving EQSs for water under the PBA.¹⁸¹ While 157 (54 per cent) of all municipalities state that they have carried out an environmental assessment of their comprehensive plan,¹⁸² only 108 (37 per cent) state that other or additional measures have been undertaken for the purpose of ensuring that EQSs for water are complied with in their planning activities.¹⁸³ While a majority of the responding municipalities state that they have developed or are in the process of developing municipal water and sewage plans in which the EQSs for water for the most part have been taken into account,¹⁸⁴ merely 98 (33 per cent) of all municipalities state that they have developed plans for how to handle storm water, where quantitative as well qualitative aspects are considered.¹⁸⁵ This is unfortunate, as previous studies have indicated that polluted storm water are an important aspect to consider in the implementation of EQSs for water.¹⁸⁶ In addition, 14 per cent of the municipalities accentuates the need for changes in legislation in order to actively work with achieving EQSs for water under the PBA.¹⁸⁷ The data provided by the National Board of Housing, Building and Planning referred to above also reveal that EIAs in connection with the adopting of a detail development plan only have been produced on a few occasions in 2017.¹⁸⁸

To conclude, provided that the PoMs are fully complied with by all actors, they offer a good basis for consideration of the EQSs for water in spatial planning activities. The current PoMs can also be considered to better reflect the adaptive and integrated river basin planning approach of the WFD compared to the PoMs of the previous six-year cycle. However, it follows from the foregoing that the current PoMs are neither fully complied with, nor sufficiently integrated into ordinary practice in administrative authorities and municipalities. As a result, EQSs for water are inadequately considered in municipal spatial planning activities, as well as insufficiently controlled by regional national authorities. In turn, this risks the long-term protection of water resources at the river basin and river basin district scales. The municipalities' room for discretion in implementing the PoMs remain. A clear obligation to take into account not only EQSs, but also the PoMs, RBMPs and eventual additional action plans that must be developed by the County Administrative Boards under the PoMs, is evidently still missing in the PBA.¹⁸⁹ Furthermore, despite their key function in providing overview and crucial information on the current quality of the waters in a particular river basin district, the RBMPs are not formally

¹⁸⁰ The Water District Authorities (2018 n 169) 5–6, and 74.

¹⁸¹ Ibid, 6 and 76.

¹⁸² Ibid, 75. 121 of these municipalities state that additional data from the VISS database have been taken into account to a certain extent in these processes.

¹⁸³ Ibid, 75.

¹⁸⁴ Ibid, 77.

¹⁸⁵ Ibid, 77.

¹⁸⁶ Johanna Söderberg, 'EU:s ramdirektiv för vatten och dagvattenförorening – Klarar Sverige kraven?' (2011) 1 Nordic Environmental Law Journal 3–30; and the National Board of Housing, Building and Planning, 'Uppföljning av tillämpningen av plan- och bygglagstiftningen 2016' (2018) 86–88. See also Christensen (n 134).

¹⁸⁷ The Water District Authorities (2018 n 169) 76.

¹⁸⁸ See The National Board of Housing, Building and Planning *Öppna data* (2018), available at <https://www.boverket.se/sv/PBL-kunskapsbanken/Allmant-om-PBL/uppfoljning/Statistik/oppna-data/> (2018–08–21).

¹⁸⁹ Such a requirement was, however, imposed on authorities that decides cases and matters *under the SEC* in 2017, see SEC Ch 5 s 15.

binding or even declared as guiding for planning and subsequent decision-making by the municipalities when implementing the WFD.

4. Discussion

The lack of legal integration between the freshwater governance system and the legal framework for spatial planning in Sweden entails that water quality aspects are at great risk of being ignored in planning activities at the local and regional levels. In turn, this makes it significantly more difficult to achieve the WFD's environmental objectives. Even though the adaptive and integrated governance system of the WFD can be considered to provide Member States with discretion as regards which measures to adopt in each river basin and/or river basin district, it is clear that the rulings from the CJEU have reduced Member States discretion in implementation in other aspects by stressing the binding character of the environmental objectives in individual decision-making situations. In light of *Weser*, *Schwarze Sulm* and *Protect*, Swedish municipalities must be prohibited from adopting plans or granting individual building permits that might deteriorate the water status or jeopardise the possibilities to achieve good water status or potential. As illustrated in the previous chapter, however, the current Swedish legislation cannot sufficiently guarantee that decision-making under the PBA fully comply with EQSs for water, despite explicit legal obligations to follow these EQSs in planning and decision-making under the Act (Chapter 2 section 10).

Overall, the legal framework provides that it primarily is the level of knowledge and ambition within the individual municipality that determines how and to what extent EQSs for water are considered in municipal spatial planning and building activities under the PBA. Along the lines of decentralised decision-making and local self-government as guaranteed by the Instrument of Government (1974:152), the responsibility for implementing the measures in the PoMs lies with the municipalities. No administrative authority can legally force a municipality to plan according to a PoM, or to adopt a comprehensive plan that takes EQSs for water into consideration. The only legal possibility in this regard, is for the government to request an individual report from a municipality, where the municipality account for how EQSs are to be followed and/or a specific PoM will be implemented in spatial planning activities. This cannot be considered a sufficient implementation of the integrated planning and adaptive governance system of the WFD, and thus constitutes an issue that needs to be addressed by the legislator. The current situation is also not satisfactory in view of the general obligation under the WFD to work incrementally towards achieving a good water status, nor is it reasonable given that a fair and transparent application of the law is generally desired.

Based on the knowledge from previous research and the results of this study, it is argued here that the design of the legal framework is of crucial importance to develop formalised co-operation across levels and scales in such hydrologically based, adaptive and integrated systems that the WFD represents. By establishing robust forms of co-operation between the authorities and municipalities involved, as well as a system that guarantees consultation and participation by stakeholders and the public, the chances of adopting informed plans and management decisions can be increased, through integration of local and diverging knowledge across the levels of governance. In turn, this can enhance the chances of achieving the environmental objectives of the WFD.

Due to the character of the WFD as a holistic planning system at the catchment scale through river basin districts, a legal integration of the planning systems would entail making the water planning and governance system adopted to implement the WFD superior to planning and subsequent decision-making at all administrative levels, including the municipalities. In this case, by clearly stating in the PBA that not only EQSs but also the PoMs, the RBMPs, and eventual additional action plans for each river basin district or catchment area, must be considered in planning and subsequent decision-making under the Act. It should also be considered and further investigated, how the comprehensive and perhaps even regional planning levels could be better used as strategic planning instruments to achieve EQS.¹⁹⁰ In addition, the current requirement to annually report on progress to the Water District Authorities must be underpinned by a sanctioned enforcement mechanism, to counteract passivity and enhance the information provided to the Water District Authorities. Considering the adaptive approach of the WFD, it is crucial that higher level authorities are well-informed and up-to-date on, for example, progress, set-backs and current water status, to be able to revise and decide on EQSs, PoMs and RBMPs for the next six-year cycle on the best possible and complete basis.

5. Main conclusion and legislative proposals

The main conclusion of this paper is that municipal spatial planning activities in Sweden need to be formally integrated with the freshwater governance system at the catchment scale. Amendments to current legislation are therefore necessary. In this final section, proposals for changes in this regard are presented, with summary justifications for each proposal. It should be noted that the ambition when designing the proposals has been to essentially keep the current system for spatial planning in Sweden intact, at the same time as the system for municipal spatial planning under the PBA becomes better integrated with, and subordinated to, the water governance system adopted to implement the WFD.

Proposal 1: *Ensure that PoMs and RBMPs are taken into account in planning and subsequent decision-making, by, for example, amending the current provision in SEC Chapter 5, section 15, to explicitly include municipal planning and decision-making under the PBA, as well as planning and decision-making under other sectoral legislations.*

Motivation: The first and foremost measure to link the water planning and governance system of the WFD to subsequent municipal spatial planning activities is to integrate the documentation developed at the river basin district level into municipal planning and decision-making under the PBA. Considering the holistic and hydrologically based water planning provided by the Water District Authorities, it is crucial that not only EQSs for water, but also the PoMs and RBMPs are considered in planning and subsequent decision-making by actors on all levels. By

¹⁹⁰ For example, by making the comprehensive plans legally binding for future planning and decision-making, at the same time as the EQSs, PoMs and RBMPs are mandatory to consider when updating the comprehensive plan, clearer guidelines for water planning, governance and protection can be established on the municipal level. In a similar way as comprehensive plans, regional plans could provide important strategic planning for water governance, where the municipalities concerned work together to support the implementation of EQSs for water in a specific water course or river basin. In particular, regional plans could be important instruments for such waters and/or river basins where the EQSs for water are at the greatest risk of not being achieved.

making the data of current water status as well as planned measures expressed in the PoMs and the RBMPs mandatory to consider in assessments, potential impact of future developments can be more easily assessed, in particular from a hydrological perspective at the scale of river basins. Such an approach also enables enhanced communication and information exchange between the actors involved in water governance at different levels, which in turn may contribute to a wider and more informed perspective on water planning and governance in the river basin district as a whole. In turn, this might enable development projects to be located where they are most appropriate in light of the current water status and previous planning for future developments in the region or in a specific municipality.

Proposal 2: Amend the new provision (SEC Chapter 5 section 4) to clearly include spatial planning and building decisions under the PBA.

Allow municipalities to restrictively apply the derogation regime stipulated in article 4(7) of the WFD, under direct control by the Water District Authorities.

Motivation: Amending the new provision in Chapter 5 section 4 (in force by January 1 2019) will prohibit authorities and municipalities to authorise activities or measures to start or be altered if they risk to deteriorate the water status or adversely affect the possibilities to achieve EQSs for water. In light of the *Weser* case, all subsequent decision-making (“in every stage of implementation”) must be in compliance with the environmental objectives in article 4 of the WFD. This includes planning and decision-making under the PBA, in the meaning that municipal planning and building decisions that risk deteriorating the water quality or having adverse effects on the possibilities to achieve the EQSs for water must be prohibited, unless they can be motivated under the derogation regime in article 4(7) of the WFD. However, the newly adopted legal changes to the SEC does not clearly reflect this. Instead of exclusively targeting the authorisation of *activities* and *measures*, the new provision should also explicitly include spatial planning and building decisions under the PBA.

In order to increase the flexibility due to the non-deterioration obligation prohibiting municipal planning and building decisions that infringe on the forthcoming provision, the possibility to grant derogations in line with article 4(7) of the WFD should include municipal decision-making under the PBA. Even though, in practice, few municipal planning projects are likely to fall within the scope of article 4(7) – primarily larger port projects or other larger-scale socio-economic projects will probably be able to qualify – it is important that the legislative framework includes such a possibility for the municipalities. The forthcoming legislative changes entails that the government may issue regulations on exemptions from the prohibition to deteriorate the water status,¹⁹¹ which likely will occur through amendments to the Water Quality and Management Ordinance (2004:660). The possibility to grant derogations in accordance with the new Ordinance should thus include the municipalities, who also must be obliged to request an opinion from the Water Authorities when considering a derogation. It is also crucial that the provisions of the Ordinance clearly state that such a possibility should be used restrictively, and that potential decisions must be sent to the Water District Authorities for review and potential repeal, as now proposed by the government (forthcoming as SEC Chapter 19 sections 3a-c and

¹⁹¹ See Government Bill 2017/18:243 (n 22) 13. Forthcoming as SEC Ch 5 s 6, Act (2018:1407).

5, and Chapter 22 section 13 para 1 point 2). In light of the *Protect* case, environmental NGOs and concerned individuals must also be able to appeal decisions motivated under article 4(7) of the WFD.¹⁹²

Proposal 3: *Refer to SEC Chapter 5 in its entirety in the current provision of PBA Chapter 2 section 10.*

Motivation: In light of the previous two proposals, it is crucial that the PBA refers to the whole of Chapter 5 in the SEC, rather than the current formulation where only EQSs adopted under Chapter 5 SEC are referred to, without specifying *how* they are to be followed in municipal planning and decision-making. By such an amendment, the municipalities would more clearly be mandated to both consider the documentation provided by the Water District Authorities in their planning and subsequent decision-making under the PBA, as well as be clearly prohibited to adopt plans or grant building permits that risk to deteriorate the water status or negatively affect the possibilities to achieve EQSs for water, unless the decisions can be motivated under the derogation regime of article 4(7) of the WFD.

Proposal 4: *Amend SEC Chapter 5, alternatively the Water Quality and Management Ordinance (2004:660), with an obligation for the authorities and the municipalities to report on progress under decided PoMs to the responsible higher-level authority. The obligation must be underpinned by an enforcement mechanism, such as a conditional fine.*

Motivation: Information on progress and experienced difficulties from the key actors involved in implementing the PoMs, including the local authorities, is crucial in WFD implementation. Adequate information can increase the possibilities for the Water District Authorities to adjust management strategies at the river basin district level, to incrementally achieve the EQSs for water in a river basin district, which is a central part of the adaptive approach of the directive. The adaptive approach of the WFD, where learning through constant evaluation and monitoring are in focus, is prevented unless correct and up-to-date information from all actors involved in implementation of the PoMs are acquired. Reporting requirements must thus be mandatory and effectively enforced, for example through the imposition of a conditional fine.

Proposal 5: *Adjust the current provisions in the PBA so that they clearly reflect that environmental assessments (screening) of comprehensive as well as detail development plans are required under SEC Chapter 6, unless it is specifically stated that such screening is not required.*

Motivation: As a result of the latest amendments to the SEC Chapter 6, municipalities are as a rule required to assess, or screen, whether a new or altered plan under the PBA is likely to have significant environmental impact, unless it is specifically stated that such screening is not required

¹⁹² In light of the *Protect* case, it is generally likely that a concerned individual or a duly constituted environmental NGO must be able to question before a national court whether a municipality has kept within the limits of discretion granted by article 4 of the WFD, when adopting a plan or granting a building permit that risks to deteriorate the water status or adversely affect the possibilities to reach the EQSs for water. Possibly, the right to question also includes the absence of, alternatively the content in, an environmental impact assessment preceding the municipal decision. The closer prerequisites for this cannot, however, be examined in the context of this paper, but definitely constitutes an interesting area for continued research regarding participation and access to justice under the WFD.

(SEC Chapter 6 section 5). This is however not clearly reflected in the current PBA (Chapter 3 section 8 and Chapter 4 section 34), which risks to reduce the impact of the newly clarified provisions in the SEC in municipal planning activities. In order to clarify the legal situation, it is proposed here be that the PBA should explicitly reflect the main rule of SEC Chapter 6. In general, the SEA procedure provides the most significant possibility for assessing how the WFD requirements may be horizontally integrated into policies and decision-making procedures, such as spatial planning procedures under the PBA. Under the WFD, it is crucial that the potential negative effects on the water environment of all plans or projects are thoroughly assessed prior to adoption or authorisation. It should also be considered whether the absence of such an assessment should be included in the grounds for re-examination and repeal, in order to increase national enforcement and control in this regard. Under the current legal framework, it is not possible to compel the municipalities to conduct an environmental assessment, or to re-examine and repeal municipal plans on the sole ground that such an assessment have not been conducted prior to adoption.

Proposal 6: Amend PBA Chapter 4 section 12 to explicitly include protective measures to counteract pollution of water and other disturbances that risk the long-term protection of water quality in detail development plans.

Motivation: This proposal aims to strengthen the possibilities for municipalities to *actively* use detail development plans to implement EQSs for water. Municipal planning has been identified as a key instrument in this regard, at the same time as the municipalities currently only have minor opportunities to more directly contribute to achieving EQSs under the PBA. While the municipality currently can determine protective measures to counteract, for example, ground pollution, accidents, and flooding, as well as disturbance through air pollution, noise, vibration or light in detail development plans, considerations relating to water quality or pollution of water are currently not comprised within the wording of Chapter 4. Hence, it is unclear whether municipalities may determine protective measures to counteract deterioration of water quality in detail development plans, which can be considered a shortcoming in the implementation of EQSs for water under the Act.

Paper IV

EU:s ramdirektiv för vatten och dagvattenförorening – Klarar Sverige kraven?

Johanna Söderberg

Abstract

This article discusses the EU Water Framework Directive from a legal perspective, with special focus on the environmental effects of stormwater. Efficient management of polluted stormwater is a crucial measure to take in order to obtain the objectives of the directive, in particular a "good water status". However, analyses of legal material supplemented by interviews indicate an inefficient Swedish implementation. Although the Swedish Environmental Code contains several legal management control measures that can be used to improve the handling of stormwater, the relevant provisions are not precise enough; they are leaving considerable room for discretionary judgements to the administrative authorities and municipalities involved. Furthermore, enforcement authorities fail to comply with the legal tasks to initiate reviews of old permits in order to adjust the conditions to the modern environmental requirements stipulated in the directive.

1. Introduktion¹

Sedan 2000-talets början har Sverige tillsammans med övriga EU-länder ställts inför stora utmaningar på vattenvårdsområdet med anledning av

EU:s ramdirektiv för vatten.² Ramvattendirektivet har antagits i syfte att upprätta en ram för skyddet av samtliga vattenförekomster i Europa.³ Inlandsytvatten, kustvatten och grundvatten samt allt vatten i övergångszonerna mellan dessa vattenförekomster, omfattas därmed av direktivets bestämmelser.⁴ De primära målen är att allt vatten i Europa ska ha uppnått en *god status* till senast år 2015 och att ytterligare försämringar av vattenförekomsterna förhindras (*principen om icke-försämring*).⁵ Flera dotterdirektiv till ramvattendirektivet har antagits och flera tidigare direktiv på vattenområdet upphör successivt att gälla allteftersom ramvattendirektivet och dotterdirektiven implementeras och genomförs praktiskt i medlemsstaterna. Ramvattendirektivet har vidare inneburit att en ny förvaltningsnivå för kvaliteten på vattenmiljön har införts i Sverige, genom indelning i vattendistrikt och inrättande av nya vattenmyndigheter. Då vatten normalt är gränsöverskridande till sin karaktär är utgångspunkten i direktivet att vattenförvaltningen ska baseras på vattnets naturliga avrinningsområden, istället för på administrativa eller geografiska gränser.⁶ Följaktligen har Sveriges landområden och kustvattenområden

¹ Författaren är fil.mag. i rättsvetenskap med särskild inriktning mot miljö- och naturresursrätt, Luleå Tekniska Universitet. Artikeln skrivs inom projektet Policy-skapande för adaptiv förvaltning av naturresurser (AMORE). AMORE-projektet är tvärvetenskapligt och inkluderar utöver rättsvetenskap även ämnena statsvetenskap, historia, nationalekonomi, tillämpad geologi och avfallsteknik. Projektets studieobjekt är tillförseln av dagvatten till Lule älv. I fokus för artikeln ligger därmed Bottenvikens vattendistrikt med det primära exemplet Luleå kommun.

² Europaparlamentets och Rådets direktiv 2000/60/EG om upprättande av en ram för gemenskapens åtgärder på vattenpolitikens område.

³ Direktiv 2000/60/EG preambeln p.40.

⁴ Direktiv 2000/60/EG artikel 1.

⁵ Direktiv 2000/60/EG artikel 4.

⁶ Direktiv 2000/60/EG artikel 3 (1).

indelats i fem olika vattendistrikt; Bottenvikens, Bottenhavets, Norra Östersjöns, Södra Östersjöns och Västerhavets vattendistrikt,⁷ en indelning som främst har baserats på avrinningsområdenas naturliga sammanlänkning med de stora havsbassängerna i Östersjön.⁸ Bottenvikens vattendistrikt, vilket ligger i fokus för denna artikel, omfattar i huvudsak Norrbottens och Västerbottens vatten, med huvudavrinningsområdena från och med Torneälven till och med Öreälven.⁹

Föroreningsproblematiken utgör ett av ramvattendirektivets huvudsakliga mål och genom att dagvatten utgör en *dominerande* källa för tillförsel av föroreningar till våra ytvatten och även kan orsaka grundvattenförorening,¹⁰ är hanteringen av dagvattnet av stor betydelse för att målet god status ska kunna nås. Det är främst den påverkan som dagvattnet har på recipienterna när det leds ut till sjöar och vattendrag utan att renas innan, som spelar roll för möjligheterna att uppnå en god vattenstatus. Även om dagvatten som begrepp inte nämns i direktivet finns det från föroreningsperspektivet flera artiklar i ramvattendirektivet och i annan EU-rättslig lagstiftning som kan kopplas till medlemsstaternas hantering av dagvatten.

Denna artikel syftar till att diskutera den nya vattenförvaltningen ur ett juridiskt perspektiv, med särskilt fokus på problematiken kring dagvatten. I första hand har följande tre frågor undersökts:

1. Hur inverkar ramvattendirektivet på hanteringen av dagvatten? Vissa anknyttande EU-direktiv behandlas också.

2. Hur ser den svenska regleringen av dagvatten ut? Är den tillräcklig för att motverka förorening från dagvatten?

3. Kan det svenska rättssystemet garantera en *faktisk* hantering av dagvattenproblematiken, i enlighet med EU-rättens krav? I studien finns två underlagsrapporter där den praktiska hanteringen av dagvatten inom Luleå kommun belyses med utgångspunkt från lagstiftningskrav.¹¹

I syfte att förstå hur dagvattenhanteringen påverkas av ramvattendirektivets genomförande har dagvatten och dess problematik kartlagts, främst genom studier av naturvetenskapligt och tekniskt material rörande dagvattenfrågor. Därefter har ramvattendirektivet och andra anknyttande EU-rättsakter granskats, med fokus på beröringspunkter till dagvattenhanteringen. Den rättsliga och faktiska hanteringen av dagvattenfrågor har undersökts främst med stöd av författningstext, förarbeten, EU-rättsliga direktiv samt statliga utredningar och andra myndighetspublikationer. Delar av den faktiska hanteringen har därutöver undersökts genom att viktiga aktörer inom Luleå älvs avrinningsområde har intervjuats. Bottenvikens vattenmyndighet valdes på grund av att de har huvudansvaret för ramvattendirektivets genomförande i Bottenvikens vattendistrikt, Luleå kommun på grund av att de har huvudansvaret över avloppsanläggningarna och reningen av avloppsvatten inom Luleå kommun. De intervjuuttalanden som används i artikeln syftar dock enbart till att exemplifiera diskussionen.

Artikeln är uppdelad i två huvudavsnitt. Det första avsnittet inleds med en beskrivning av dagvattenproblematiken och de miljöproblem som dagvatten orsakar. Därefter följer en översikt

⁷ 5 kap. 10 § 1st MB.

⁸ Prop. 2003/04:57 s.8.

⁹ 2 kap. 1 § VFF.

¹⁰ Bäckström, Viklander, 2008, s.19.

¹¹ Se Söderberg, Westholm, 2008 och 2009.

över ramvattendirektivet, där kopplingarna till dagvattenfrågorna särskilt belyses. I det andra avsnittet diskuteras dagvattenproblematiken i relation till den svenska miljölagstiftningen. Här beskrivs hur dagvatten regleras i svensk rätt och de rättsliga styrmedel och regler som finns för att ställa krav på dagvattenhanteringen. Artikeln avslutas med en diskussion kring om den rättsliga och faktiska hanteringen av dagvatten är tillräcklig för att motverka förorening från dagvatten idag.

2. Dagvattenproblematiken och EU:s ramdirektiv för vatten

2.1 Allmänt om dagvattenproblematiken

Dagvatten utgörs av nederbördsvatten, i form av regn eller avsmält snö, spolvatten eller framträngande grundvatten som tillfälligt rinner av hårdgjorda ytor,¹² såsom asfalterade vägar, hus-tak, byggnadsfasader eller fordon. Det handlar således om tillfälligt förkommande vatten avrinnande på mark som inte är täckt av vatten i normala fall, framförallt inom tätbebyggelse och på större vägar utanför tätbebyggda områden. Insikten om att dagvatten innehåller betydande mängder föroreningar är anledningen till att dagvattenfrågorna uppmärksammas allt mer i Sverige.¹³ När det regnar eller snöar tar nederbörden först med sig luftföroreningar och när den sedan landar på hårda ytor löser vattnet upp och drar med sig ytterligare föroreningar som har deponerats i torr eller våt form på de hårdgjorda ytorna.¹⁴

Studier av dagvatten i stadsmiljöer har visat på innehåll av näringsämnen (främst kväve och

fosfor), tungmetaller, olja, suspenderat material, klorid, organiska miljögifter (till exempel PAH och PCB) samt bakterier.¹⁵ I dagvatten från vägar utgörs de vanligaste tungmetallerna av bly, zink, järn, koppar, kadmium, krom och nickel.¹⁶ De främsta föroreningskällorna är trafikrelaterade; till exempel bilavgaser, drivmedel, korrosion av fordon, däckslitage, vägar och halkbekämpningsmedel. Andra framträdande källor till föroreningar i dagvatten är luftföroreningar och byggmaterial.¹⁷ Samtliga av dessa källor räknas som *diffusa* utsläppskällor, vilka generellt är svårare att kontrollera och få bukt med i jämförelse med identifierbara punktkällor. Föroreningskällornas diffusa karaktär är därför en bidragande orsak till dagvattenproblematiken.

Hanteringen av dagvatten i urbana områden har i huvudsak handlat om att leda bort dagvatt-net från städernas kärnor så snabbt som möjligt. Från slutet av 1870-talet och fram till mitten av 1900-talet anlades främst så kallade *kombinerade system* för avloppshanteringen, där dagvattnet samlas upp och leds till reningsverk tillsammans med övrigt avloppsvatten.¹⁸ De negativa effekterna av de kombinerade systemen, i form av ökad belastning på ledningsnät och reningsverk samt ökad risk för översvämningar och bräddning av avloppsvatten vid kraftiga regn, var orsaken till en övergång från kombinerade till *duplicerade* (eller separerade) *system* vid VA-uppbyggnad i städerna.¹⁹ I de duplicerade systemen samlas dagvattnet upp i särskilda dagvattenbrunnar och leds via separata ledningar till olika utsläppspunkter. Utsläppspunkterna myn-

¹² Prop. 2005/06:78 s.44.

¹³ Bäckström, Viklander, 2008, s.9.

¹⁴ Bergström, 2005 s.9.

¹⁵ Dagvattenstrategi för Stockholm stad, 2005, s.13 och till exempel Kristin Karlsson, 2006.

¹⁶ Bäckström, Viklander, 2008, s.9.

¹⁷ Bergström, 2005, s.9-10.

¹⁸ Dagvattenstrategi för Stockholm stad, 2005, s.3.

¹⁹ Bergström, 2005, s.8.

nar direkt i sjöar och vattendrag och dagvattnet släpps där ut helt utan föregående rening eller kontroll.²⁰ Den traditionella dagvattenhanteringen i Sverige sedan mitten av 1900-talet innebär med andra ord en okontrollerad spridning av föroreningar till våra vattenmiljöer.

Vilken påverkan dagvatten har på recipienten beror, förutom på dagvattnets innehåll av föroreningar, även på recipientens egenskaper och på tillrinningsområdets markanvändning.²¹ En viktig orsak till dagvattenproblematiken är därför *exploateringen* av marken. På naturliga marker, utan hårdgjorda ytor, kan vattnet renas naturligt genom att passera ned genom jordlagren. I takt med att städer och vägar har byggts ut har dock de gröna ytorna som kan sköta denna naturliga reningsprocess minskat i motsvarande mån.²² Här finns en tydlig koppling till kommunernas dominerande ansvar över den fysiska planeringen i enlighet med plan- och bygglagen (PBL). Genom att kommunerna har det huvudsakliga ansvaret för planläggning av mark och vatten,²³ har de även stora möjligheter att hantera dagvattenfrågorna inom sin kommun. Det finns ytterligare ett viktigt skäl till att kommunernas planering av mark och vatten bör bidra till en långsiktigt hållbar dagvattenhantering, vid sidan av föroreningsproblematiken. Skälet är att undvika risker för översvämning av gator, mark och byggnader vid höga flödestoppar på grund av kraftiga eller ihållande nederbördsfall.²⁴

I takt med att de negativa effekterna av kombinerade och duplicerade system för dagvattenhantering har uppmärksamats, har mer långsiktiga och miljövänliga dagvattenlös-

ningar utvecklats, bland annat i form av lokalt omhändertagande av dagvatten (LOD). LOD innebär att man försöker efterlikna naturens sätt att ta hand om dagvattnet, genom exempelvis avdunstning, fördröjning eller infiltration i marken.²⁵ Moderna hanteringar av dagvatten utgörs därför av till exempel dammar, våtmarker, svackdiken eller perkolationsmagasin.²⁶ De äldre systemen för dagvattenhantering är dock fortfarande dominerande i många av Sveriges kommuner, vilket med hänsyn till föroreningsaspekterna kan innebära svårigheter med att uppnå ramvattendirektivets krav.

Exemplet Luleå Kommun

Att de äldre systemen för dagvattenhantering fortfarande är dominerande kan illustreras med Luleå kommun som exempel. 95-98 % av dagvattensystemet i Luleå kommun är duplikat idag och orenat dagvatten leds till 153 olika utsläppspunkter.²⁷ Dagvattnet i Luleå kommun renas således i princip inte alls, utan leds till recipienter runt om i Luleå och medför en okontrollerad tillförsel av föroreningar till vattenmiljöerna. Några mätningar av föroreningsinnehållet i dagvattnet eller av föroreningsnivån i de mottagande recipienterna har inte utförts av kommunen, som därmed inte har någon vetskap om vilken påverkan dagvattnet faktiskt har på vattenförekomsterna.²⁸ Förutom omedvetenheten och avsaknaden av data kring dagvattnets miljöpåverkan utgör *ekonomiska aspekter* en ytterligare anledning till bristen på moderna lösningar av dagvattenfrågorna inom kommunen. Hållbara

²⁰ Bergström, 2005, s.7-8.

²¹ Bäckström, Viklander, 2008, s.9.

²² Bergström, 2005, s.9.

²³ 1 kap. 2 § PBL.

²⁴ Widarsson, 2007, s.9.

²⁵ Dagvattenstrategi för Stockholm stad, 2005, s.7.

²⁶ Bäckström, Viklander, 2008, s.14-15.

²⁷ Stefan Marklund, Avdelningschef Vatten & Avlopp Luleå kommun, november 2008.

²⁸ Stefan Marklund, Avdelningschef Vatten & Avlopp Luleå kommun, november 2008.

dagvattenlösningar är både kostsamma och tekniskt krävande och genom att det befintliga avlopps nätet och VA-anläggningarna i Luleå kräver ständigt underhåll och utbyggnad till stora kostnader, får de långsiktiga lösningarna ge vika för de dagsaktuella problemen.²⁹ Situationen kan dock inte påstås vara unik för Luleå kommun. I många kommuner är det bristen på kunskap, tid och pengar, i kombination med en svag delaktighet från VA-sidan i stadsplaneringsprocessen, som är orsaken till att långsiktiga dagvattenlösningar sällan prioriteras.³⁰

2.2 Ramvattendirektivet och dagvatten

Ramvattendirektivet har införlivats i svensk rätt i huvudsak genom ändringar i 5 kap. MB om miljökvalitetsnormer och åtgärdsprogram samt genom införande av förordning (2004:660) om förvaltningen av kvaliteten på vattenmiljön (vattenförvaltningsförordningen, VFF) och förordning (2007:825) med länsstyrelseinstruktion. Därutöver har Naturvårdsverket och Sveriges geologiska undersökning arbetat fram föreskrifter om karaktärisering och fastställande av miljökvalitetsnormer för yt- respektive grundvatten.³¹ Vattenförvaltningsförordningen bygger på ramvattendirektivets bestämmelser och hänvisar även direkt till direktivets artiklar och bilagor i många fall. Grundläggande i både direktivet och den svenska förordningen är *principen om icke-försämring*, vilken innebär att kvaliteten på vattenförekomsterna under alla omständigheter åtminstone inte får försämrats. Här ligger således en tanke om att förebygga framtida skador på

vattenmiljöerna, vid sidan av de reparativa och förbättrande åtgärderna som ska vidtas av medlemsstaterna i syfte att nå det övergripande målet i vattenförvaltningen; god status för samtliga vattenförekomster till senast år 2015.³² Vad som är god status kan skilja sig åt både mellan medlemsstaterna och mellan olika områden i en medlemsstat, då hänsyn ska tas till de förutsättningar som råder i området för den specifika vattenförekomsten. Det är dock möjligt att föreskriva undantag i form av lägre kvalitetskrav eller längre tid för att uppnå målen.³³ Undantag är möjliga för till exempel vattendrag som är konstgjorda eller kraftigt modifierade, alternativt när det bedöms som tekniskt omöjligt eller ekonomiskt orimligt att uppnå målet god status redan till år 2015.

En länsstyrelse i varje vattendistrikt är utsedd till *vattenmyndighet* och har det övergripande ansvaret för ramvattendirektivets genomförande i Sverige.³⁴ Vattenmyndigheternas ansvar sträcker sig i huvudsak från att planera arbetet på ett sätt som uppmuntrar och möjliggör samverkan av alla som berörs eller är intresserade,³⁵ till att arbeta fram förslag till de dokument som sedan ska vara styrande för vattenförvaltningsarbetet i de olika distrikten.³⁶ Dokumenten - vilka utgörs av förslag till miljökvalitetsnormer, åtgärdsprogram och förvaltningsplaner - fastställs sedan av de *vattendelegationer* som har inrättats för respektive vattenmyndighet och som har till uppgift att fatta beslut inom vattenmyndigheternas ansvarsområde.³⁷ Tanken är att de fastställda

²⁹ Stefan Marklund, Avdelningschef Vatten & Avlopp Luleå kommun, november 2008.

³⁰ Se Widarsson, 2007, s.22 där möjliga orsaker till kommunernas bristande investeringar i långsiktiga dagvattenlösningar diskuteras.

³¹ NFS 2008:1 och 2010:12 samt SGU-FS 2008:2

³² 4 kap. 2 § VFF.

³³ 4 kap. 9-13 §§ VFF.

³⁴ 5 kap. 11 § 1st MB.

³⁵ 2 kap. 4 § VFF.

³⁶ 5 kap. VFF.

³⁷ Förordning (2007:825) 24 § 1st.

dokumenten, i första hand åtgärdsprogrammen och förvaltningsplanerna, ska tjäna som planeringsunderlag vid beslut hos samtliga berörda myndigheter och samtidigt utgöra ett kontinuerligt verktyg för kommunikation till allmänheten, EU-kommissionen samt andra intressenter.³⁸

Ramvattendirektivet tar ett samlat grepp om vattenförvaltningen och ett av direktivets primära syften är att komma till rätta med tillförseln av föroreningar till vattenmiljöerna i Europa. Redan av artikel 1 framgår att ramvattendirektivet syftar till att åstadkomma en gradvis minskning, och på sikt eliminering, av flera olika prioriterade miljöfarliga ämnen. EU-gemensamma miljökvalitetsnormer för dessa ämnen har fastställts i ett dotterdirektiv till ramvattendirektivet,³⁹ vilket även föreskriver att medlemsstaterna är skyldiga att upprätta ett register över utsläpp och spill av ämnena i miljön.⁴⁰ Frågan blir om bristen på mätningar av dagvattnets föroreningsinnehåll i till exempel Luleå kommun, verkligen står i överensstämmelse med detta krav? Kravet på register i dotterdirektivet, tillsammans med ramvattendirektivets krav på identifiering av och åtgärder för att minska utsläppen från både punktkällor och diffusa källor⁴¹, borde nämligen innebära att medlemsstaterna är *skyldiga att kartlägga* om utsläppen av dagvatten innehåller några av de prioriterade eller miljöfarliga ämnena. Åtminstone borde medlemsstaterna, i enlighet med försiktighetsprincipen, vara skyldiga att försäkra sig om att utsläppen inte är farliga för människors hälsa eller miljön.

Som berörts inledningsvis nämns inte dagvatten som begrepp i ramvattendirektivet, men direktivet får ändå stor betydelse för medlemsstaternas dagvattenhantering på grund av föroreningsperspektivet. Problemen med förorenande ämnen och hälsoskadliga miljögifter i miljön, härstammande från till exempel luftföroreningar, trafiken och byggnadsmaterial, är utbredda idag. Det kan samtidigt inte ifrågasättas att dessa föroreningar har påvisats i dagvatten och att dagvatten utgör en av de huvudsakliga källorna för tillförsel av föroreningar till våra vattenmiljöer.⁴² Dagvattenhanteringen kan även kopplas till möjligheterna att nå flera av Sveriges nationella miljömål⁴³, inte minst miljömålet *Giftfri miljö*.⁴⁴ Mot den bakgrunden går det inte att blunda för problemet med att dagvatten ohindrat transporterar föroreningar direkt till mottagande sjöar och vattendrag, utan vare sig kontroll eller föregående rening. Dagvattenproblematiken behöver med andra ord uppmärksammas för att vi ska klara ramvattendirektivets krav.

Exemplet Bottenvikens vattendistrikt

Att dagvattenhanteringen får betydelse för att uppnå ramvattendirektivets mål kan illustreras av kopplingar mellan dagvattnets miljöpåverkan och flera av Bottenvikens vattendistrikts specifikt

³⁸ Naturvårdsverket, Rapport 5489, 2005, s.62.

³⁹ Direktiv 2008/105/EG om miljökvalitetsnormer på vattenpolitikens område.

⁴⁰ Direktiv 2008/105/EG artikel 5.

⁴¹ Direktiv 2000/60/EG artikel 10.

⁴² Se till exempel Bäckström, Viklander, 2008, som anger dagvatten som en *dominerande* källa för tillförsel av miljögifter till våra vattenmiljöer.

⁴³ De nationella miljömålen är 16 stycken till antalet och utgör ytterligare preciseringar av innehållet i begreppet hållbar utveckling i 1 kap. 1 § MB. Tanken är att målen ska användas som *vägledning* för domstolar, förvaltningsmyndigheter och kommuner i deras beslutsfattande, när de tolkar hållbarhetsbegreppet inom ramen för sin verksamhet. Miljömålen är inte rättsligt bindande eftersom de inte tagits in i lagtexten.

⁴⁴ För en redogörelse för vilka miljömål som kan kopplas till dagvattenhanteringen, se Bäckström, Viklander, 2008, s.19.

utpekade problemområden. Fem områden har identifierats som primärt viktiga för att målet god status ska kunna nås i distriktet; försurning, övergödning, miljögifter, främmande arter i ekosystemen samt olika former av fysisk påverkan.⁴⁵ Ytterligare ett problem som konstateras i förvaltningsplanen för Bottenvikens vattendistrikt är att många viktiga dricksvattentäkter saknar skydd i form av vattenskyddsområde i åtskilliga kommuner i Norrbotten.⁴⁶ Bristande skydd för dricksvattentäkter är ett problem i stora delar av Sverige och bidrar även till svårigheter med att nå miljömålet *Grundvatten av god kvalitet*.⁴⁷

Försurningsproblematikens koppling till dagvatten handlar framförallt om så kallade surstötar under snösmältningsperioder.⁴⁸ Försurande ämnen, framförallt svavel och kväve härstammande från atmosfären, ackumuleras i snön under vinterhalvåret och transporteras sedan med dagvattnet till vattenmiljöerna när snön smälter. Att Norrbotten är ett län med normalt sett mycket snörika vintrar, bidrar givetvis till problematiken med försurningseffekter i länet. Bedömningen, vilken till stor del baseras på beräkningar och uppskattningar och inte på fysiska kontroller eller på annat sätt verifierad data, är att åtminstone 5 % av sjöarna och vattendragen i Bottenvikens vattendistrikt har försurningsproblem relaterade till mänsklig påverkan.⁴⁹ Även lokala övergödningseffekter kan kopplas till dagvatten, även om andra källor är övervä-

gande när det handlar om transport och läckage av framförallt kväve och fosfor till vattenmiljöerna.⁵⁰ Problemen med både försurnings- och övergödningseffekter är störst under våren när snön smälter.

Miljögifter är det problemområde med starkast koppling till dagvatten. I vattenförvaltningen används begreppet miljögifter som en samlingsbeteckning för samtliga ämnen som har en negativ miljöinverkan och riskerar att skada organismers funktioner.⁵¹ Tillförseln av miljögifter till vattenförekomsterna i Bottenvikens vattendistrikt beskrivs i den fastställda förvaltningsplanen som ett utbrett problem i distriktet.⁵² Uppskattningen är att 42 % av Bottenvikens kustvatten inte uppnår god ekologisk status på grund av miljögifter, samtidigt som *samtliga* ytvatten i distriktet inte uppnår god kemisk status beroende på förhöjda kvicksilvervärden. Andra miljögifter som uppskattas förekomma i stor utsträckning i distriktet är metaller och organiska miljögifter.⁵³ En viktig del av problematiken utgörs även av att miljögifter till stor del härstammar från diffusa källor och inte från punktutsläpp.⁵⁴ Här finns således en ytterligare koppling till dagvattenproblematiken, genom att den diffusa belastningen är en stor källa till föroreningar i dagvatten. Det finns därmed en risk för ökad spridning av miljögifter till våra vattenmiljöer beroende på hur och om dagvattnet tas om hand.

⁴⁵ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.104.

⁴⁶ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.104.

⁴⁷ <http://www.miljomal.se/9-Grundvatten-av-god-kvalitet/>, 2010-01-14.

⁴⁸ Bäckström, Viklander, 2008, s.19.

⁴⁹ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.105.

⁵⁰ Bäckström, Viklander, 2008, s.19.

⁵¹ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.111.

⁵² Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.2.

⁵³ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.2.

⁵⁴ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.112.

I detta sammanhang är det värt att uppmärksamma att den fastställda förvaltningsplanen omnämner dagvatten som en av de viktigaste diffusa föroreningskällorna, trots att det samtidigt konstateras att det i flera fall finns väl definierade utsläppspunkter för dagvatten.⁵⁵ Frågan jag ställer mig är om det inte vore rimligare att räkna de definierade utsläppspunkterna för dagvatten som *punktkällor*, på samma sätt som utsläppspunkter från exempelvis avloppsreningsanläggningar räknas till dessa? En kategorisering som punktkällor borde i förlängningen kunna innebära att utsläppspunkterna ska omfattas av *gränsvärden* för utsläpp av prioriterade förorenande ämnen i enlighet med ramvattendirektivets krav, i de fall innehåll av sådana ämnen har påvisats i dagvatten. Några specifika krav vad gäller dagvattnets utsläppspunkter återfinns inte i vare sig åtgärdsprogram eller förvaltningsplan. För problemen med miljögifter och diffus belastning handlar det istället om att "öka kunskapsunderlaget", i syfte att senare kunna ta fram konkreta kostnadseffektiva åtgärder.⁵⁶ Övriga åtgärder i åtgärdsprogrammet som berör dagvattens miljöpåverkan direkt, riktar sig till Banverket och Vägverket⁵⁷ och påtalar dessa myndigheters ansvar för att *utreda* dagvattnets miljöpåverkan inom sina respektive verksamhetsområden.

Slutligen när det gäller problemet med bristande skydd för dricksvattentäkter ligger kopplingen i att förorenat dagvatten kan orsaka att grundvatten förorenas. Grundvattenförorening kan utgöra ett problem bland annat för bostadsområden som

är lågt placerade och som ligger i anslutning till en förorenad recipient. Detta är fallet för exempelvis bostadsområdet Hertsön i Luleå kommun som ligger i anslutning till en av stålindustrin SSAB:s recipienter, Hertsöfjärden.⁵⁸ Enligt förvaltningsplanen för Bottenvikens vattendistrikt är skyddet av grundvattenförekomster som är kopplade till dricksvattentäkter ett område som behöver prioriteras under den andra förvaltningscykeln av ramvattendirektivets genomförande.⁵⁹

2.3 Myndigheter i (dag)vattenförvaltningen

Åtminstone tre aktörer i den nya vattenförvaltningen spelar nyckelroller för att komma åt dagvattenproblematiken; vattenmyndigheterna, kommunerna och Trafikverket (tidigare Vägverket). I det följande beskrivs deras roller i vattenförvaltningen kortfattat, med särskilt fokus på dagvattenfrågorna.

Vattenmyndigheterna

Då vattenmyndigheterna bär huvudansvaret för ramvattendirektivets genomförande i Sverige är det de som ska dra upp riktlinjerna för vattenförvaltningsarbetet inom sina respektive distrikt. Deras övergripande ansvar innefattar allt ifrån att ta fram underlag för att kartlägga och klassificera vattenförekomsterna i förhållande till målet god status, till att arbeta fram de förslag till miljökvalitetsnormer, åtgärdsprogram och förvaltningsplan som ska vara styrande i vattenförvaltningen. På detta sätt är vattenmyndigheternas roll främst planerande och samordnande. Det operativa ansvaret, det vill säga det *praktiska genomförandet* av de åtgärder som föreskrivs i åtgärdsprogrammen,

⁵⁵ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.91.

⁵⁶ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.114.

⁵⁷ Banverket och Vägverket ingår från den 1/4 2010 i den nybildade myndigheten Trafikverket.

⁵⁸ Hans Olsson, Miljöchef vid SSAB Luleå, november 2008.

⁵⁹ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2009, s.191.

ligger på andra förvaltningsorgan, såsom Naturvårdsverket, Jordbruksverket, länsstyrelser och kommuner.⁶⁰ Därutöver ska vattenmyndigheterna upprätta program för övervakning av att målen för respektive distrikt nås.⁶¹ Vattenmyndigheterna har således, åtminstone indirekt, en skyldighet att kontrollera att åtgärderna som föreskrivs i åtgärdsprogrammen både är tillräckliga och att de genomförs i praktiken.

En fråga som har debatterats i Sverige är vilken *rättslig status* de miljökvalitetsnormer som vattenmyndigheterna ansvarar för att ta fram egentligen har.⁶² Enligt ramvattendirektivet är medlemsstaterna skyldiga att fastställa miljökvalitetsnormer som svarar mot målet god status för samtliga vattenförekomster, med undantag för de miljöfarliga ämnen som har EU-gemensamma miljökvalitetsnormer.⁶³ I vattenförvaltningsförordningen anges därför att miljökvalitetsnormerna ska fastställas dels så att statusen inte försämras och dels så att en god status uppnås.⁶⁴ Vattenmyndigheterna i Sverige har tidigare gemensamt beslutat att miljökvalitetsnormerna i vattenförvaltningen är att anse som rättsligt bindande, men beslutet har i samrådsförfaranden kritiserats för att vara en överim-

plementering av ramvattendirektivet.⁶⁵ Tyvärr är rättsläget fortsatt oklart även efter den senaste lagändringen kring miljökvalitetsnormer och åtgärdsprogram, vilken trädde ikraft den 1 september 2010. Orsakerna utvecklas i avsnitt 3.3 nedan.

Det är genom åtgärdsprogrammets utformning som vattenmyndigheterna har möjlighet att påverka och ställa krav på dagvattenhanteringen. Genom konkreta förslag till åtgärder, riktade till specifika förvaltningsmyndigheter eller kommuner, kan vattenmyndigheterna tala om vad som behöver göras för att målen för distrikten ska nås. Åtgärdsprogrammets utformning är även vattenmyndigheternas enda möjlighet att påverka enskilda verksamheter och åtgärder. Enskilda miljöpåverkare binds nämligen inte direkt av vare sig miljökvalitetsnormerna eller åtgärdsprogrammen, utan berörs endast indirekt genom de ansvariga myndigheternas efterkommande beslut, vilka ska baseras på underlaget i vattenmyndigheternas åtgärdsprogram. Inte minst av denna anledning är det av stor vikt att de åtgärder som föreskrivs i åtgärdsprogrammen är tillräckligt konkreta för att faktiskt bidra till en förbättring av vattenkvaliteten.

Kommunerna

Kommunerna har en nyckelroll i vattenförvaltningen och för dagvattenproblematiken, inte minst på grund av deras dominerande ansvar för mark- och vattenanvändningen (och därmed möjlighet att bidra till långsiktigt hållbara dagvattenlösningar) inom sin kommun, i enlighet med PBL. Kommunerna spelar även en viktig roll när det handlar om det praktiska genomförandet av miljökvalitetsnormer och åtgärdsprogram. Enligt MB är kommuner, tillsammans med andra

⁶⁰ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010.

⁶¹ 7 kap. 1 § VFF.

⁶² Problematiken bottnar bland annat i att ramvattendirektivet talar om miljömål istället för om miljökvalitetsnormer, samt i att definitionen av miljökvalitetsnormer skiljer sig åt i de olika språkliga versionerna av direktivet. I den svenska versionen definieras miljökvalitetsnormer i form av vägledande riktvärden, vilket ger sken av att de inte skulle vara rättsligt bindande, se direktiv 2000/60/EG artikel 2 (35).

⁶³ Flertalet av dessa har fastställts i det tidigare nämnda dotterdirektivet 2008/105/EG om miljökvalitetsnormer inom vattenpolitikens område.

⁶⁴ 4 kap. 2 § VFF.

⁶⁵ Vattenmyndigheten Bottenviken, Särskild sammanställning av samrådssynpunkter, 2009, s.11

myndigheter, ansvariga för att se till att miljö-kvalitetsnormer "följs".⁶⁶ Därutöver är kommunerna skyldiga att genomföra de åtgärder som är riktade till dem i ett fastställt åtgärdsprogram,⁶⁷ en skyldighet som dock inte är sanktionerad.

Till kommunernas obligatoriska tillsynsansvar hör tillsyn över sådana miljöfarliga verksamheter som inte kräver tillstånd samt över hanteringen av kemiska produkter och avfall inom kommunen.⁶⁸ Kommunerna är vidare ansvariga för dricksvattenförsörjning samt inrättande och skötsel av allmänna avloppsreningsanläggningar i enlighet med lagen om allmänna vattentjänster (VA-lagen).⁶⁹ VA-lagens betydelse för kommunernas dagvattenhantering diskuteras nedan i avsnitt 3.1. Redan här kan dock nämnas att VA-lagen visserligen har utvidgat kommunernas skyldigheter när det gäller dagvattenhantering, men lagtextens utformning lämnar samtidigt ett stort utrymme för fritt skön för kommunerna i dessa frågor.

Ett annat verksamhetsområde med koppling till dagvatten som kommunerna ansvarar för är snöhantering. Då snö utgör fruset dagvatten är snöhanteringen något som upptar en stor del av den kommunala dagvattenhanteringen, inte minst i typiskt sett snörika kommuner i de norra delarna av landet. Kommunerna är ansvariga för snöröjning och bortskaffande av is och snö för samtliga detaljplanlagda allmänna platser inom sin kommun.⁷⁰ Utifrån avfallsregleringen räknas snö från vinterväghållning även som en hanter-

ing med avfall.⁷¹ Den kommunala snöhanteringen kan även kräva tillstånd i vissa fall, genom att deponering av snö på markanläggningar räknas som miljöfarlig verksamhet.⁷² Det är volymen snö som årligen tillförs en deponi som är avgörande för om tillståndsplikten aktualiseras eller inte.⁷³

Trafikverket

Vattenförvaltningen ställer krav även på andra statliga myndigheter. Trafikverket är en av de myndigheter med koppling till dagvatten som påverkas av ramvattendirektivet och som måste anpassa sin verksamhet till det nya arbetssättet och de nya krav som ställs. Anledningen är att Trafikverket som sektorsmyndighet och väghållare för allmänna vägar har det direkta ansvaret för det statliga vägnätets miljöpåverkan.⁷⁴

Stora delar av det befintliga vägnätet i Sverige har tillkommit för åtskilliga år sedan, utan särskilda krav på miljöhänsyn. Det finns följaktligen många vägsträckningar idag som riskerar att påverka vattenkvaliteten negativt.⁷⁵ Av denna anledning tog Vägverket fram ett måldokument⁷⁶ 2007, där bland annat dagvatten från vägar utpekades som ett av de problemområden som myndigheten aktivt måste förbättra för att uppfylla sina åtaganden enligt ramvattendirektivet. Då omfattningen av vägdagvattnets miljöpåverkan är ofullständigt utredd var det första steget i strategin djupare undersökningar,

⁶⁶ 5 kap. 3 § MB, lydelsen av lagrummet är ändrad från "säkerställa" till "följa" fr.o.m. den 1/9 2010.

⁶⁷ 5 kap. 8 § MB.

⁶⁸ 26 kap. 3 § 3st MB.

⁶⁹ SFS 2006:412.

⁷⁰ 2 § lag (1998:814) med särskilda bestämmelser om gatuhänsyn och skyltning.

⁷¹ 15 kap. 1 § MB samt 3 § och bilaga 1 Avfallsförordning (2001:1063).

⁷² 9 kap. 1 § och 6 § MB samt förordning (1998:899) om miljöfarlig verksamhet och hälsoskydd.

⁷³ 5 § Förordning (1998:899) samt bilaga, sifferkod 90.290-90.300.

⁷⁴ 5-6 §§ Vägagen.

⁷⁵ Vägverket, Publikation 2007:48, s.6.

⁷⁶ Vägverket, Publikation 2007:48.

för att därefter upprätta prioriterings- och objektlistor samt åtgärdsförelägg.⁷⁷

2.5 Samarbete och samverkan i vattenförvaltningen

Grundtanken i ramvattendirektivet är att genomförandet ska bygga på samarbete och samverkan mellan alla som berörs eller har ett intresse i vattenfrågor.⁷⁸ Samverkanstanken kommer till uttryck i vattenförvaltningsförordningen på så sätt att vattenmyndigheterna ska planera sitt arbete så att deltagande uppmuntras samt att de ska samråda med de myndigheter, kommuner, organisationer, verksamhetsutövare och enskilda som berörs, innan beslut fattas i frågor av större betydelse.⁷⁹ I linje med samverkanstanken har 13 stycken vattenråd inrättats i Bottenvikens vattendistrikt. Vattenråden bygger på frivilligt deltagande från olika intressenter, såsom kommunala organ och företrädare för näringsliv och miljöorganisationer. Tanken bakom vattenråden är främst att få lokal kunskap från dem som är insatta i frågor kring miljö och miljöpåverkan inom ett specifikt avrinningsområde, men även att de som berörs av åtgärderna ska få möjlighet att yttra sig och påverka innehållet i de dokument som ska styra vattenförvaltningen.⁸⁰

Den lokala kunskapen, förankringen av vattenvårdsarbetet samt aktivt deltagande av många olika aktörer och företrädare för olika intressen, är viktiga delar i vattenförvaltningen. Samtidigt finns en negativ aspekt av samverkan som inte bör underskattas; *miljövårdsintressen riskerar att hamna i skymundan* bakom de stora

miljöpåverkande aktörerna. Då stora aktörer, såsom vattenkraftsproducenter och skogsindustrin, har mer resurser att lägga på att bevaka sina intressen i vattenförvaltningen, är risken att större hänsyn tas till dessa stora miljöstörande verksamheter vid utformandet av åtgärdsprogrammen och förvaltningsplanen. Samtidigt har små ideella organisationer, som företräder till exempel fiskevårds- eller naturskyddsintressen, små möjligheter att göra sina röster hörda och finns inte alltid ens representerade i vattenråden. Samverkan riskerar därmed att ske på bekostnad av vattenkvaliteten istället för att förbättra möjligheterna att nå målen.

Att få igång samverkan och samarbete mellan olika aktörer har varit en utmaning för vattenmyndigheterna, inte minst i Bottenvikens vattendistrikt. Ramvattendirektivets implementering och praktiska genomförande har inneburit både införande av en ny förvaltningsnivå på vattenområdet och inrättande av ett nytt arbetssätt med samverkan och samarbete över administrativa och geografiska gränser. Det nya arbetssättet, och inte minst den nya förvaltningsnivån, är inte alldeles enkel att sammanfoga med den traditionella hanteringen av vattenfrågor i Sverige, där frågorna har avgjorts på olika nivåer och där varje aktör i princip haft ett självständigt ansvar att fatta beslut inom sitt ansvarsområde. Vattenförvaltningen i Bottenviken har traditionellt varit lokalt anknuten och utan att något samarbete mellan olika aktörer vare sig har krävts eller förväntats.⁸¹

⁷⁷ Vägverket, Publikation 2007:48, s.9.

⁷⁸ Direktiv 2000/60/EG preambeln p.14.

⁷⁹ 2 kap. 4 § VFF.

⁸⁰ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.185.

⁸¹ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.7.

3. Dagvattenproblematiken och den svenska rätten

3.1 Hur regleras hanteringen av dagvatten i svensk rätt?

Den allmänna beskrivningen av dagvatten, som tillfälligt förekommande nederbördsvatten avrinnande från hårdgjorda ytor, överensstämmer med den juridiska definitionen av dagvatten.⁸² Det är däremot en svårare uppgift att identifiera och kartlägga de *rättsliga krav* som ställs på hanteringen av dagvatten i svensk rätt. De huvudsakliga lagarna av intresse är VA-lagen, MB och PBL, men när det gäller dagvattenfrågor är dessa lagar svåra att överblicka, dåligt samordnade och innebär en svag styrning.⁸³ Rent lagtekniskt faller dagvattenhanteringen nämligen in under olika definitioner och rättsliga krav, bland annat beroende på var det uppkommer och hur det tas om hand. Det komplicerade rättsläget leder även till att ansvarsfördelningen kring dagvattenfrågorna blir otydlig och svårhanterlig, vilket i sin tur försvårar de praktiska möjligheterna att komma åt problematiken. Om inte lagstiftningen tydligt pekar ut vem som är skyldig att agera, hur ska förvaltningen av ett så traditionellt försummat problem som dagvatten kunna förbättras?

Dagvatten kan räknas som avloppsvatten enligt MB...

I stor utsträckning faller dagvatten in under MB:s definition av begreppet avloppsvatten.⁸⁴

Närmare bestämt betraktas i princip allt dagvatten som avleds inom detaljplanlagt område⁸⁵ alternativt som avleds från en begravningsplats⁸⁶ som avloppsvatten. Vidare betraktas dagvattnet alltid som avloppsvatten när det samlas upp i det kommunala dagvattensystemet, till exempel i dagvattenbrunnar och dagvattenledning.⁸⁷ Dagvattenhanteringen inom detaljplanlagt område utgör därför *miljöfarlig verksamhet* enligt MB, genom att det handlar om utsläpp av avloppsvatten.⁸⁸ Regleringen innebär även att samtliga verksamheter inom detaljplanlagt område som genererar dagvatten, definieras som miljöfarliga. I till exempel stora industrier kan dagvatten uppkomma genom att nederbörd drar med sig föroreningar från fasta ytor, såsom tak på byggnader eller asfalterade markytor.

För dagvatten som utgör avloppsvatten blir MB:s krav och övrig lagstiftning som rör hantering av avloppsvatten tillämplig. Här återfinns bland annat det allmänna kravet på att dagvatten ska avledas, renas eller på något sätt tas om hand så att inte olägenheter för vare sig människors hälsa eller miljön uppkommer samt att särskilda avloppsanordningar ska inrättas för detta syfte.⁸⁹ Vidare gäller att dagvatten inte *får* släppas ut orenat om sådant utsläpp inte kan ske utan risk för människors hälsa eller miljön.⁹⁰ I denna formulering finns med andra ord ett uttryck för *försiktighetsprincipen*, i och med att redan risken för skada är tillräcklig. Kraven är med andra ord inte förenliga med det faktum att dagvatten i stor

⁸² Se till exempel 2 § i Naturvårdsverkets föreskrifter (1994:7) där dagvatten definieras som "nederbördsvatten, det vill säga regn- eller smältvatten, som inte tränger ner i marken, utan avrinner på markytan".

⁸³ Kritiken delas av Stockholms kommun, se till exempel Dagvattenstrategi för Stockholm stad, 2005, s.3.

⁸⁴ 9 kap. 2 § MB.

⁸⁵ 9 kap. 2 § 3p MB.

⁸⁶ 9 kap. 2 § 4p MB.

⁸⁷ Prop. 2005/06:78 s.44.

⁸⁸ 9 kap. 1 § 1p MB.

⁸⁹ 9 kap. 7 § MB.

⁹⁰ 12 § förordning (1998:899) om miljöfarlig verksamhet och hälsoskydd.

utsträckning släpps ut orenat till recipienterna, helt utan föregående kontroll av föroreningsinnehållet.

Genom att hanteringen av avloppsvatten faller in under MB:s tillämpningsområde, utgörs de grundläggande materiella miljökraven som kan ställas på hanteringen av denna form av dagvatten av de allmänna hänsynsreglerna i 2 kap. MB. Med stöd av de allmänna hänsynsreglerna kan krav ställas på kommuner och verksamhetsutövare att till exempel ha erforderlig *kunskap* om föroreningsnivåerna i dagvatten,⁹¹ att i enlighet med försiktighetsprincipen vidta *förebyggande* åtgärder i syfte att förhindra spridning av föroreningar genom utsläpp av dagvatten,⁹² alternativt att *lokalisera* avloppsreningsverk eller utsläppspunkter för dagvatten till mindre känsliga recipienter.⁹³ Enbart genom att de allmänna hänsynsreglerna blir tillämpliga, finns det med andra ord utrymme i svensk rätt att ställa långtgående krav på hanteringen av sådant dagvatten som omfattas av MB:s tillämpningsområde. Vid sidan av de allmänna hänsynsreglerna finns en hel del andra bestämmelser i MB som kan ligga till grund för hanteringen av dagvatten. Bland annat kan reglerna kring det praktiska genomförandet av miljökvalitetsnormerna i vattenförvaltningen spela en viktig roll. Reglerna beskrivs nedan i avsnitt 3.3.

Att det utrymme som MB innehåller för att ställa krav på dagvattenhanteringen i många fall inte utnyttjas i praktiken, illustreras av följande två intervjuuttalanden av VA-chefen i Luleå kommun:

”Dagvatten renas normalt inte i Sverige utan vi anser att vi kan släppa ut det direkt till våra recipienter” och

”...vad jag anser finns det ingen reglering för hur dagvatten ska hanteras, ingen alls”.⁹⁴

... eller som markavvattnings enligt MB...

Dagvatten inom detaljplanlagt område eller som avleds från en begravningsplats utgör alltså avloppsvatten, medan motsvarande vatten utanför dessa områden vanligtvis definieras som vägdagvatten.⁹⁵ Anledningen är att det framförallt är vägar som utgör de hårdgjorda ytorna utanför detaljplanlagda områden. Den myndighet som i första hand är ansvarig för omhändertagande av vägdagvatten är som nämnts den nybildade myndigheten Trafikverket.

Vid omhändertagande av vägdagvatten, vid till exempel byggande och underhåll av väg, faller åtgärder som görs för att avvattna vägkroppen i stor utsträckning in under MB:s reglering av markavvattnings och räknas därmed som *vattenverksamhet*.⁹⁶ I och med definitionen som vattenverksamhet faller även hanteringen av vägdagvatten huvudsakligen in under MB:s tillämpningsområde, innebärande att de allmänna hänsynsreglerna och bestämmelser kring miljökvalitetsnormer blir tillämpliga också vid hanteringen av denna form av dagvatten. Utrymme finns således i lagstiftningen att ställa långtgående krav på hur vägdagvatten ska hanteras. Till exempel ger 2 kap. MB stöd för att ställa krav på att dagvattnet ska omhändertas lokalt genom infiltration, att det ska renas innan

⁹¹ 2 kap. 2 § MB (kunskapskravet).

⁹² 2 kap. 3 § MB (krav på skyddsåtgärder och försiktighetsmått).

⁹³ 2 kap. 6 § MB (lokaliseringsregeln).

⁹⁴ Stefan Marklund, Avdelningschef Vatten & Avlopp Luleå kommun, november 2008.

⁹⁵ Vägverket, Publikation 2008:61, 2008, s.8.

⁹⁶ 11 kap. 2 § MB.

det släpps ut eller att det ska ledas bort till recipienter som är mindre känsliga.

... alternativt falla under VA-lagens definition av begreppet avloppsvatten

VA-lagen behandlar kommunernas skyldigheter att tillhandahålla allmänna vattentjänster i tillfredsställande omfattning.⁹⁷ Begreppet vattentjänst används i lagen som en sammanfattande benämning för samtliga tjänster rörande vattenförsörjning och avlopp som kommunerna ska tillhandahålla.⁹⁸ VA-lagen har en egen definition av när dagvatten ska räknas som avloppsvatten, vilken skiljer sig från MB:s avgränsning. Här har lagstiftaren nämligen slopat kravet på detaljplan och anger istället "samlad bebyggelse" som kriterium för att dagvatten ska räknas till och omhändertas som övrigt avloppsvatten enligt lagen.⁹⁹

Enligt den tidigare VA-lagen var kommunerna inte skyldiga att avleda sådant dagvatten som uppkom utanför detaljplanelagt område, men i och med att den nya lagen trädde ikraft (den 1 januari 2007) utvidgades kommunernas skyldigheter kring dagvattenhantering. Den stora skillnaden utgörs just av att skyldigheten att avleda dagvatten inte längre är beroende av detaljplan, utan träder in så fort det handlar om samlad bebyggelse.¹⁰⁰ En annan förändring är att *miljöhänsyn* lyfts in som grund för att skyldigheten att anordna allmänna vatten- och avloppsanläggningar ska aktualiseras, vid sidan av det tidigare *hälsoskyddsskälet*. De huvudsakliga motiven bakom utvidgningen av utbygg-

nadsansvaret anges i propositionen vara att lagstiftningen ska bidra till en hållbar utveckling och stå i överensstämmelse med moderna krav på miljöhänsyn.¹⁰¹

I propositionen diskuteras även vad förändringarna får för betydelse för kommunernas dagvattenhantering specifikt.¹⁰² Bland annat anges att miljöaspekterna sannolikt kommer att få betydelse för utbyggnaden av allmänna dagvattenanläggningar samt öka utrymmet för alternativa dagvattenlösningar än traditionellt bortledning, till exempel i form av att dagvattnet ska renas innan utsläpp sker. Resonemanget motiveras av att en dagvattenanläggning som inrättas på grund av miljöhänsyn, även måste motverka de befarade risker för miljöstörningar som motiverat anläggningen och då är det långt ifrån säkert att enbart bortledning av dagvattnet räcker till.

Enligt det allmänt hållna stadgandet i 6 § VA-lagen är kommunerna skyldiga att ordna allmänna vattentjänster om de, med hänsyn till lagens skyddsintressen, "behöver ordnas" i ett större sammanhang. När det gäller dagvattenhanteringen anges i propositionen att lagrummet ska tolkas så att utbyggnadsskyldigheten inträder så fort det finns ett faktiskt behov av en gemensam lösning på dagvattenfrågorna, i ett område med samlad (befintlig och/eller blivande) bebyggelse.¹⁰³ Utgångspunkten är således att det är det verkliga behovet som ska avgöra om en allmän vattentjänst i form av en dagvattenanläggning ska tillhandahållas av kommunen eller inte. Någon vidare vägledning än så tillhandahålls inte av vare sig lag eller förarbeten.

⁹⁷ 1 och 6 §§ VA-lagen.

⁹⁸ 2 § VA-lagen. Definitionen överensstämmer med ramvattendirektivets definition av begreppet vattentjänst, se artikel 2 (38).

⁹⁹ 2 § VA-lagen.

¹⁰⁰ Prop. 2005/06:78 s.42 anger 20-30 fastigheter som riktmärke för att ska vara fråga om samlad bebyggelse, en uppskattning som baseras på tidigare praxis.

¹⁰¹ Prop. 2005/06:78 s.45.

¹⁰² Prop. 2005/06:78 s.45-47.

¹⁰³ Prop. 2005/06:78 s.45-47.

När det gäller kommunernas skyldigheter för driften av allmänna VA-anläggningar är VA-lagen inte heller särskilt detaljerat utformad. I 10 § 1st stadgas enbart att en allmän VA-anläggning "skall ordnas och drivas så att den uppfyller de krav som kan ställas med hänsyn till skyddet för människors hälsa och miljön och med hänsyn till intresset av en godushållning med naturresurser". I lagrummet ges följaktligen inte mer vägledning än att anläggningarna ska överensstämma med gällande krav på hälsoskydd och miljöskydd. Kraven som avses är de som kan ställas genom MB och annan miljölagstiftning. Precis som för hanteringen av övrigt dagvatten gäller således de allmänna hänsynsreglerna och avloppshantering räknas som nämnts även som miljöfarlig verksamhet enligt 9 kap. MB. Tillstånd eller anmälan för kommunala avloppsreningsanläggningar krävs i vissa fall.¹⁰⁴

Av det anförda kan slutsatsen dras att den nya VA-lagen syftar till att skärpa kraven på kommunernas dagvattenhantering, samtidigt som lagtextens generella utformning tillsammans med allmänt hållen vägledning i förarbetena lämnar ett mycket stort *avvägningsutrymme* till kommunerna att avgöra när, om och hur dagvattnet ska tas om hand. Avvägningsutrymmet i kombination med de ekonomiska aspekterna och tendensen i många kommuner att lågprioritera uppbyggnad av hållbara dagvattenlösningar, leder till att prognosen för att förbättra dagvattenhanteringen inte blir särskilt ljus. Att situationen dessutom ofta är sådan, att kommunen

utövar tillsyn över sig själv på avloppsområdet efter delegation från länsstyrelsen,¹⁰⁵ förbättrar inte direkt möjligheterna att ställa krav på hanteringen. I till exempel Luleå kommun utövar det kommunala miljökontoret tillsynen över kommunens vatten- och avloppshantering. De ska därmed även verka för att utbyggnadsskyldigheten fullgörs.

I åtgärdsprogrammet för Bottenvikens vattendistrikt föreskrivs att kommunerna, i samverkan med länsstyrelserna, behöver utveckla vatten- och avloppsplaner.¹⁰⁶ Sådana planer utgör ett viktigt steg mot en mer hållbar kommunal hantering av dagvatten men åtgärden ter sig relativt tandlös trots kommunernas skyldighet att vidta de åtgärder som föreskrivs i ett åtgärdsprogram.¹⁰⁷ Åtgärden är nämligen alltför vagt utformad för att sägas rikta något direkt krav mot kommunerna på att vatten- och avloppsplaner *måste* finnas och ställer heller inga konkreta krav på hur dagvatten ska hanteras. Här föreligger således en brist på tydliga krav och styrning från nationellt håll.

3.2 Hur når vi god status?

Ramvattendirektivet föreskriver miljökvalitetsnormer och åtgärdsprogram som de främsta styrmedlen i vattenförvaltningen. Mot den bakgrunden har fokus lagts på dessa instrument även i vattenförvaltningsförordningen,¹⁰⁸ med direkta kopplingar både till ramvattendirektivet och till den generella regleringen av miljökvalitetsnormer och åtgärdsprogram i 5 kap. MB.

¹⁰⁴ Enligt bilagan till förordning (1998:899) sifferkod 90.10-90.20 kräver kommunala avloppsreningsanläggningar som tar emot en mängd avloppsvatten motsvarande 2000 personekvivalenter tillstånd från länsstyrelsen, medan anmälan räcker för sådana avloppsreningsanläggningar som tar emot avloppsvatten motsvarande 200 personekvivalenter.

¹⁰⁵ 51 § VA-lagen utpekar länsstyrelsen som tillsynsmyndighet över kommunerna, men tillsynen kan delegeras enligt 26 kap. 3 § 4st MB samt bilagan till förordning (1998:900) om tillsyn enligt miljöbalken.

¹⁰⁶ Vattenmyndigheten Bottenviken, Åtgärdsprogram 2009-2015, 2010, s.10.

¹⁰⁷ 5 kap. 8 § MB.

¹⁰⁸ 4 och 6 kap. VFF.

Genom att åtgärdsprogrammen ska ange de åtgärder som är nödvändiga för att nå god status, utgör de nyckeldokument i vattenförvaltningen. Åtgärdsprogrammen utgör även nyckeldokument för dagvattenproblematiken, genom att det (i vattenförvaltningen) är via åtgärdsprogrammets utformning och innehåll som problematiken kan komma åt.

Miljökvalitetsnormer och åtgärdsprogram – ändamålsenliga instrument?

Enligt definitionen i MB utgörs miljökvalitetsnormer av föreskrifter om kvalitetskrav på mark, luft, vatten eller miljön i övrigt, i syfte att skydda människors hälsa eller miljön.¹⁰⁹ Det finns olika typer av miljökvalitetsnormer i svensk rätt; *gränsvärdesnormer* anger föroreningsnivåer eller störningsnivåer som inte får över- eller underskridas efter en angiven tidpunkt, *målsättningsnormer* anger riktvärden som skall eftersträvas och således inte bör över- eller underskridas efter en angiven tidpunkt, medan *indikatornormer* anger ett mått på förekomsten av organismer som kan tjäna som ledning för tillståndet i miljön.¹¹⁰ Därutöver har lagstiftaren lämnat öppet för att föreskriva de ytterligare typer av normer som följer av vårt medlemskap i EU, så kallade *övriga normer*.¹¹¹ Det är till kategorin övriga normer som lagstiftaren anser att miljökvalitetsnormerna i vattenförvaltningen ska räknas, på grund av att de normerna inte enkelt kan hänföras till vare sig gränsvärdesnormer, målsättningsnormer eller indikatornormer.¹¹² I avsnitt 3.3 nedan diskuteras hur detta uttalande i propositionen egentligen ska tolkas och vad denna kategorisering innebär

för miljökvalitetsnormernas rättsliga status i vattenförvaltningen.

Till skillnad från många andra styrinstrument i MB - där prövning och kontroll av enskilda störningskällor ligger i fokus, genom att till exempel föreskriva gränsvärden för utsläpp eller obligatorisk tillståndsplikt för miljöfarliga verksamheter - utgår miljökvalitetsnormer från själva mottagaren (recipienten) och föreskriver en gräns för vilken kvalitetsnivå denna minst måste ha.¹¹³ Systemet med individuell kontroll och tillståndsprövning syftar främst till att begränsa olika störningar direkt vid källan och är på så sätt ett bra instrument för att komma åt och minska föroreningar från betydande *punktkällor*. Genom att miljökvalitetsnormer istället innebär en arbetsmetod med fokus på miljötillståndet, utgör de ett bra instrument för att hantera situationer där *diffus påverkan* från många olika (och ofta svåridentifierade) källor bidrar till en oacceptabel föroreningsnivå.¹¹⁴ Då den diffusa påverkan ofta är svår att komma åt med andra mer traditionella styrmedel, kan miljökvalitetsnormerna användas som komplement till den individuella prövningen och miljöproblemen kan därigenom angripas från olika håll.¹¹⁵ På så sätt kan både punktkällorna och de diffusa utsläppen beaktas. Genom att den diffusa belastningen utgör den huvudsakliga källan till föroreningar i dagvatten, är miljökvalitetsnormer ett bra instrument för att komma åt dagvattenproblematiken. Detta gäller dock under förutsättningen att normen kan genomföras i praktiken.

Ett åtgärdsprogram utgör ett strategiskt planeringsdokument för det praktiska genomförandet av en beslutad miljökvalitetsnorm, genom

¹⁰⁹ 5 kap. 1 § 1st MB.

¹¹⁰ 5 kap. 2 § 1st 1-3pp MB.

¹¹¹ 5 kap. 2 § 1st 4p MB.

¹¹² Prop. 2009/10:184 s.42.

¹¹³ SOU 2005:59 s.55.

¹¹⁴ SOU 2005:59 s.58.

¹¹⁵ Gipperth, 2005, s.21.

att det översätter det eftersträvade miljötillståndet till handlingsregler för myndigheter, kommuner och indirekt även enskilda.¹¹⁶ Fördelarna med att arbeta med åtgärdsprogram i vattenförvaltningen är dels att de åtgärder som föreskrivs kan anpassas till den aktuella miljösituationen och till de specifika förutsättningar som råder i ett vattendistrikt, dels att det möjliggör uppnående av en helhetsbild, i syfte att komma åt och minska föroreningarna från samtliga bidragande föroreningskällor. Att uppnå en helhetsbild i syfte att nå målet god status är även den grundläggande tanken bakom miljökvalitetsnormer och åtgärdsprogram som huvudsakliga styrmedel i ramvattendirektivet.¹¹⁷

När systemet fungerar som det är tänkt möjliggör det att ett samlat grepp om vattenförvaltningen kan tas, genom att en mängd olika och specifikt anpassade åtgärder kan anges i åtgärdsprogrammen,¹¹⁸ varav alla inte nödvändigtvis grundar sig på regler i MB. Exempel på styrmedel som kan föreskrivas som åtgärder i ett åtgärdsprogram är generella föreskrifter, administrativa styrmedel, prövning och omprövning av tillstånd och villkor, tillsyn av verksamheter och åtgärder samt planläggning av mark och vatten. De åtgärder som föreskrivs måste förstås även kunna genomföras i praktiken och här är det den nationella rätten som sätter gränserna. Slutsatsen blir att miljökvalitetsnormer och åtgärdsprogram rent teoretiskt *är* ändamålsenliga instrument i vattenförvaltningen och för att hantera dagvattenproblematiken, men att ändamålsenligheten är *beroende av* att det finns ett rättsligt system som kan garantera ett säkert genomförande av instrumenten i praktiken. Frågan blir

därför om det finns ett sådant rättsligt system i Sverige idag?

3.3 Genomförande av miljökvalitetsnormer och åtgärdsprogram i Sverige

Diskussionen kring huruvida Sverige uppfyller EU-rättens krav kring miljökvalitetsnormer och åtgärdsprogram har pågått i Sverige i princip sedan instrumentens införande i svensk rätt. I två olika statliga utredningar från 2005¹¹⁹ konstateras att det svenska systemet *inte* kan anses garantera ett säkert genomförande av instrumenten, mot bakgrund av de krav som EU-domstolen har ställt i ett flertal mål mot andra medlemsstater. Den huvudsakliga anledningen är att reglerna och de rättsliga styrmedlen kring miljökvalitetsnormer och åtgärdsprogrammen är för svaga idag och i utredningarna ges därför flera förslag till hur lagstiftningen kan förstärkas. Bland annat föreslås att 2 kap. MB förändras så att miljökvalitetsnormernas rättsverkan gentemot enskilda förtydligas och skärps och att åtgärdsprogrammets rättsverkan förändras på ett sätt som möjliggör åtgärder direkt mot enskilda påverkare.¹²⁰ EU-domstolen har nämligen inte accepterat ett nationellt rättsläge där det praktiska genomförandet av miljökvalitetsnormer är beroende av olika myndigheters eget initiativ och styrning, vilket har visat sig genom uttalanden som att miljökvalitetsnormer ska antas i bindande form, att så kallad administrativ praxis (det vill säga att medlemsstaten i praktiken uppfyller normen genom ansvariga myndigheters krav och styrning) inte är tillräckligt samt att

¹¹⁶ 5 kap. 4-8 §§ MB.

¹¹⁷ Direktiv 2000/60/EG artikel 11.

¹¹⁸ 5 kap. 6 § 1st MB.

¹¹⁹ SOU 2005:113 och SOU 2005:59.

¹²⁰ Gipperth, 2005, s.22 ff.

normerna ska kunna grunda både rättigheter och skyldigheter för enskilda.¹²¹

Med anledning av utredningarna har lagstiftningen kring miljökvalitetsnormer och åtgärdsprogram nyligen ändrats.¹²² Förslagen till förstärkning av regelverket har dock fått gehör endast i viss utsträckning, medan rättsläget är fortsatt svagt på andra punkter. I huvudsak har lagändringen inneburit att *gränsvärdesnormerna* har särskiljts från övriga typer av normer, främst genom att rättsverkan av gränsvärdesnormerna har förstärkts. Bland annat kan *strängare krav* än de som normalt följer av en tillämpning av de allmänna hänsynsreglerna i 2 kap. MB, numera ställas när det handlar om att följa en gränsvärdesnorm,¹²³ men inte för att följa övriga typer av normer. Även den tidigare stoppregeln (i 16 kap. 5 § MB), är numera uteslutande kopplad till möjligheterna att följa gränsvärdesnormer och placerad i 2 kap. MB.¹²⁴

För miljökvalitetsnormerna i *vattenförvaltningen* är dock rättsläget inte helt klarlagt heller efter lagändringen, eftersom det är långt ifrån självklart att dessa normer ska hänföras till kategorin gränsvärdesnormer. Lagstiftaren har ju tvärtom indikerat att normerna i vattenförvaltningen i huvudsak är att hänföra till kategorin *övriga normer*.¹²⁵ Klassificeras de som övriga normer, och inte som gränsvärdesnormer, omfattas de heller inte av den stärkta rättsverkan som har införts. Här är propositionen nämligen otvetydig; de strängare krav som följer av de nya bestämmelserna (i 2 kap. 7 § 2-3st MB) får endast tillämpas i förhållande till fastställda gräns-

värdesnormer. För att uppfylla övriga typer av normer "räcker det med att kunna tillämpa de grundläggande hänsynskraven i 2 kap. miljöbalken".¹²⁶ Rättsläget är med andra ord helt oförändrat för samtliga övriga typer av normer. Klart är dock att ramvattendirektivets dotterdirektiv med EU-gemensamma miljökvalitetsnormer föreskriver just *gränsvärden*, i form av ett årsmedelvärde och en maximal tillåten koncentration av ämnet i olika ytvatten, vilket måste innebära att åtminstone de normerna faller under kategorin gränsvärdesnormer och omfattas av den stärkta rättsverkan. Även andra normer i vattenförvaltningen kan mycket väl vara att kategorisera som gränsvärden, till exempel om de relaterar till att uppnå god kemisk status i yt- eller grundvatten.

En huvudsaklig kategorisering av miljökvalitetsnormerna i vattenförvaltningen som övriga normer leder även till ett osäkert rättsläge när det gäller normernas rättsliga status. I propositionen ger lagstiftaren nämligen uttryck för att miljökvalitetsnormerna i vattenförvaltningen *är* att anse som rättsligt bindande, på grund av att ramvattendirektivets princip om icke-försämring och mål om god status är bindande för medlemsstaterna och dessa krav otvetydigt uttrycks som miljökvalitetsnormer i den svenska vattenförvaltningsförordningen.¹²⁷ Uttalandet tyder på att miljökvalitetsnormerna i vattenförvaltningen ska vara att anse som rättsligt bindande, trots att de inte huvudsakligen definieras som gränsvärdesnormer. Propositionen ger ingen ytterligare vägledning när det gäller dessa övriga normers rättsliga status, förutom att tydligt ange att de inte ska omfattas av den stärkta rättsverkan. Sammantaget innebär de något motsägelsefulla

¹²¹ Se Gipperth, 2005, s.21 och 92 för utveckling av kritiken.

¹²² Se SFS (2010:882) samt prop. 2009/10:184.

¹²³ 2 kap. 7 § 2st MB.

¹²⁴ 2 kap. 7 § 3st MB.

¹²⁵ Se ovan avsnitt 3.2 samt prop. 2009/10:184 s.42.

¹²⁶ Prop. 2009/10:184 s.46-47.

¹²⁷ Prop. 2009/10:184 s.41-42.

uttalandena i propositionen att rättsläget för miljö kvalitetsnormerna i vattenförvaltningen inte är helt klart efter lagändringen och vattenmyndigheterna bör därför inte lägga allt för stor vikt vid lagstiftarens generella klassificering av normerna i vattenförvaltningen som övriga normer, utan istället utgå ifrån vad normen faktiskt syftar till när normerna för olika vatten tas fram.

MB:s genomförande av miljö kvalitetsnormer

MB innehåller flera rättsliga möjligheter att praktiskt genomföra en miljö kvalitetsnorm. De huvudsakliga *materiella miljökraven* utgörs, precis som i övrigt när MB är tillämplig, av de allmänna hänsynsreglerna i 2 kap. Bland annat kan lokaliseringsregeln¹²⁸ användas för att styra bort nya verksamheter, medan stoppregeln¹²⁹ kan användas för att helt hindra andra verksamheter och åtgärder. Teoretiskt kan en befintlig verksamhet tvingas upphöra eller en ny verksamhet eller åtgärd hindras från att komma till stånd genom en tillämpning av stoppregeln. I praktiken är det dock svårt att motivera så drastiska åtgärder på grund av det väsentlighetsrekvisit¹³⁰ som lagrummet innehåller, samtidigt som det därutöver måste klargöras att det är *just den verksamheten* som orsakar den ohållbara situationen.

Hänsynsreglerna kompletteras av bland annat hushållningsbestämmelserna i 3–4 kap. MB, MB:s särskilda kravregler för olika typer av verksamheter och av reglerna om skydd av områden, till exempel i form av miljöskyddsområden, vattenskyddsområden eller Natura 2000-områden. MB:s tillsynsbestämmelser i 26 kap. ger

tillsynsmyndigheterna vida möjligheter att ställa krav både på verksamheter och åtgärder, i första hand genom att meddela de förelägganden och förbud som behövs i enskilda fall för att MB och beslut fattade med stöd av MB (till exempel beslutade miljö kvalitetsnormer) ska efterlevas.¹³¹ Sådana tillsyns ingripanden får dock inte begränsa verksamheter som har rättskraftiga tillstånd,¹³² utan i de fallen måste tillsyns myndigheterna istället använda reglerna om omprövning och återkallande av tillstånd och villkor i 24 kap. MB.¹³³ Även samrådsregeln i 12 kap. 6 § MB kan aktualiseras när det handlar om att följa miljö kvalitetsnormer, om en verksamhet som varken kräver tillstånd eller anmälan riskerar att leda till en väsentlig ändring i naturmiljön.

De allmänna hänsynsreglerna är som framgått grundläggande för samtliga typer av ingripanden med stöd av MB. När det gäller genomförandet av miljö kvalitetsnormer har dock kritik riktats mot att hänsynsreglerna inte innehåller någon tydlig koppling till just genomförandet av miljö kvalitetsnormer. Den bristande kopplingen har lett till ett osäkert rättsläge, bland annat kring hur höga krav myndigheterna i praktiken kan rikta gentemot enskilda verksamheter och åtgärder med stöd av 2 kap. MB, i syfte att följa en beslutad miljö kvalitetsnorm. Genom den senaste lagändringen har kopplingen mellan de allmänna hänsynsreglerna och genomförandet av miljö kvalitetsnormer nu alltså tydliggjorts och förstärkts, men då enbart avseende gränsvärdesnormerna. Hur normerna definieras får således avgörande betydelse för hur höga krav som kan ställas i enskilda fall och för flera av normerna i

¹²⁸ 2 kap. 6 § MB

¹²⁹ 2 kap. 9 § MB

¹³⁰ Enligt lagtexten i 2 kap. 9 § 1st MB stoppas endast verksamheter och åtgärder som orsakar "skada eller olägenhet av väsentlig betydelse".

¹³¹ 26 kap. 1 § och 9 § 1st MB.

¹³² 26 kap. 9 § 3 st MB.

¹³³ 24 kap. MB innehåller flera direkta kopplingar till genomförandet av miljö kvalitetsnormer, se till exempel 5 § 1st 2 p.

vattenförvaltningen innebär ändringen som nämnt ett i stort sett oförändrat, eller åtminstone fortsatt oklart, rättsläge.

En viktig möjlighet som MB innehåller, men som tyvärr inte har fått något större praktiskt genomslag, är möjligheten att meddela generella föreskrifter i syfte att skydda människors hälsa eller miljön, alternativt för att uppfylla Sveriges internationella åtaganden.¹³⁴ Det nuvarande bemyndigandet omfattar dock endast miljöfarliga verksamheter och har därför ingen given koppling till genomförandet av miljökvalitetsnormer. På grund av den begränsade räckvidden, föreslog Miljöbalkskommittén 2005 att ett nytt generellt bemyndigande för regeringen, att inom *hela MB:s tillämpningsområde* meddela generella föreskrifter om förbud, skyddsåtgärder eller försiktighetsmått i syfte att genomföra en miljökvalitetsnorm, skulle tas in i 5 kap. MB.¹³⁵ Enligt förslaget skulle möjligheten vara helt kopplad till ett åtgärdsprogram och användas i syfte att komma åt den diffusa belastningen, då denna svårigen kan hanteras med befintliga styrmedel i MB.¹³⁶ Förslaget skulle ha inneburit en generell möjlighet att, i ett åtgärdsprogram fastställt av regeringen, ta initiativ till generella föreskrifter i syfte att nå kvalitetskraven i vattenförvaltningen och brott mot föreskrifterna skulle även vara straffsanktionerade.¹³⁷ I propositionen till den senaste lagändringen lämnas dock förslaget utan åtgärd,¹³⁸ vilket tyvärr innebär att möjligheterna att komma åt den diffusa belastningen inte har förbättrats. På grund av kopplingen mellan diffusa källor och föroreningar i dagvatten kan slutsatsen dras att inte heller möjligheterna att

komma åt dagvattenproblematiken har förbättrats genom lagändringen.¹³⁹

Ett ytterligare rättsligt styrmedel som behöver lyftas fram mer när det handlar om genomförandet av miljökvalitetsnormer, är möjligheten för regeringen att inrätta *miljöskyddsområden* i syfte att följa en beslutad miljökvalitetsnorm.¹⁴⁰ Till miljöskyddsområden kan nämligen kopplas skräddarsydda föreskrifter, i vilka krav på skyddsåtgärder och försiktighetsmått kan riktas direkt mot enskilda verksamheter oavsett om de har tillstånd eller inte¹⁴¹ och föreskrifterna *bryter även rättsverkan* i meddelade tillstånd.¹⁴² Ett av förändringsförslagen, som Lena Gipperth la fram i sin utredning från 2005, var att möjliggöra antagande av lika starka föreskrifter för åtgärdsprogram som idag finns för miljöskyddsområden.¹⁴³ Förslaget liknar det miljöbalkskommittén lade fram om möjlighet att ta fram generella föreskrifter i syfte att komma åt den diffusa belastningen, då även dessa enligt förslaget skulle bryta rättsverkan i meddelade tillstånd. En sådan lösning skulle underlätta för tillsynsmyndigheterna genom att de då inte behöver gå omvägen via att initiera omprövning av tillstånd eller villkor för att ställa krav på befintliga verksamheter i efterhand, men förslaget vann tyvärr inte gehör vid revideringen av lagstiftningen.¹⁴⁴

¹³⁴ 9 kap. 5 § MB.

¹³⁵ SOU 2005:59 s.158-159.

¹³⁶ SOU 2005:59 s.129-130.

¹³⁷ SOU 2005:59 s.158-159.

¹³⁸ Prop. 2009/10:184 s. 49.

¹³⁹ I sammanhanget kan även påpekas att vattenförvaltningsförordningen uttryckligen anger att åtgärder för att hantera den diffusa belastningen *måste* finnas med i åtgärdsprogrammen för distrikten, se 6 kap. 5 § VFF.

¹⁴⁰ 7 kap. 19 § MB. Enligt lydelsen är möjligheten inte uteslutande kopplad till miljökvalitetsnormer.

¹⁴¹ 7 kap. 20 § 1st MB samt prop. 1997/98:45, del 1 s.318.

¹⁴² 24 kap 1 § 1st MB.

¹⁴³ Gipperth, 2005, s.86.

¹⁴⁴ Se prop. 2009/10:184 s.35-36

Inte heller i övrigt har åtgärdsprogrammets rättsverkan på något sätt förstärkts.¹⁴⁵

3.4 Osäkerhet kring ansvar och befogenheter

I Sverige är ett säkert genomförande av miljökvalitetsnormer och åtgärdsprogram helt beroende av att myndigheter och kommuner tar sitt ansvar, dels genom att ha tillräcklig *kunskap* om de skyldigheter och möjligheter de har för att se till att normerna följs och dels genom att faktiskt *använda sig* av dessa möjligheter för att rikta krav gentemot enskilda miljöpåverkare, i syfte att uppnå en bättre miljökvalitet. Med andra ord råder precis det rättsläge i Sverige som EU-domstolen inte har accepterat i mål mot andra medlemsländer.¹⁴⁶ Anledningen är att varken miljökvalitetsnormer eller åtgärdsprogram binder de enskilda miljöpåverkarna direkt, utan instrumenten riktar sig istället till myndigheter (inklusive domstolar) och kommuner och är bindande endast för dessa.¹⁴⁷ Att myndigheter och kommuner under dessa omständigheter uttrycker osäkerhet kring frågor om ansvar och inte tycks veta vilka befogenheter de har att rikta krav mot enskilda påverkare, spär givetvis på problematiken.¹⁴⁸

Redan i sin samrådshandling år 2008 efterfrågade Bottenvikens vattenmyndighet en stärkt nationell samordning av vattenförvaltningen, där det tydligare framgår hur målen ska uppnås och

hur eventuella målkonflikter mellan olika intressen ska lösas.¹⁴⁹ Vidare efterfrågades tydligare ramar kring myndigheternas ansvar och befogenheter i vattenförvaltningen. Överhuvudtaget har vattenmyndigheterna fått lägga mycket fokus under den första förvaltningscykeln på att försöka tydliggöra och förmedla sin roll i vattenförvaltningen gentemot andra aktörer,¹⁵⁰ samtidigt som de själva verkar osäkra på vilka befogenheter de faktiskt har. I materialet från samrådsprocessen i slutet av 2009 tydliggörs att det råder stor osäkerhet kring frågor om ansvar och befogenheter.¹⁵¹ Många remissvar ifrågasatte bland annat vattenmyndigheternas befogenheter att rikta krav mot andra myndigheter och kommuner. Det föreligger således en *brist på nationell styrning* och tillräcklig information till samtliga myndigheter som är inblandade i ramvattendirektivets genomförande, vilket försvårar möjligheterna att uppnå god status.

Förhållandet mellan vattenförvaltningen och PBL

En konfliktsituation som är rättsligt osäker rör förhållandet mellan vattenförvaltningen och kommunernas planmonopol enligt PBL. Redan 2002 påpekade miljöbalkskommittén vikten av att den nya vattenförvaltningen behöver stå över det kommunala planmonopolet i händelse av konflikt mellan dessa intressen,¹⁵² men någon ändring av lagstiftningen i en sådan riktning har inte skett. Att rättsläget inte är helt klart för de

¹⁴⁵ Se prop. 2009/10:184 avsnitt 5 s. 49 ff där åtgärdsprogrammen och deras funktion diskuteras.

¹⁴⁶ Se till exempel Mål C-361/88 Kommissionen mot Tyskland, Mål C 13/90 Kommissionen mot Frankrike och Mål C 14/90 Kommissionen mot Frankrike.

¹⁴⁷ Se 5 kap. 3 § och 8 § MB.

¹⁴⁸ Osäkerheten kring ansvar och befogenheter för genomförandet av miljökvalitetsnormer lyftes fram av miljöbalkskommittén redan 2005, se SOU 2005:59 s.122 ff, och har kommit till uttryck i samrådsförfarandena under hela den första genomförandecykeln av ramvattendirektivet.

¹⁴⁹ Vattenmyndigheten Bottenviken, Samarbete för bättre vatten, 2008, s.X.

¹⁵⁰ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.12.

¹⁵¹ Vattenmyndigheten Bottenviken, Förvaltningsplan 2009-2015, 2010, s.183.

¹⁵² SOU 2002:107 s.87.

inblandade parterna, kan illustreras av följande intervjuuttalande:

”Det händer även när vi riktar krav på åtgärder mot kommuner att de hävdar planmonopol, eftersom de inte vill genomföra vissa åtgärder, men då får man snällt påpeka att denna nya lagstiftning faktiskt kör över det kommunala planmonopolet och att vi har rätt att bestämma i dessa frågor.”¹⁵³

Uttalandet ger sken av att vattenförvaltningen idag är rättsligt *överordnad* det kommunala planmonopolet, men rättsläget är betydligt mer komplicerat än så. Visserligen kan det kommunala planmonopolet till viss del sägas ha inskränkts genom den nya vattenförvaltningen, med anledning av att kommunerna har fått fler bestämmelser om miljökvalitet att ta hänsyn till när de planerar användningen av mark och vatten. Enligt gällande rätt är kommunerna nämligen skyldiga att iakttä fastställda miljökvalitetsnormer i sin planläggning och länsstyrelsen har även möjlighet att *överpröva* en detaljplan eller områdesbestämmelser som inte tar hänsyn till en fastställd miljökvalitetsnorm.¹⁵⁴ Denna möjlighet tillkommer dock länsstyrelsen generellt och inte vattenmyndigheten specifikt. Vattenmyndigheten som sådan har således inga befogenheter i lagstiftningen att köra över kommunerna när det gäller planfrågor. Denna brist kan påverka genomförandet av ramvattendirektivet negativt, med anledning av den viktiga roll som kommunernas planering och planläggning spelar i vattenförvaltningen generellt och för att få till stånd hållbara dagvattenlösningar specifikt.

Vidare får skyldigheten för kommuner att genomföra de åtgärder som föreskrivs i ett åtgärdsprogram betydelse i sammanhanget, genom att åtgärdsprogrammen är bindande för kommunerna och bundenheten även gäller vid planläggning av mark och vatten.¹⁵⁵ Bestämmelsen kan dock inte tolkas på så sätt att den kan användas för att *tvunga* kommuner att anta, ändra eller upphäva en detaljplan.¹⁵⁶ Rättsläget innebär således att varken länsstyrelsen eller vattenmyndigheten med rättsliga medel kan tvinga en kommun som förhåller sig passiv, och således *inte* planlägger mark och vatten, att planera i enlighet med ett åtgärdsprogram. Bestämmelsen i 12 kap. 6 § PBL, genom vilken regeringen kan rikta ett planföreläggande gentemot en passiv kommun, är heller ingen möjlighet i denna situation, eftersom varken miljökvalitetsnormers uppfyllande eller åtgärdsprogrammets genomförande utgör grund för ett sådant föreläggande.¹⁵⁷ Rättsläget är med andra ord låst och frågan behandlas inte heller i lagförslaget till en ny plan- och bygglag, som lades fram av regeringen i mars 2010.¹⁵⁸ En möjlig förklaring till att frågan inte behandlats, är att ingen regering vill göra sig politiskt impopulär bland landets kommuner, vilket sannolikt skulle bli konsekvensen av en sådan försvagning av det kommunala planmonopolet som är nödvändig för att målkonflikten ska kunna lösas.

Exemplet Bottenvikens vattenmyndighet

Att myndigheter och kommuner är osäkra på sina befogenheter och sitt ansvar för uppfyllandet av miljökvalitetsnormer och genomförande av

¹⁵³ Peter Wihlborg, Vattensamordnare Bottenvikens vattenmyndighet, november 2008.

¹⁵⁴ 2 kap. 2 § 3st samt 12 kap. 1 § 1st 3p PBL.

¹⁵⁵ 5 kap. 8 § MB.

¹⁵⁶ Prop. 2003/04:2 s.34.

¹⁵⁷ 12 kap. 6 § och 12 kap. 1 § 1st 1-2 pp PBL.

¹⁵⁸ Se Prop. 2009/10:170 En enklare plan- och bygglag.

åtgärdsprogram i vattenförvaltningen, illustreras av följande två uttalanden av en person anställd som vattensamordnare vid Bottenvikens vattenmyndighet, vid en intervju i november 2008:

”Mycket av de riktlinjer som vi fått har även varit vaga och otydliga till sin struktur, och även när det gäller ansvarsfördelningen är det svårt. Bland annat när det handlar om ansvaret mellan vattenmyndigheterna eftersom vi är uppdelade och det inte finns någon ”chef” som har det övergripande samordningsarbetet vattenmyndigheterna emellan. Förutsättningarna mellan distrikten är ju även olika genom att miljöproblemen ser olika ut.”

”Nu gällande tillstånd kommer alltid att gälla. Än så länge är det oklart hur och om enskilda miljöfarliga verksamheter kommer att påverkas, men i dagsläget är det inte frågan om att ompröva tillstånd, utan det blir i så fall snarare frågan om att föreskriva undantag för sådana vattenförekomster som är påverkade av t.ex. markanvändningen eller miljöfarliga verksamheter i närområdet. Till nästa cykel måste det dock till en struktur som gör det möjligt att komma åt dessa verksamheter, men idag finns det ingen möjlighet att göra det, då de juridiska medlen saknas och det skulle ta alldeles för lång tid att ompröva alla tillstånd. Det vore orealistiskt. Vi har heller ingen möjlighet att rikta åtgärder direkt mot privata aktörer.”¹⁵⁹

Som framgår av uttalandet upplever Bottenvikens vattenmyndighet det krångligt, eller rent av omöjligt, att komma åt verksamheter med rättskraftiga tillstånd med de juridiska medel som finns i lagstiftningen idag. Detta har föranlett att de heller inte valt att föreskriva några konkreta åtgärder kring detta i det första åtgärdspro-

grammet. Vattenmyndigheten verkar dock se hindren istället för möjligheterna när det handlar om att komma åt och minska belastningen från stora befintliga verksamheter. Som lagstiftningen är utformad har tillsynsmyndigheter nämligen inte bara möjlighet utan är *skyldiga* att ompröva villkor för miljöfarliga verksamheter och vattenverksamheter om dessa bedöms vara otillräckliga, och tillsynsmyndigheten behöver i dessa situationer inte heller gå omvägen via 24 kap. MB.¹⁶⁰ Otillräckligheten kan till exempel utgöras av att verksamheten ”med någon betydelse” bidrar till att en miljökvalitetsnorm inte följs.¹⁶¹ Skyldigheten att initiera en omprövning kan således aktualiseras för till exempel länsstyrelserna i Norrbotten och Västerbotten (i egenskap av tillsynsmyndigheter över stora miljöfarliga verksamheter och vattenverksamheter) om en befintlig verksamhet påverkar vattenmiljön i sitt närområde på sådant att målet god status riskerar att inte nås. Redan med anledning av principen om icke-försämring bör krav kunna ställas på omprövning av tillståndsvillkor för vissa verksamheter, för att garantera att vattenkvaliteten inte försämras ytterligare. Ytterligare en aspekt av betydelse är att det är *verksamhetsutövaren som har bevisbördan* för att visa att verksamheten bedrivs i enlighet med MB:s regler och krav, även vid en omprövning initierad av tillsynsmyndigheten.¹⁶²

I sammanhanget kan påpekas att vattenförvaltningsförordningen uttryckligen föreskriver att åtgärder för att i behövlig mån åstadkomma omprövning av tillstånd

¹⁵⁹ Peter Wihlborg, Vattensamordnare Bottenvikens vattenmyndighet, november 2008.

¹⁶⁰ Se 26 kap. 2 § 2st MB som anger att någon särskild framställning i enlighet med 24 kap. 7§ MB inte behöver göras i de situationer då tillståndsvillkor bedöms som otillräckliga.

¹⁶¹ Se 24 kap. 5 § 1st 2p MB.

¹⁶² 2 kap. 1§ 1st MB.

och villkor till befintliga verksamheter måste finnas med i åtgärdsprogrammen.¹⁶³ På grund av kravet i lagstiftningen har Bottenvikens vattenmyndighet skrivit in i åtgärdsprogrammet att länsstyrelserna åtminstone behöver genomföra en "översyn" av befintliga tillstånd inom distriktet och "vid behov verka för" en omprövning av tillstånd och villkor för miljöfarliga verksamheter och vattenverksamheter som kan inverka negativt på vattenförekomsternas status.¹⁶⁴

Med anledning av osäkerheten kring ansvarsfördelningen, oklarheter i de rättsliga kraven och svag nationell styrning kring systemet med miljökvalitetsnormer och åtgärdsprogram, är det svårt att hävda att EU-rättens krav på ett säkert och tydligt genomförande verkligen efterlevs i Sverige. Tyvärr råder inte heller den nyligen genomförda lagändringen bot på detta faktum, även om den utgör ett viktigt steg i rätt riktning.

3.5 Svaga åtgärdsprogram i vattenförvaltningen – exemplet Bottenvikens vattendistrikt

I det fastställda åtgärdsprogrammet för Bottenvikens vattendistrikt riktar vattenmyndigheten krav, i form av 37 generellt utformade styrmedels- och utredningsorienterade åtgärder, gentemot bland annat länsstyrelserna i Norrbottens och Västerbottens län, Vägverket, Banverket och samtliga kommuner i distriktet. Samtliga åtgärder som föreskrivs ska vara vidtagna senast den 22 december 2012.¹⁶⁵ De föreskrivna åtgärderna innebär dock en mycket svag styrning och lämnar stort utrymme (och stort ansvar) till de utpekade myndigheterna och kommunerna att själva besluta om de lämpligaste och mest kost-

nadseffektiva *faktiska* åtgärdscombinationerna. I samrådsprocessen i slutet av 2009, inför att de olika dokumenten i vattenförvaltningen skulle fastställas, kritiserades vattenmyndigheternas åtgärdsprogram just för sin vaghet och bristen på konkreta åtgärder. Många remissvar påpekade riskerna med att åtgärdernas generella och övergripande karaktär innebär svårigheter för myndigheter och kommuner att koppla sitt ansvar för att åtgärden genomförs till rätt vattenförekomst och påverkansfaktorer.¹⁶⁶ Vidare påpekades att bristen på konkreta åtgärder innebär en otydlighet kring vem som ska agera och vad som ska göras. På grund av kritiken har vattenmyndigheten i det fastställda åtgärdsprogrammet i anslutning till varje övergripande åtgärd, även gett förslag till fysiska åtgärder och utredningsbehov i syfte att tydliggöra hur de *kan* genomföras. Det återstår att se om de exemplifierande förslagen i praktiken är tillräckliga för att myndigheter och kommuner ska veta vad de ska göra.

Precis som i åtgärdsprogrammet generellt är de åtgärder som riktas mot kommunerna av övergripande karaktär. Här anges bland annat att kommunerna i sin tillsynsverksamhet behöver "prioritera" de områden med vattenförekomster som inte uppnår, eller riskerar att inte uppnå, god ekologisk status eller god kemisk status. Andra åtgärder som föreskrivs är att kommunerna behöver inrätta vattenskyddsområden för sådana kommunala dricksvattentäkter som behövs för dricksvattenförsörjningen samt att kommunerna "behöver utveckla sin planläggning och prövning så att miljökvalitetsnormerna för

¹⁶³ 6 kap. 5 § 1st 2p VFF.

¹⁶⁴ Vattenmyndigheten Bottenviken, Åtgärdsprogram 2009-2015, 2010, s.10.

¹⁶⁵ 6 kap. 2 § VFF.

¹⁶⁶ Vattenmyndigheten Bottenviken, Särskild sammanställning av inkomna synpunkter, 2009, s.15.

vatten uppnås och inte överträds”.¹⁶⁷ Några särskilt specifika åtgärder är det således inte fråga om i åtgärdsprogrammet för kommunernas del. Otydligheten har föranlett att flera kommuner har efterfrågat tydligare information och vägledning kring hur de ska arbeta med miljötillsyn och planläggning utifrån åtgärdsprogram och miljökvalitetsnormer. Som tidigare nämnts återfinns inga konkreta krav på kommunernas dagvattenhantering i åtgärdsprogrammet.

I åtgärdsprogrammet riktas även krav gentemot Vägverket. Här anges att Vägverket behöver ta fram kunskapsunderlag och genomföra åtgärder för att undanröja eller motverka vägdagvattnets miljöpåverkan, framförallt när det gäller sådana vattenförekomster som ligger i riskzonen för att inte nå upp till kvalitetskraven inom utsatt tid.¹⁶⁸ Inte heller här är det således fråga om några särskilt konkreta åtgärder.

4. Slutsatser

Sammanfattningsvis, och som svar på artikelns första frågeställning, kan konstateras att ramvattendirektivet får betydelse för Sveriges hantering av dagvatten. Med anledning av kopplingarna mellan föroreningsperspektivet i ramvattendirektivet och de miljöproblem som dagvattenförorening leder till, måste dagvattenproblematiken uppmärksammas och tas på allvar för att Sverige ska klara EU-rättens krav. Detta visar sig inte minst i de direkta kopplingarna mellan dagvattenproblematiken och Bottenvikens vattendistrikts specifikt utpekade problemområden.

Kan då den svenska regleringen av dagvatten idag anses tillräcklig för att motverka förore-

ning från dagvatten? Genom att se strikt på det rättsliga regelverket och de möjligheter det innehåller för att ställa krav gentemot dem som hanterar dagvatten, kan konstateras att den svenska rätten innehåller goda *möjligheter* för detta. Eftersom MB blir tillämplig för i princip samtliga aktörer som hanterar dagvatten i sin verksamhet, finns utrymme i lagstiftningen att ställa krav kring hur detta vatten ska hanteras, redan (och kanske främst) genom de allmänna hänsynsreglerna i 2 kap. Utöver de allmänna hänsynsreglerna finns mer specifika krav för bland annat den kommunala hanteringen av dagvatten, dels genom MB:s regler om miljöfarlig verksamhet och de särskilda kraven för hantering av avloppsvatten, dels genom kommunernas utvidgade skyldigheter enligt den nya VA-lagen. Krav kan även riktas mot befintliga miljöfarliga verksamheter och vattenverksamheter med stöd av reglerna om omprövning av tillstånd och villkor och gentemot icke tillståndspliktiga verksamheter och åtgärder genom reglerna om tillsyn.

Utrymme för att ställa krav på hanteringen av dagvatten finns med andra ord i den svenska lagstiftningen, men frågan om den svenska regleringen är tillräcklig för att motverka förorening från dagvatten måste trots detta besvaras nekande. Slutsatsen bottnar i att de flesta regler som äger tillämpning för hanteringen är av generell karaktär och lämnar allt för stort utrymme och framförallt *ansvar* till beslutande myndigheter och kommuner att själva ta initiativ till mer materiella krav på skyddsåtgärder och försiktighetsmått. Samtidigt är reglerna kring dagvatten svåra att överblicka, dåligt samordnade och innebär en svag styrning till ansvariga myndigheter.

Mot denna bakgrund blir även svaret på den tredje frågeställningen, det vill säga om det svenska rättssystemet kan anses garantera en

¹⁶⁷ Vattenmyndigheten Bottenviken, Åtgärdsprogram 2009-2015, 2010, s.10.

¹⁶⁸ Vattenmyndigheten Bottenviken, Åtgärdsprogram 2009-2015, 2010, s.9.

faktisk hantering av dagvattenproblematiken i enlighet med EU-rättens krav, klart nekande. Eftersom det praktiska genomförandet och säkerställandet av att miljölagstiftningen efterlevs vilar på förutsättningen att myndigheter och kommuner tar sitt ansvar och sina uppgifter på allvar, är ett faktiskt genomförande *beroende av* myndigheternas egna initiativ. Det kräver i sin tur att de ansvariga först och främst är medvetna om vilket ansvar och vilka befogenheter de har och att de därefter faktiskt använder de maktmedel som miljölagstiftningen tillhandahåller. Denna förutsättning gäller inte minst för att komma åt dagvattenproblematiken, men även för uppfyllandet av både miljökvalitetsnormer och Sveriges nationella miljömål.

Hur kommer det sig då att det utrymme som svensk rätt innehåller för att ställa krav inte utnyttjas fullt ut i praktiken? Är det brist på kunskap om reglernas och instrumentens räckvidd bland de beslutsfattande myndigheterna som är den främsta orsaken, eller finns det andra orsaker till att dagvattenproblematiken försummas av dem som har möjlighet (och i vissa fall till och med skyldighet) att agera? Är det till och med så att de ansvariga medvetet blundar för problematiken på grund av att den bedöms vara så svår (och kostsam) att komma åt? Det går inte att ge ett enkelt svar på dessa frågor, utan troligtvis är det en kombination av flera faktorer som medför att den faktiska hanteringen av dagvatten inte i tillräcklig utsträckning motverkar att våra vattenmiljöer förorenas av dagvatten idag. Oklarheterna och den svaga styrningen i lagstiftningen kring hur dagvatten ska hanteras, tillsammans med brister och svaga regler kring det praktiska genomförandet av miljökvalitetsnormer och åtgärdsprogram innebär tydliga hinder. Därutöver är den nationella styrningen och samordningen i vattenförvaltningen svag och

informationen till dem som är ansvariga i stor utsträckning otillräcklig. Detta visar sig i oklarheter kring befogenheter och i fördelningen av ansvar i vattenförvaltningen generellt.

En av de främsta orsakerna till dagens försummade dagvattenhantering är dock den omedvetenhet kring dagvattnet och dess miljöpåverkan som råder, inte minst i Bottenvikens vattendistrikt. Bristen på mätningar av dagvattnets föroreningsinnehåll och dess påverkan på recipienterna, har föranlett att dagvattenfrågorna över huvud taget inte har uppmärksamats eller tagits på allvar under den första förvaltningscykeln av ramvattendirektivet. Detta visar sig bland annat genom avsaknaden av hänsynstagande till dagvattenproblematiken i det första åtgärdsprogrammet för Bottenvikens vattendistrikt. Slutsatsen blir att det inte finns ett rättsligt system i Sverige som kan garantera ett säkert genomförande av de miljöpolitiska målsättningarna och inte heller för att förhindra dagvattenförorening av våra vattenmiljöer. Samtidigt kan ramvattendirektivets krav på kartläggning av samtliga utsläppskällor av prioriterade miljöfarliga ämnen inte anses fullt ut uppfyllt i den svenska rätten, i och med bristen på hänsynstagande till dagvattenproblematiken.

Så, vad krävs egentligen för en mer hållbar hantering av dagvattenfrågor som når upp till EU-rättens krav? Först och främst behövs en tydligare nationell styrning i vattenförvaltningen och en bättre förankring av den nya förvaltningsnivån, bland de myndigheter och kommuner som är delaktiga i ramvattendirektivets genomförande. Därutöver krävs en tydligare fördelning av befogenheter och ansvar, både vad gäller vattenförvaltningen generellt och dagvattenhanteringen specifikt. Ytterligare skärpningar av lagstiftningen kring miljökvalitetsnormer och åtgärdsprogram och starkare

kopplingar mellan dessa styrmedel och kommunernas planering av mark- och vattenanvändningen i enlighet med PBL, är andra områden som behöver prioriteras, i första hand av lagstiftaren. I ljuset av MB:s mål om en hållbar utveckling och i enlighet med försiktighetsprincipen bör åtminstone krävas att omfattningen av miljöproblemet dagvattenförorening noggrant kartläggs och att planeringen och uppbyggnaden av nya dagvattensystem i städerna sker i överensstämmelse med moderna krav på miljöhänsyn. Tillsammans kan dessa åtgärder utgöra de första stegen på vägen mot en ekologiskt hållbar dagvattenhantering i Sverige.

Källor

Litteratur och rapporter

- Bergström Agnetha, *Metod för bedömning av dagvattensutsläpp till sjöar i Stockholmsområdet*, 2005:197 CIV, Luleå Tekniska Universitet.
- Bäckström Magnus, Viklander Maria, *Alternativ dagvattenhantering i kallt klimat*, Svenskt Vatten Utveckling, 2008, Rapport Nr 2008-15.
- Gipperth Lena, *Åtgärdsprogram för miljö kvalitetsnormer*, SOU 2005:113, 2005.
- Karlsson Kristin, *Pathways of pollutants in storm-water systems*, Luleå Tekniska Universitet, Luleå, 2006, Licentiatuppsats 2006:05, ISSN 1402-1757.
- Naturvårdsverket, *En bok om svensk vattenförvaltning*, Rapport 5489, 2005, ISBN 91-620-5489-9.
- Stockholms stad, *Dagvattenstrategi för Stockholms stad*, 2005.
- Söderberg Johanna, Westholm Lina, *Den rättsliga hanteringen av dagvattenfrågor – en studie av svensk och EG-rättslig lagstiftning rörande dagvattenproblematiken*, Luleå Tekniska Universitet, Luleå, 2008, C-uppsats 2008:256, ISSN 1402-1773.
- Söderberg Johanna, Westholm Lina, *Den praktiska hanteringen av dagvatten - en studie av tre viktiga aktörer i förvaltningen av vattnet inom Lule älvs avrinningsområde*, Luleå Tekniska Universitet, Luleå, 2009, D-uppsats 2009:031, ISSN 1402-1552.
- Vattenmyndigheten Bottenviken, *Samarbete för bättre vatten*, Samrådshandling, 2008.
- Vattenmyndigheten Bottenviken, *Förvaltningsplan 2009-2015*, 2010.
- Vattenmyndigheten Bottenviken, *Åtgärdsprogram 2009-2015*, 2010.
- Vattenmyndigheten Bottenviken, *Särskild sammanställning av inkomna synpunkter*, 2009.
- Vägverket, *Fördjupningsdokument Miljö; Vatten och material 2008-2017*, Publikation 2007:48, 2007, ISSN: 1401-9612.
- Vägverket, *VVMB 310 Hydraulisk dimensionering*, Publikation 2008:61, 2008, ISSN 1401-9612.
- Widarsson Lars-Erik, *Drivkrafter för en hållbar dagvattenförvaltning*, Svenskt vatten utveckling, 2007, Rapport Nr 2007-04.

Offentligt tryck

- Rådets direktiv 91/271/EEG av den 21 maj 1991 om rening av avloppsvatten från tätbebyggelse.
- Europaparlamentets och rådets direktiv 2000/60/EG om upprättande av en ram för gemenskapens åtgärder på vattenpolitikens område.
- Europaparlamentets och rådets direktiv 2006/118/EG om skydd av grundvatten mot förorening och försämring.
- Europaparlamentets och rådets direktiv 2008/1/EG om samordnade åtgärder för att förebygga och begränsa föroreningar.
- Europaparlamentets och rådets direktiv 2008/105/EG om miljö kvalitetsnormer inom vattenpolitikens område.
- EG-domstolens dom den 30 maj 1991, Europeiska gemenskapernas kommission mot Förbundsrepubliken Tyskland, Mål C-361/88.
- EG-domstolens dom den 1 oktober 1991, Europeiska gemenskapernas kommission mot Franska republiken, Mål C 13/90.

EG-domstolens dom den 1 oktober 1991, Europeiska gemenskapernas kommission mot Franska republiken, Mål C 14/90.

Regeringens proposition 1997/98:45 – Miljöbalk.

Regeringens proposition 2003/04:2 – Förvaltningen av kvaliteten på vattenmiljön.

Regeringens proposition 2003/04:57 – Vattendistrikt och vattenmiljöförvaltning.

Regeringens proposition 2005/06:78 – Allmänna vattentjänster.

Regeringens proposition 2009/10:84 Åtgärdsprogram och tillämpningen av miljökvalitetsnormer.

Statens offentliga utredningar, *Bestämmelser om miljökvalitet*, SOU 2002:107, 2002.

Statens offentliga utredningar, *Miljöbalkskommitténs slutbetänkande*, SOU 2005:59, 2005.

Naturvårdsverkets föreskrifter 1994:7 om rening av avloppsvatten från tätbebyggelse.

Naturvårdsverkets föreskrifter 2008:1 om klassificering och miljökvalitetsnormer avseende ytvatten

Naturvårdsverkets föreskrifter 2010:12 om ändring i föreskrifter (NFS 2008:1) om klassificering och miljökvalitetsnormer avseende ytvatten enligt förordningen (2004:660) om förvaltning av kvaliteten på vattenmiljön;

Sveriges geologiska undersöknings föreskrifter 2008:2 om statusklassificering och miljökvalitetsnormer för grundvatten.

Intervjuer

Vattenmyndigheten för Bottenvikens vattendistrikt: Peter Wihlborg – vattensamordnare och Maria Renberg – miljöjurist, November 2008.

SSAB Tunnpå AB i Luleå: Hans Olsson - Miljöchef, November 2008.

Luleå kommun, Tekniska förvaltningen Vatten och Avlopp: Stefan Marklund – avdelningschef, November 2008.

Internet

<http://www.miljomal.se/9-Grundvatten-av-god-kvalitet/> 2010-01-14