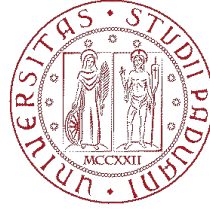


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**Dipartimento di Scienze Storiche, Geografiche e dell'Antichità**

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**(D)River of Change?**

**The local implementation of the Water Framework**

**Directive in Germany: A public participation**

**perspective**

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## STATEMENT OF ORIGINALITY

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## **ABSTRACT**

Related to issues such as the global climate change, growing populations, and industrial pollution, the world is experiencing a decrease of quality and quantity of freshwater resources with tremendous impact on the well-being of people, as well as future social and economic development. As a result, appropriate governance approaches that integrate the complexities surrounding the issue of water management are needed to protect contemporary water resources and prevent any further deterioration. Through the introduction of the European Union Water Framework Directive (EC/60/2000), the European Union (EU) and its member states have aimed at tackling these issues by introducing a wide range of policy obligations to the European member states, including, but not limited to, a specific focus on public consultation during the process of planning and implementing measures to improve the general quality of European waters, thus making public participation a central element of water protection in the EU. However, being based on the local contexts at hand, approaches to public participatory processes may be argued to be highly diverse, making it difficult to understand the functionality in terms of contributing effectively to the aims of the directive. Therefore, the thesis is informed by the question of “how we may identify local and regional differences in approaches to active public participation in the context of common policy-objectives?”, leading to the sub-question of “how can we understand those differences in the context of the Water Framework Directive in Germany?”. The thesis answers these questions via the application of a Qualitative Comparative Analysis to two cases in Germany. The analysis shows strong differences in the implementation of participatory processes in the context of the WFD across both cases, as well as insufficiencies, for instance when it comes to adjusting the participatory process to the local and regional needs.

## **ABSTRACT IN ITALIANO**

In relazione a questioni come il cambiamento climatico globale, l'aumento della popolazione e l'inquinamento industriale, il mondo sta vivendo una diminuzione della qualità e della quantità delle risorse idriche dolci, con un impatto enorme sul benessere delle persone, nonché sullo sviluppo sociale ed economico futuro. Di conseguenza, sono necessari approcci adeguati alla governance che integrino le complessità che circondano la gestione dell'acqua per proteggere le risorse idriche contemporanee e prevenire ulteriori deterioramenti. Attraverso l'introduzione della Direttiva quadro sull'acqua dell'Unione Europea (CE/60/2000), l'Unione Europea (UE) e i suoi Stati membri si sono proposti di affrontare questi problemi introducendo una vasta gamma di obblighi politici per gli Stati membri europei, tra cui, ma non solo, un particolare focus sulla consultazione pubblica durante il processo di pianificazione e attuazione delle misure per migliorare la qualità generale delle acque europee, rendendo così la partecipazione pubblica un elemento centrale della protezione delle acque nell'UE. Tuttavia, basandosi sui contesti locali in questione, gli approcci ai processi partecipativi pubblici possono essere considerati altamente diversi, rendendo difficile comprendere la loro funzionalità in termini di contributo efficace agli obiettivi della direttiva. Pertanto, la tesi si basa sulla domanda "come possiamo identificare le differenze locali e regionali negli approcci alla partecipazione pubblica attiva nel contesto di obiettivi politici comuni?", portando alla sotto-domanda "come possiamo capire tali differenze nel contesto della Direttiva quadro sull'acqua in Germania?". La tesi risponde a queste domande attraverso l'applicazione di un'Analisi Qualitativa Comparativa a due casi in Germania. L'analisi mostra forti differenze nell'attuazione dei processi partecipativi nel contesto della Direttiva quadro sull'acqua in entrambi i casi, nonché insufficienze, ad esempio per quanto riguarda l'adattamento del processo partecipativo alle esigenze locali e regionali.

## **ACRONYMS**

**BW** – Baden Wurttemberg

**EC** – European Commission

**EEA** – European Environmental Agency

**EU** – European Union

**FRG** – Federal Republic of Germany

**IRBD** – International River Basin District

**MWP** – Mecklenburg Wester Pomerania

**NRBD** – National River Basin District

**PoM** – Programme of Measures

**QCA** – Qualitative Comparative Analysis

**RBD** – River Basin District

**RBDd** – River Basin District Danube

**RBDwp** – River Basin District Warnow/Peene

**RBMP** – River Basin Management Plan

**UN** – United Nations

**WFD** – Water Framework Directive

**WHO** – World Health Organization

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# **Chapter 1: Introduction**

## **1.1 Introductory remarks**

What has long merely been a prediction for the distant future, has now become an undeniable truth that is recognized by contemporary policymakers, scholars, and the broader civil society alike: “humanity will have to cope with challenges posed by resource scarcity – first and foremost the water challenge” (Lalonde, 2022:184). Related to issues such as the global climate change, growing populations, and industrial pollution, the world is experiencing a decrease of quality and quantity of freshwater resources with tremendous impact on the well-being of people, as well as future social and economic development (Water.org, 2023). In particular, of the total amount of about three per cent of fresh water on the earth, most of it remains frozen, in the underground, or in the air, leaving humanity with an ever-decreasing quantity of quality fresh water for human use (Lalonde, 2019).

Consequently, when dealing with such a limited and essential resource, questions regarding the right management of these resources might arise to identify and overcome shortcomings and secure human well-being all around the world. Thus, attempts to deal with issues of water resource management has been at the forefront of global policy making in the last decades, occupying not only the agendas of water stressed countries, but also comparatively water rich regions, such as the European Union (EEA, 2021). Nevertheless, based on the complexity of the issue of water resource management, touching every aspect of human life - from energy production, over agriculture, to consumption -, developing effective and holistic policies to water resource management remains a challenge to policymakers around the world (UNESCO, 2021).

Within that context, the European Union, in the beginning of the century, has introduced a policy framework, widely recognized as one of the most ambitious pieces of environmental policy-making to date (Mesquita, 2019; Green et al., 2013; etc.), that aims at tackling issues of declining water quality and quantity and at ensuring safe and sustainable water resource management for all European waters (Carter, 2007). Namely, the European Union Water Framework Directive (WFD) has become essential part of contemporary environmental policymaking within the European realm and has been regarded as groundwork for environmental policy agendas beyond the issue of water resource management (Moss, 2004).

Despite the integration of multiple sectors into one holistic policy approach, the framework brings into focus the importance and value of multi-level governance approaches, through its specific attention directed towards horizontal and vertical forms of cooperation, ranging from international cooperation to the inclusion of public opinions concerning the topic area of water policies (*see* Josefsson & Baaner, 2011). As a precondition for the application and implementation of the WFD, the inclusion of the wider public is seen as a means to ensure the effectiveness and “goodness” of measures employed, with the final aim of ensure good qualitative, chemical and quantitative status (or potential) for all European water bodies.

Thus, considering the importance of local specificities not only to the implementation of environmental policymaking in general, but to the entire field of local and sustainable development, this paper aims at analysing the measures applied to involve the public into local and regional decision-making as a precondition for the achievement of the goals defined by the WFD. In particular, this study aims to test the application of strategies to involve the wider public in the state of Germany based on eight decisive features that must arguably be respected when aiming for a fair and inclusive participatory approach. Moreover, based on the respect towards local particularities that may or may not affect the success of effective public involvement, one may argue for the need to adjust the strategies to involve the public to the local preconditions, while aiming at the best possible solution for the specific context.

Thus, this thesis seeks to answer the question of “how we may identify local and regional differences in approaches to active public participation in the context of common policy-objectives?” in order to identify the implementation of local strategies that take into account the local specifics, which may impact the successful application of participatory approaches. In particular, the analysis focusses on the state of Germany with respect to its long history of policy implementations within the realm of European policy making, its geographical location being centred in Europe with large quantity of waters exceeding the borders, and its low ranking when it comes to overall quality of water bodies (*see* Chapter 5). Thus, the paper aims at answering the sub-question of “how we can understand those differences in the context of the Water Framework Directive in Germany?”. The paper argues under the main premise, that an increased participation in turn, increases the likelihood for achieving good status for all water in Europe.

### **1.1.1 Research Context and Research Gap**

This study is situated under the umbrella of contemporary scholarly discussions regarding the successful application of participatory approaches within the field of European environmental

policy making, as well as wider considerations concerning the role of local particularities for the aims of sustainable development. Moreover, the paper is concerned with questions regarding the successful implementation of the provisions of the WFD within the European realm and thus, the success of the WFD to improve the overall quantity and quality of waters in Europe.

Situated in the context of academic literature of local sustainable development, this thesis focusses on the specific implementation of participatory approaches within distinct local contexts, aiming at testing the successfulness of including local perspectives into the broader framework of the WFD. In particular, keeping in mind the global efforts to ensure safe and sustainable water for all under the Goal 6 of the Agenda 2030 of the United Nations (UN), this research aims at contributing to overall considerations of right and successful measures to achieve those goals defined, especially Goal 6, with respect to the inclusion of local particularities in overall public policy frameworks. However, whereas comparatively narrow in its focus, this thesis argues for the importance of directing the general attention towards the specificities of the implementation of the WFD in order to better understand the respective policy outcomes and potential shortcoming during implementation. This is necessary, as I argue, due to the vast scope of the WFD, integrating all water related issues into one policy agenda, which may hamper an understanding of the specific measures implemented during the overall process. Further, by focusing on the specifics of the local implementation of the WFD and the structures that may or may not allow for the participation of the wider public, we might be able to better understand the necessary preconditions for the implementation of environmental policy framework in the local sphere with regards for public participation, as one may argue. Finally, by testing the theoretical framework for local participation developed by Rowe and Fewer (2000) and further developed by Slavikova & Jilkova (2011), with respect to the guidelines that have been outlined by the European Commission (EC) via the application of a Qualitative Comparative Analysis, the study may inform future examinations of local participation processes within the realm of the WFD.

Based on a probabilistic understanding of causality concerning the improvement of policy outcomes via the application of participatory policy approaches (*see e.g. Steyaert & Ollivier, 2007*), this paper contributes to the study of local development insofar, as it highlights the specific considerations necessary to successfully promote public participation in environmental policy making. Further, by directing the attention towards the local implementation of transnational policy agendas, the paper sets emphasis on the importance of bottom-up policy

agendas and allows for the further study of potential local solutions to wider global issues, as one might argue.

### **1.1.2 Delimitations**

While allowing for the focused analysis of local participation process, the conducted study may be criticized for being comparatively narrow in its focus, due to its analytical scope being based on merely two out of ten possible cases in Germany. However, as argued by the author, the directed focus allows for a more specific analysis and a broader understanding of the respective cases which, in turn, may allow for the application of the methodological framework to a multitude of case-studies. Moreover, directing the attention towards two very different local contexts allows for assumptions of a wider degree of generalizability for cases concerned with the local process of public involvement within the realm of the WFD.

Further, the paper may be criticized for the lack of an identification of causal relations when it comes to the connection between public participation on the one side, and the achievement of the goals of the objectives on the other. However, while these concerns bear some important insights, the overall connection between public involvement and their impact to policy outcomes has long been established by local development and public policy literature (*see* WHO, 2022). Moreover, the WFD itself highlights the involvement of the public as a precondition for improving the policy outcomes of the WFD in the local, regional, national and international sphere (EC, 2000). Thus, while not specifically analyzing the causality between public participation and improved water quality, the study focusses on the implementation of the directive itself, rather than its success in terms of improving the statuses of waters in Europe and is thus detached from questions concerning the overall success of the directive.

Finally, the paper directs its focus on the implementation of the WFD, rather than taking all relevant environmental policy-agendas into account. This is due to the scope and complexity of the WFD and its importance and effects beyond the WFD itself into the realm of environmental policymaking. Thus, as I argue, the analysis of the processes of public participation in the context of the WFD improves the overall understanding of local participation processes for environmental policymaking. Thus, the findings of the analysis bare value beyond the boundaries of the WFD, as argued by this paper.

### **1.1.3 Structure**

The thesis is structured so as to cover a range of issues related to the implementation of public participation process in three main parts:

Firstly, the paper will briefly introduce the general research context of the paper related to management of water resources, as well as the issues surrounding the topic area of (integrated) water resources management. Further, the first part will introduce the WFD and its provisions followed by a brief discussion concerning public participation literature in the realm of environmental policy making.

The second part will introduce and discuss the methodological framework and will introduce the strengths and weaknesses surrounding the application of the qualitative framework at hand, namely, the Qualitative Comparative Analysis (QCA).

Finally, the study will conclude with the analysis by presenting and discussing the findings of the research in the third part of this paper.

However, when discussing the policy approaches to water resource management, one must first understand the complex and interrelated nature of water, as one might argue. Consequently, the subsequent part will highlight the most noteworthy issues to define the extent of the contemporary water crisis in terms of its impact to human and economic development. Moreover, based on the need to better understand affective policy making in the realm of water, the following part will highlight essential drivers for the erosion of freshwater quality and quantity.

## **CHAPTER 2: The Background and context**

### **2.1 Introduction into water as a resource for development**

The following parts will discuss the issues of water as a resource for development related to the issues, related to individual household use, industrial-, and agricultural production.

#### **2.1.1. Water scarcity related issues at the individual level**

According to Balloni and Venkatachalam (2016:vii), the impacts of the water crisis are “[...] unambiguously noticeable at the local, regional, national and transboundary levels”, ranging from issues of, but not limited to, drinking water scarcity, national energy production, and potential conflicts arising over limited water resources on the international level (Balloni & Venkatachalam, 2016; Van Loon et al., 2016). To understand the impact of water scarcity to human development, one must understand the uses of the resource in general, as one might argue. Thus, first and foremost, water is connected to life in form of access to drinking water, food production, health and hygiene (Ali et al., 2019; UNICEF, 2022). According to UNICEF (UNICEF, 2022), more than two billion people lack such access to safe drinking water and are dependent on water sources that are contaminated with faeces, which is posing a tremendous risk to the health of people (WHO, 2022). Additionally, despite chemical pollutants like “[...] arsenic, fluoride or nitrate, emerging contaminants such as pharmaceuticals, pesticides, per – and polyfluoroalkyl substances (PFASs) and microplastics generate public concern” (WHO, 2022). These contaminations pose serious short- and long-term risks to the health of people, such as an increased likelihood for cancer (WHO, 2022; NCI, 2022). Further, almost half of the population lacked access to adequate sanitation in 2020, with hundreds of millions of people still defecating openly (WHO, 2022). Additionally, the unsafe discharge of wastewater often leads to the contamination of further water resources, impacting the irrigation of crop and thus, challenging the health of people through food intake (ibid). Further issues are diarrhoeal diseases, worm infections and polio (ibid). From a different perspective, the lack of access to drinking water and sanitation in households may produce risks related to the procurement of water resources, which is often left to women and children. Thus, increased working efforts, paired with a decrease in human well-being, leading to further issues such as a decrease in school-attendance of children, is heavily impacting human development on a local scale. This is despite tremendous annual efforts and investments into the water and sanitation infrastructure globally (Nayar, 2013).

Nevertheless, despite the basic use of water for drinking and sanitation, the use of water as a resource goes far beyond its use on the individual level, with, according to the United Nations World Water Development Report of 2021 (UN, 2021), accounts only for about 12 per cent of the total water use.

### **2.1.2. Water scarcity related to issues of industrial production**

In contrast, industrial production (19 per cent) and especially agricultural production (69 per cent) make up the biggest chunk of water demand globally, both depending heavily on the state of development. Industrial production's demand in particular, including energy production, is further expected to increase by four hundred per cent for manufacturing and hundred and forty per cent for power generation (OWiD, 2018; World Bank, 2022). While industrial production is said to have a great potential for limiting its demand for water resources through an increase in economic efficiency (UNESCO, 2022), the dependency on both, the economic and material/energy output of the industry, especially for developed and developing countries, may cause difficulties for policymakers to limit the exploitation and pollution of water resources in the short-term. On the other hand, practices such as “[f]racking for natural gas, particularly in shallow aquifers [...]” or the use of coal for the generation of thermal electricity pose “[...] significant risks to groundwater contamination” (UNESCO, 2022), as well as increase the production of CO<sub>2</sub> Emissions (and therefore contribute to an accelerating pace of the global climate change (UNESCO, 2022)). This puts emphasis on the importance of safe and sustainable water resource management, as might be argued.

### **2.1.3 Water scarcity related to issues of agricultural production**

While water is used for variety of domestic and industrial purposes, water for food production, albeit with regional variations, remains the main driver for groundwater exploitation globally (OWiD, 2018). Especially in agricultural-dependent countries, water is often used up to ninety-five percent for agricultural purposes, which is only expected to increase over the coming decades due to population growth (ibid). Despite the pollution of groundwater (as mentioned above) that is affecting the safety of food-production, many water-scarce regions are struggling with changing patterns of precipitation, which in turn might hamper irrigation and thus, the provision of food to its populations (FAO, 2015). In combination with agriculture being one of the greatest economic drivers through the provision of jobs in the sector, water shortages pose a threat to economic and social well-being of people all around the world. Therefore, the

protection of (especially) groundwater resources is of widespread concern for many policymakers (UNESCO, 2022).

While the importance of water as a resource for human development appears to be straightforward, dealing with its challenges requires an understanding of the common drivers for the erosion of freshwater resources, and the prospective barriers to ensure the sustainable provision of them. Therefore, the following section will briefly discuss the main drivers of past, current, and future drivers of water scarcity.

## **2.2 Drivers for water scarcity**

According to Loe and Patterson (2017), the drivers of water shortages and the erosion of freshwater resources may be categorized in terms of general resource availability, demography, economic growth, and further twenty-first century challenges, such as climate change and poverty. These drivers affect the quality and quantity of European waters via direct and indirect forms of water pollution, extensive water abstractions, and - albeit often as a result of the former – a loss of aquatic biodiversity.

### **2.2.1 Resource Availability**

Not surprisingly, one of the main drivers for regional variability in terms of accessibility of freshwater resources is connected to variations in temporal and spatial variations in distribution (Loe & Patterson, 2017). More particularly, different patterns of precipitation may impact the general availability of water depending on the region. Whereas regions with low levels of precipitation are predominantly found in the less developed world, these challenges accumulate due to limitations in storage capacity, a lack of restraints when it comes to the overexploitation of groundwater resources and the above-mentioned lack of infrastructure that ensures the availability of safe water (Loe & Patterson, 2017). These patterns are particularly challenging where there is a lack of governance to balance those dynamics, which may lead to worsening effects of water availability, as one might argue.



### **2.2.2 Demography**

Population growth and aging populations combined, lead to a tremendous increase in demand for freshwater resources. In particular, modern medical practices and the production of drugs both require enormous amounts of freshwater, which is only expected to increase with continuously changing demographics, such as aging populations (Ali et al., 2019). Similarly, growing populations increase the demand for drinking water, industrial production, and food production (Loe & Patterson, 2017). As a consequence, these factors require a rise in efficiency when it comes to the use of water in each sector, to be able to produce more with less (Loe & Patterson, 2017). Additionally, recent continuing trends of urbanization are putting additional stress on the resource availability, as cities increase economic production, especially in focused areas (Loe & Patterson, 2017).

### **2.2.3 Economic Growth**

Although related to the previous sections, economic growth requires particular attention due to its impact on the accessibility of freshwater. Based on the assumption formulated by Kuznets (*see e.g.* Dinda, 2004) growing economic activity leads to an increase in economic output, which further increases water use. Additionally, growing prosperity is changing patterns of consumption, as well as dietary preferences, predominantly leading to more water demand in industrial-, and food production (Loe & Patterson, 2017). Consequently, more production furthers more water pollution by the industry, challenging the availability of safe water resources (Loe & Patterson, 2017; etc.). In particular, as identified by the EEA (2018), about thirty eight per cent of all surface water bodies and thirty five per cent of all groundwater bodies within the area of the EU suffer pollution via diffuse sources, such as from pesticides used for agricultural production, or emissions leading to the enrichment of nutrients, such as nitrogen or phosphorus. Consequently, increased economic production endanger aquatic biodiversity and “[...] can be dangerous to human health, e.g. owing to toxic algal blooms, and can impair the use of water for drinking and bathing” (EEA, 2018: 67). Albeit several local, regional and national attempts to decrease the use of fertilisers and nutrients resulting from agricultural production, recent years have shown an increase of fertilisers in the recent years (EEA, 2018). Thus, economic growth may increase overall pollution of waters via the increase in industrial and agricultural production and hence, the acceleration of diffuse source pollution.

## **2.2.4 Climate related drivers**

Finally, despite the growing demand for energy production which is boosting freshwater extraction, climate change may be considered as one of the main contemporary challenges to freshwater resources, albeit arguably not directly related to anthropological pressures. According to the UN water report: “Climate change directly impacts the natural recharge of groundwater through its influence on precipitation and on leakage from surface waters, including ephemeral streams, wetlands and lakes” (UN, 2021). Further, floodings, increasing evapotranspiration rates, and rising sea levels affect the natural water basins all over the world (Baudoin & Arenas, 2018).

## **2.3 Towards sustainable water resource management?**

Thus, considering all drivers for a decreasing availability of freshwater resources, one may highlight the complexity of sustainable water governance, encompassing all these aspects to protect existing water resources on the one hand, and ensure the sustainable provision of freshwater on the other hand. Therefore, contemporary scholarly literature has argued for a integrated holistic approach to water resource management, that takes into account the complexity that entails the management of water resources (Biswas, 2004). While still holistic in its nature, integrated systemic approaches aim at dealing with the dominant pressures to water resource management, in order to maintain the effectiveness and feasibility of governance measures (Vouvoulis et al., 2017). Further, based on the characteristics of water – with its impacts ranging from local, over national, to transboundary levels - policy approaches to water resource management are argued to necessarily address all levels of governance to be affectively implemented and to avoid discrepancy between local realities and national or international agendas. Thus, through the establishment of a multi-level policy framework in form of the WFD, the European community aimed at ensuring the sustainable management of water resources by enabling member states to address the issue of water with respect to local variations, in order to ensure good water quality of all river basins within the European Union (Vouvoulis et al., 2017). Thus, the following part will briefly introduce the European Water Framework Directive (2000/60/EC) and its basic structure and provisions, as a prerequisite for the final analysis. As this paper aims to analyse the application of the participatory principle within the local and regional settings of two River Basin Districts (RBDs), special attention will be given to the importance of active public participation, outlined within article 14 of the directive (WFD, 2000/60/EC).

## **CHAPTER 3: The European Union's Water Framework Directive**

As outlined in the previous section, the issue of water management is inherently an issue of an appropriate governance of water, which is touching upon every aspect of human life, ranging from personal household use to large scale energy production. Thus, where multiple sectors are in play, the likelihood for multi-sectoral misfits may increase (Moss, 2004). As a result, good water management requires the governance of the resources throughout all its layers, responding to the needs and specificities of all sectors, as well as actors involved. Consequently, expanding the institutional boundaries to cover all aspects of water governance has been argued to be the most effective solution to deal with the multitude of issues that may arise when cooperation between sectors is low, and sector specific solutions may negatively affect overlapping sectors (Moss, 2004). Nevertheless, expanding the scale of institutional arrangements may likewise bare new risks and challenges, starting with complex institutional structures that sufficiently enable decisionmakers to respond to water related issues and needs (Moss, 2004). With the introduction of the European Water Directive, the European Union and its member states aimed at constructing a framework that incorporates the complex nature of water resource management by setting clear goals for the protection of water resources, while giving the individual member states enough flexibility to implement the guidelines according to the local specificities in the respective region (Green et al., 2013; Joyce & Convery 2009; Mesquita, 2019). To better understand the structure of the WFD and to be able to analyse its implementation in the state Germany, the following part will outline the specific characteristics and regulations of the WFD based on contemporary academic research surrounding the WFD.

### **3.1 The EU WFD: ambitions and scope**

While the WFD has often been argued to be one of the most ambitious EU-regulation to date (Vouvoulis et al., 2017; etc.), its development reaches back to a long history of water related legislations in the EU (Green et al., 2013). Nevertheless, only in the 1980s, the EU started to expand its legislative reach by defining “[...] binding quality standards for the protection of drinking water, fisheries, shellfish beds, bathing waters, and groundwater” (Green et al., 2013: 2). Finally, with the introduction of the WFD, the sector specific approach was replaced by an integrated river basin approach, aiming to improve the responsiveness to variations on the regional basin-level (Green et al., 2013). This is supposed to be achieved by expanding its scope

towards the protection of “[...] all water bodies, promoting sustainable use of water, tentatively linking water management with other policies, allowing for regional and multilevel goal setting, improving public participation, introducing ecological standards, and facilitating adaptation to climate change” (Green et al., 2013:3).

The final aim of the Directive was to achieve good quality status for all waters within the EU until 2015, with the possibility of expanding the deadline until 2027 (Howarth, 2009). Good quality status diverges from the ideal “[...] biological, chemical, and morphological conditions [...]” (Green et al., 2013: 4), slight of the defined river basins with no impact of anthropological pressures and indicates a deviation from the ideal conditions (Green et al., 2013). In particular, good quality status implies the compensation of human pressures on the ecosystem, while allowing for a minimal deviation from the reference condition, as defined above. Moreover, the assignment of the respective status is hence due on the individual river basin level and built on the local circumstances at hand (Green et al., 2013). Based on the respective reference conditions for each water, good status can only be achieved by fulfilling all predefined benchmarks (Josefsson & Baaner, 2011). This principle is commonly referred to as “one-out-all-out-principle” (Josefsson & Baaner, 2011).

Moreover, one of its most ambitious and novel innovations has been the attempt to restructure the institutional compositions of European water governance, promoting the recalibration of water management through the creation of river basin districts, to avoid overlapping responsibilities and interests among institutional bodies and to enable joint decision making on the river basin level (Howarth, 2009). Instead of managing European waters based on administrative or political boundaries, the WFD requires the Member States to cooperate among hydrological and geographical units (EC, 2022). Consequently, redefining institutional boundaries may enable policy makers to resolve complex and interdependent issues of water management. While the envisaged policy guidelines might be considered comparatively straightforward in their nature, the composition of the European Water Framework Directive requires closer examination in order to understand the nature of its actual implementation and to thus be able to assess the compliance to its stipulations – namely, the successful application of the provision regarding active public participation – by the Federal Republic of Germany (FRG), as a prerequisite for the successful and sustainable protection of European waters. Therefore, the following part aims at deconstructing the directive and its specific requirements to the European member states.

### 3.2 The WFD governance: multilevel coordination

As mentioned before: an essential part of the WFD is concerned with the reconstruction of institutional and political boundaries to hydrological and natural geographical units on the river basin level, enabling a better management of European water bodies, while avoiding conflicts of interest and overlapping responsibilities and accountabilities among different political actors and sectors (Carter, 2007). Whereas some hydrological units may enable member states to perpetuate former administrative structures, water bodies such as the Volga require a multitude of member states, even beyond the territorial boundaries of the European Union (Moss, 2012), to increase cooperation and to jointly address issues surrounding the management of such water bodies (EC, 2022). Thus, by removing former political boundaries as well as integrating chemical, quantitative, and ecological guidelines into one integrated management approach on the river basin level, a strong vertical and horizontal flow of information regarding the respective quality conditions of European waters is established (Green et al., 2013).

Accordingly, each district is required - under article thirteen of the directive (Moss, 2012) - to provide the European Commission with a so called “River Basin Management Plan” (RBMP) (EC, 2022), which includes a detailed *Programme of Measures* (PoM) aiming at the formulation and implementation of specific measures in order to reach good quality status for the respective waters (Mesquita, 2019). The RBMP needs to be updated every six years (EC, 2022). Where necessary, the RBMP allows for “[...] more detailed programmes and management plans for sub-basin, sector, issue, or water type, to deal with particular aspects of water management” (EC, 2000). Despite the individual measures for the respective programming period, each RBMP shall include aspects such as the mapping of boundaries and locations of water bodies and ecoregions, identification of reference conditions, or the estimation of different forms of water pollution (EC, 2000).

Further, coordination is explicitly encouraged by setting standards for how to deal with conflicting measures of implementation by coordinating the steps involved, from analysis, over identification of existing legislations, to adjusting measures to the provisions of the Directive, where necessary (EC, 2022). Thus, “Member States must [...] analyse the human and natural impacts on current river basins then set goals and standards at both EU and national level and finally determine the policy instruments that will be used to meet these goals” (Mesquita, 2019:39). Where quality objectives and technological source controls conflict with each other (for instance by underestimating the effects of certain substances on the wider ecosystem), the Directive provides the member states with a framework of how to analyse and coordinate actions among each other, based on risk and cost-efficiency (Howarth, 2009, Joyce & Convery,

2009). Unfortunately, according to Green et al. (2013), despite the provision of international coordination mechanisms, “[...] only a few member states reported using them to coordinate their monitoring programs, indicating weak horizontal information flow”.

However, additional to defining the respective river basin districts based on the individual surface and groundwaters, the member states are required under article three of the directive to identify the “appropriate competent authority” that ensures compliance with the rules of the directive (EC, 2000) and thus, ensures increased vertical and horizontal cooperation. While the rules and requirements of the directive are legally binding for each member state and failure to adhere to the provisions of the WFD may lead to penalties (EC, 2000), the authority to appoint river basin districts on the national level (including the PoMs), and the identification of an appropriate competent authorities, remains with the respective member states, requiring each state to “[...] implement EU law through their own national legal order [...]” (Green et al., 2013:3).

Finally, the Directive guides coordination and implementation through so called command-and control mechanisms, including cost-efficiency, inter-agency negotiation processes, and public participation. These mechanisms require the provision of detailed descriptions of measures applied, strict monitoring and obligations, and increased transparency measures, involving the wider public, or rather: all interested parties. By additionally introducing pricing mechanisms, the Directive aims at guiding water consumption in a sustainable manner to achieve its objectives (Joyce & Convery, 2009).

In conclusion, as the EU-Commission might be argued to be somewhat dependent on the reporting and the proper interpretation and implementation of the rules by the member states, requiring detailed examination of the respective implementation strategies, this paper is informed by the need to test the obedience in form of the active involvement of the public to European law for the sake of ensuring sustainable water management within the EU.

Nevertheless, whereas the form of implementation of the EU-WFD might be argued to leave some room for interpretation and some flexibility in implementation, as a means to encompass the complexity of water related issues, the goals of the directive, while requiring the analysis of each water body individually, are specific in their outcome. Namely, good status by the end of the programming period (Starke et al., 2021), which will further be explained in the following section.

### **3.3 Good quality status for all waters**

Central to the main objectives of the European Water Framework Directive is the protection of all waters within and beyond the European territorial boundaries and ensuring good quality status for all, as has been outlined above. Albeit the diverse characteristics of each objective depending on the respective water body (ranging from aquatic ecology over protection of drinking water resources to bathing water), each objective “[...] must be integrated for each river basin”, when applicable (EC, 2000). However, based on the diverse nature of water bodies, the WFD differentiates between measures concerning surface and groundwater protection, based on ecological, chemical, and quantitative conditions (Green et al., 2013).

#### **3.3.1 Surface and groundwater**

The target-period for restoring and protecting surface and groundwaters within the EU has initially been set for a period of fifteen years (Moss, 2004, Green et al., 2013, Mesquita, 2019, etc.). When it comes to surface waters, one may differentiate between ecological and chemical conditions that must be met (Moss, 2012; Green et al., 2013), whereas good ecological status (defined within Annex V of the WFD) is concerned with the “[...] quality of the biological community, the hydrological characteristics and the chemical characteristics” (EC, 2022) and includes (among many others) measures such as the “composition and abundance” of aquatic flora, fish fauna, thermal conditions, and salinity (EC, 2022). As setting general quality standards for the individual conditions of water bodies is nearly impossible, the EU relies on each member state to provide consistent planning and analysis for setting the right standards and measures (EC, 2022).

On the other hand, when concerned with the good chemical status of all waters, each member state must ensure compliance with the regulations regarding chemical substances established on the European level (EC, 2022). The parameters for the most hazardous and less hazardous substances are set at the European, or national level, respectively (Green et al., 2013).

Both categories provide the groundwork for good quality status of surface waters but achieving those standards depends heavily on the compliance and interpretation, as well as means of measurement of each individual member state, as one may argue.

Similarly, good status of all groundwater bodies within the EU can again be differentiated between two main categories, (namely quantitative and chemical) although they differ slightly from the regulations set for the surface waters. Whereas the chemical conditions of the surface

waters provide the member states with a minimum standard of chemical quality which may allow for a low level of pollution, any chemical pollution concerning groundwaters must be avoided (EC, 2022). Thus, groundwater protection from chemical pollution is mainly concerned with the monitoring of changing chemical conditions and to detect any indirect anthropological chemical pollutions (EC, 2022), following the “principle of minimum anthropogenic impact” (EC, 2022).

When it comes to the quantity of groundwater, the Directive permits the discharge of groundwater resources only when the respective natural recharge is not needed by the ecological system, aiming at protecting the overall quantity of groundwater (ibid). This is due to the importance of groundwater availability to the entire ecological system, as specifically outlined in the latest UN World Water Development Report on water (UN, 2022).

According to Moss (2012), the integration of groundwater and surface water protection into a common framework has been argued to be one of the main innovations within the nexus of water resource management policy making on European level.

As for time-planning, the member states are required to restore and protect the statuses in terms of chemical, quantitative, and ecological pollutions of surface and groundwater within three given time periods of a total maximum of 27 years, with several river basin districts still lacking behind (EEA, 2018).

### **3.4 Public participation in the WFD**

As mentioned above, the WFD aims at tackling water related issues at all its layers. As those issues are often most apparent on the local level, member states are obliged to take local particularities into account. Within this context, local opinions, experiences and ideas are of decisive importance to identify possible problems and solution and to increase the legitimacy of the implementation of measures within local settings (Green et al., 2013). Therefore, this section discusses the obligations, under the WFD, to actively involve the public into the drafting and planning stages of the RBMP and the PoM. Understanding the obligations, as well as the benefits of involving the public is required, as I argue, to be able to analyse their implementation and to assess their success in the final section of this study.

As highlighted by Ortwin (2010), the WFD establishes “[...] the objective to invite stakeholders, experts and the public to take part in decision-making about water basin management [...]”. Although limited in their decision-making capacities, “[...] stakeholders



are involved either as knowledge providers or as value consultants” (Ortwin, 2010). The involvement of the public, despite the already mentioned need to increase legitimacy and to take into account local expertise, is widely based on the assumption that high quality public participation serves as a “key feature” for success in public policy making and implementation (Steyaert & Olliver, 2007, Green et al., 2013). Whereas there is no “one-size-fits-all” understanding in public participation approaches, the literature suggests a wide range of key features of -, and obligations toward the involvement of stakeholders. When it comes to the benefits of public involvement into decision-making processes, one may highlight a few core assumptions:

Firstly, underlying the efforts for the involvement of the public into the decision-making processes is the assumption of greater legitimacy for policy-decisions and their decision-makers. In particular, if the public is timely involved, potential obstacles may be overcome and solved (Irvin & Stansbury, 2004). As a result, more trust of the governments may be expected, as well as higher rates of support for policy-outcomes (ibid).

Secondly, public involvement is said to produce better decisions, as the need for more detailed considerations for the right policies is enhanced. In particular, the local public may be expected to have greater access to local-specific information, which may be highly valuable for the planning and implementation stages (Berry et al., 2019).

Moreover, if decision-making is based on local preferences, those decisions may be expected to be more beneficial to the public and thus, more efficient within the affected area (Irvin & Stansbury, 2004). As highlighted by (Brown, 2011:172), “higher levels of participation [...] will yield more equitable social outcomes and improved environmental conditions, because the distance between decision-maker and recipient has been reduced”.

However, despite its benefits, there are many aspects of the public involvement that need to be considered before the public may effectively contribute to policy-frameworks.

Firstly, in order for the public to effectively contribute to the process through means of consultation, a need for knowledge creation and social learning is created (ibid). In particular, the enhancement of local expertise is required to further informed opinions and understandings of the policy processes. as well as measures (Ivrin & Stansbury, 2004). Thus, in order to be able to participate, the public needs to be informed and needs to have the opportunity to gain local expertise. Further, to effectively shape the decision-making process, the process of social learning needs to be continuous and with enough time at hand (Ivrin & Stansbury, 2004).

Moreover, social hierarchies play an important part in the public participation process. In particular, social standing may enable certain actors to dominate the participatory process which may, in turn, lead to unbalanced policy outcomes and disadvantages for some parts of the population (Brown, 2011).

Thus, dangers of “elite-capture” must be taken into consideration at every step for the participatory process and may be overcome by actively informing the public, sophisticated structures of the participatory activities, and the constant evaluation of equal involvement of all (Ivrin & Stansbury, 2004). Hence, the “how” to involve the public and the “who” is involved should be at the core of every effective decision-making process, as one may argue.

Furthermore, in order to participate effectively, each and every one must have equal opportunity to be involved based on the capacities, but also resources required. If decision-making processes disproportionately favour for example higher income groups, due to the necessity to afford transport and accommodation during the participatory activities, the danger of unbalanced outcomes is increased (Brown, 2011). Similarly, participatory structures might favour groups when it comes to other resources, such as time. Namely, if participator activities are organised over long time-periods that require active and constant participation, as well as at times at which a majority of private citizens may not be available, some actors might be excluded from the opportunity to be involved (Brown, 2011). Further, general levels of education, as precondition for informed participation, as well as unequal access to information, based on physical and non-physical factors such as access to information sources on the internet or activities that are based in major cities away from rural areas, may hamper the affective implementation of public participation. Thus, all these aspects must be taken into account when implementing active participatory efforts, as one may argue, and must be visible in the implementation of the WFD. While the WFD does not explicitly set instructions of how public participation must be implemented, the European Commission has established a framework in form of a guidance document that helps the respective competent authorities with the attempt to establish meaningful participation (EC, 2003). In particular, the document discusses who should be involved in the participatory process, at what point in time, and how the involvement may be encouraged, with respect to issues such as impact area, resources, and capacities (EC, 2003). This document serves as the basis for the final analysis of the participatory approaches in the two chosen cases and informs the construction of the methodological framework, which will be discussed in the following part.

# **CHAPTER 4: The theoretical framework and methodology**

## **4.1 Methodological insights**

The range of methodologies applied to analyse the implementation and execution of public participation under the umbrella of the WFD, as well as within environmental policy making, are diverse, ranging from the analysis of national legal documents, over the examination of single participatory processes on the basis of project implementation, to public perceptions toward participatory decision-making processes.

For instance, Howarth (2009), analyses the preconditions given for achieving good status based on the text of the Water Framework directive. Thus, Howarth focusses on the analysis of the preconditions that enable public participation, rather than the function and implementation of public participation within the RBDs itself. Hence, while setting the conditions for aspects to focus when considering public participation under the umbrella of the WFD, the method offers little room to analyse the actual implementation by the respective RBDs, as one might argue.

Moreover, Green et al. (2013) are focusing on the WFD in its entirety in which public participation is one of many aspects leading to the success of the WFD. Thus, similarly to Howarth, Green et al. focus on the preconditions for the implementation of participatory processes, rather than on the participatory processes themselves. Finally, Newig et al. (2005) examine the role of public participation in managing uncertainty in the implementation of the WFD. Hence, public participation is discussed as a means, rather than an end itself and analysed in terms of the sentiments towards it.

While establishing an understanding of the preconditions for public participation in the realm of the WFD, these analyses offer little room for investigating the respective processes of public participation in a specific setting, as a precondition for achieving good status for all water bodies.

In particular, this thesis aims at analysing the processes of participation as a part for the achievement of good status of all waters, rather than focussing on for public participation. Thus, the selected methodological approach aims at mapping and the respective participator measures in accordance with the provisions by the WFD. Therefore, the analytical framework will focus on the specific dimensions of the implementation of participatory practices, rather than the preconditions of it.

Accordingly, before examining further the specificities for the methodological framework of the final analysis of this paper, the subsequent section will outline the main features and obstacles of Qualitative Comparative Analysis (QCA), which will be deployed as the main methodological foundation in this thesis.

## **4.2 Qualitative Comparative Analysis**

The QCA approach and its main techniques were firstly developed by Charles Ragin (1987) and aimed at establishing a framework that allows for in-depth insights, while enabling “[...] some level of generalization [...]” (Rihoux et al., 2011:12) for small- and intermediate-N studies. The main function of the approach was the integration of both, qualitative and quantitative features within one approach, allowing for a selection of case-oriented, as well as variable-oriented features (ibid). Further, each analysis should aim for a holistic study of the individual cases to avoid the disregard of decisive case characteristics (ibid).

Thus, QCA does not limit the possibilities of different causal realities, but rather embraces the multitude of options available in the real world, as one might argue. That being said, when speaking of causal paths toward producing outcomes, this author argues for a probabilistic understanding of causality, in which the outcome is not necessarily directly determined by the explanatory variables. Rather, the presence or absence of the independent variable increases the likelihood for a respective outcome. Thus, based on the hypothesis we may assume that an increased and functioning participatory effort increases the likelihood for good water status.

Further, as mentioned above, QCA aims for producing some level of generalization by enabling the replication of the study in a variety of cases (ibid). As will be explained in more detail in the following chapter, the selected methodological framework allows for the examination of general participatory activities and systems within the context of the WFD by using a variety of aspects covered by the data available in formal documents due to the existence of the monitoring requirements of each RBD to the European Commission (EC), as well as the framework provided by the EC for public participation through a set of dedicated guidelines.

In some sense, QCA may be seen, as I will call it, a “semi-inductive” method, as it enables and requires the testing of theory based on a systematic framework (deductive), while allowing for the exploration of data within the boundaries of that framework (inductive) (Mollinga & Gindhaelkar, 2014). As a consequence, we are able to examine the respective case with regards to the local- and case-specific characteristics while remaining within the theoretical framework provided, as will be shown below.

As for the different analytical techniques provided by QCA, Rihoux et al. (2011) argue for five main advantages of QCA: QCA-techniques allow for the comparison of cases across nations, regions sectors, or local political entities. Secondly, it allows for the identification of a variety of possible conditions for an outcome, instead of limiting the approach to a rigid set of variables (Rihoux et al., 2011). This enables the comparison of the two chosen cases with respect to the local specificities and regional variations, as will be necessary when comparing two very distinct cases within the same framework, as one might argue. Thirdly, QCA allows for a “quasi-experimental” design in which the respective outcome is based on the specific conditions at hand. Meaning, the difference in approaches toward public participation in the respective river basin does not necessarily entail a failure of the particular approach but might rather be based on the requirements at hand. For instance, while one RBD might need to primarily engage the public through the provision of resources for the purpose of informing the public, this must not necessarily limit the means for active participation. Further, and closely related to the previous points, the operationalization of variables is not necessarily set but remains fluid in order to enable the inclusion of further variables (Slavíková & Jílková, 2011). Finally, the techniques provided by QCA allow for the inclusion of both, qualitative as well quantitative measurements, giving the researcher the necessary freedom to examine the cases in a holistic way (ibid).

While the set of techniques provided by the QCA literature and leading scholars, such as Ragin or Mill (Rihoux et al., 2011) allow for a variety of options for a comparative design, this research requires the analysis of the given variables for public participation, that do not necessarily allow for the quantification of qualitative data, but rather aim for the exploration of qualitative content within the boundaries of the theoretical framework provided.

Thus, the underlying theoretical assumptions guiding the analysis are of decisive importance to a meaningful analysis of this paper. Consequently, Chapter 4.3 will explore the theoretical concept underlying the research and the methodological operationalization of the variables used to identify a meaningful participatory process within the framework of the WFD. As a precondition for the theoretical framework applied, this methodology draws from the set conditions for public participation through the guidance document provided by the European Commission. The findings of the guidance document (EC, 2003) inform the choice of measures by asking the questions of *who was involved*, *when were they involved*, and *how were they involved*. These questions are ultimately intertwined with each other and are underlying each single point of investigation of the cases.

### **4.3 The “who”, “when”, and “how” of public participation**

While the original document of the WFD does not explicitly define the term “public participation” in its text (EC, 2000), it provides a series of preambles and articles concerned with the involvement of the public in several ways. Specifically, preamble 14 and 46 highlight the importance of “[...] information, [the] consultation and involvement of the public [...]” (EC, 2000) “[...] before final decisions on the necessary measures are adopted” (EC, 2000: Preamble 46). Similarly, article 14 states the significance of involving “all interested parties [...], in particular in the production, review and updating of the river basin management plans” (EC, 2000: Article 14). Finally, as for the monitoring requirements of the RBMP, Annex VII (EC, 2000: Annex 7) the WFD requires the member states to include “[...] a summary of the public information and consultation measures taken, their results and the changes to the plan made as a consequence” (EC 2000). As mentioned above, these guidelines allow for interpretation and a variety of options for public participation measures without setting clear rules for its implementation. Therefore, the EC guidance document (EC, 2019c) includes a variety of options and explanation with the underlying questions of who, when and how participatory measures shall be adopted.

However, none of these three aspects are exclusive but rather inform each other and are thus interrelated.

#### **4.3.1 Who?**

By using the term “all interested parties”, the WFD leaves room for interpretation for the question of who should be involved in the public participation process. Thus, clarification is needed to be able to clearly differentiate between those who, according to the WFD, have a right to be involved, and those who do not. The guidance document, however, defines the term as follows: “Interested party can be interpreted as meaning any person, group or organisation with an interest or “stake” in an issue either because they will be affected or may have some influence on its outcome”, including people who are “[...] not yet aware that they will be affected” (EC, 2019: 15). As the EC themselves acknowledge the lack of precision and thus, the lack of feasibility for the particular RBDs to involve all potentially interested parties, they introduce the following factors that may enable decision-makers to differentiate between possible stakeholders:

- “The relation of the stakeholder to the water management issues concerned;
- The scale and context at which they usually act, who they represent;
- Their involvement, being governor, user/victim/stakeholder; expert and executer of measures;
- Their capacity for engagement; and
- The political, social, “environmental”, context.”

(EC, 2019)

Thus, when examining the respective selection of stakeholders for public involvement, a thorough examination of the social, political, and environmental context is needed. For that reason, figure 1 provides a set of possible typologies as a means to differentiate among the potential stakeholders, which will ultimately inform the analysis of this paper.

*A typology of possible stakeholders:*  
**Professionals** – public and private sector organisations, professional voluntary groups and professional NGOs (social, economic and environmental). This also includes statutory agencies, conservation groups, business, industry, insurance groups and academia.  
**Authorities, elected people** - government departments, statutory agencies, municipalities, local authorities.  
**Local Groups- non-professional organised entities** operating at a local level. It usefully breaks down into:  
 Communities centred on place – attachment centred on place, which includes groups like residents associations and local councils.  
 Communities centred on interest – e.g. farmers’ groups, fishermen, birdwatchers.

Figure 1 Typologies of possible Stakeholders; source: EC, 2003

### 4.3.2 When?

The question of timing for public involvement is decisive for three main reasons: Firstly, in order to critically influence the decision-making outcome, stakeholders must be involved with enough time-resources available to address issues and change previous decision making as a result of public consultation (EC, 2019c). Secondly, while early involvement is needed for the alteration of previous decision-making, *too early* involvement may reduce public support for the mere reason of a waste of time and effort for the stakeholders when potential measures are simply not feasible in implementation. Thus, before involving the public, an assessment of the feasibility of the proposed measures open for discussion may be necessary in order to avoid public dissent (EC, 2019c). Figure 2 shows the different planning phases and the respective times for decision-making, to which point the public shall be consulted. Finally, while interrelated with issues of *how* to involve *whom*, questions of proportionality guide the activities surrounding participatory processes. In particular, as outlined by the EC (EC, 2019c: 17), “when [...] is the energy (human resources, money) that is put into the process proportionate to the

outcome?”. Thus, underlying the analysis of participatory efforts for the implementation and planning of the WFD through the eight features outlined in Chapter 4.4 is the question of whether the activities are proportionate to the respective outcome. In turn, this point equally implies the question of whether enough resources (time, money) have actually been spent in order to achieve the required outcome, as one might argue.

Nevertheless, underlying the timing issue and the issue of who is involved is the question of how public participation is promoted as for the obligation of ensuring consultation and to encourage active involvement to be fulfilled.

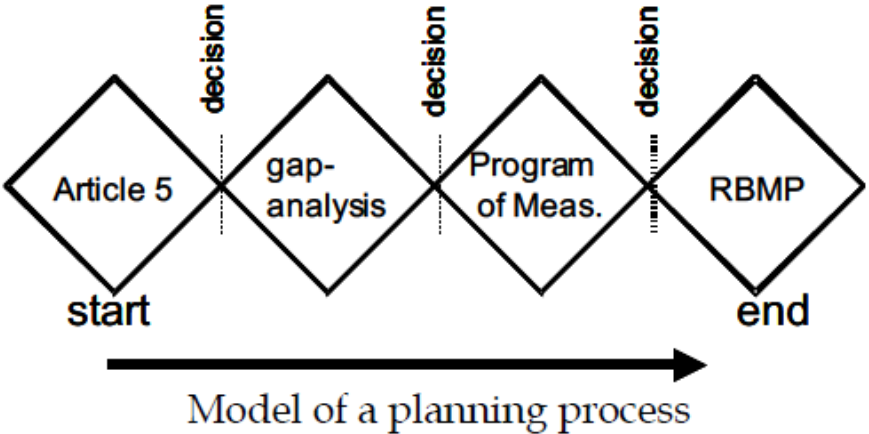


Figure 1: Phases of the WFD-planning Process. Source: EC, 2003

**4.3.3 How?**

As the time-table identifies the possible periods for stakeholder involvements including the periods for respective activities, the *how* is dependent on the respective planning phase, based on the assumption that effectiveness of activities are based on the timely application at the right moment (EC, 2019c). For example, a mere information campaign when consulting the public for the drafting of the RBMP might not provoke the required input while mere discussion points during the first cycle of the planning phase may lack the necessary information provided to the stakeholders. Thus, a thorough consideration of the respective activities is needed to ensure the effective implementation of the public participatory processes.

Possible methods for public consultation may include - depending on the phase - the provision of resources (such as leaflets, brochures, websites, adverts, and so on), the holding of seminars



(for information purposes), workshops (for the discussion of (expert) opinions and the provision of feedback), and public plenary discussions with interested stakeholders (*see* EC, 2019c).

Whether each of the factors (Who, When, How) are fulfilled must be tested based on the information provided by the respective RBDs. That is to say, there is no one-size-fits all approach to the planning and implementation of public participation processes. In the contrary, each process must be examined based on the local possibilities and needs, which, on the one hand, hampers the clear identification of issues and success, but instead enables the in-depth investigation of the respective measures, as argued by the author.

Drawing from those three points, as well as from the theoretical examination of contemporary literature on public participation, the following part will conceptualize the single points of investigation by establishing a framework that allows for the analysis of the participatory measures applied in the two chosen cases.

#### **4.4 Eight features of public participation**

Based on the theoretical discussion of approaches to public participation in chapter 3, this section makes use of previous literature concerned with the study of public participation within the realm of the WFD. In particular, the analysis of the success of measures for public participation in the Czech Republic by Slavikova & Jilkova (2011), who consider eight features that may be analysed, serves as the foundation for the qualitative comparative analysis, conducted in the third part of this paper. Specifically, within the context of Qualitative Comparative Analysis, Slavikova & Jilkova (2011) establish eight criteria for which the implementation of the WFD in terms of public participation may be tested. Namely, “representativeness/inclusivity, independence, early involvement /punctuality, influence, transparency, resource availability, structured dialogue, and continuity/social learning” (Slavikova & Jilkova, 2011). Each of these features comprise a specific aspect on which public participation may be analysed and aim at evaluation participation based on the “goodness” of the respective approach (*ibid*).

Drawing from earlier studies by Rowe and Fewer (2000:550) who aimed at constructing means to evaluate the degree of participation “[...] demanded by the European Union Framework Directive [...]”, these features derive from contemporary public participation literature, as well as the guidelines for public participation established by the European Union (Slavikova &

Jilkova, 2011). The following sections will examine the individual features more closely, in order to set the basis for the subsequent examination.

### **1) Representativeness/Inclusivity**

The representativeness or inclusivity criterion is concerned with the question whether “[...] all relevant interests [are] represented” (Slavikova & Jilkova, 2011). In particular, this concerns the question, whether all stakeholders, affected and/or interested in the implementation of the Water Framework Directive have had equal opportunities to participate within the process. In the case of the examination of the respective RBDs, this fundamentally raises the question of “who” is participating or encouraged to participate, and whether those who participate represent all affected parties by the RBMP and its PoM. As stated by Leah Sprain (2016: 66), the “[...] inclusion of a wide range of voices can help to identify the most appropriate (and desirable) forms of adaptation and their viability [...]”. This does not necessarily mean that all interested individuals must have the opportunity to participate equally. Rather, all probable interests of all individual should be represented, be it by private companies, non-governmental organizations, or unions (Slavikova & Jilkova, 2011)

Thus, in order to determine the inclusivity of the participatory process, one must firstly analyse the demographic and socio-economic context in the context of the river basin and must then determine, whether those stakeholders had equal opportunities to be involved in the process, as one might argue.

### **2) Independence**

When it comes to the independence of the participatory process, one may ask the question whether the participatory process is organized in a way that allows or does not allow for biases (Slavikova & Jilkova, 2011). In particular, this concerns the question whether there is a dominance of specific interest parties, allowing for a disproportionate influence over the outcome and procedures, such as the hosting and moderation of events by a specific interest party. As discussed above, power imbalances within participatory settings may entail the danger of elite capture and thus, decision-making that is disproportionately favouring single actors within the participatory process (Brown, 2011).

Similarly to the issue of inclusivity, the analysis of the independence of particular participatory processes requires a profound understanding of “who” is involved and to what degree.

### **3) Early Involvement/Punctuality**

Thirdly, when considering the possible impact of public participation in decision-making processes, the European Commission highlights the question of “when” the public gets involved, in order to allow for the shaping of policy outcomes at a point where change is still feasible (EC, 2019c; Slavikova & Jilkova, 2011). Therefore, analysing the involvement requires the understanding of the decision-making process, as well as an examination of the respective activities implemented within the different stages of decision-making. As one might argue, the later the public is consulted, the lower the possibilities for impact.

### **4) Influence**

When arguing for the importance of involving the public into decision-making processes, the question of how those participatory practices may actually have an impact on policy-outcomes may not only help to investigate the general impact of public participation, but may equally contribute to the legitimacy of the participatory processes itself, as one might argue. These questions are directly related to considerations of capacities and capabilities to influence decision-making processes, be it via resource availability or expert knowledge (Drazkiewicz et al., 2015). Hence, as each group or stakeholder might be regarded in terms of their preconditions to influence the policy outcome, one may argue for the need to integrate differences via the application of strategies that allow for diversity concerning the ability to influence the respective process.

Therefore, stakeholders require the provision of information in terms of the impact of their participation by the authorities.

### **5) Transparency**

In close connection to the previous aspect, transparency requires an understanding of the limits of public participation. Further, transparent participatory processes allow for a system of check in balances in which the outside, as well as all interested parties have the opportunity to follow the decision-making processes, as well as pressure policy-makers to adopt more favourable implementation strategies (Drazkiewicz et al., 2015). Hence, we may question whether the participants are duly informed about the boundaries of public consultation: Namely, what is subject to consultation, who will be involved, and how the decisions are made (Slavikova & Jilkova, 2011).

## **6) Resource Accessibility**

In order to be inclusive, public participation not only requires the theoretical possibility to be involved, but equally the necessary information and human and financial resources to be able to contribute to the decision-making process in an informed way, as has already been discussed above. In case of insufficient resource availability, participation might be hampered and the participatory process thus insufficiently inclusive towards all interested parties, as one might argue. Therefore, all participants require sufficient financial/material, human, and time resources to participate, which must be ensured via specific approaches that balance out existing imbalances, as this paper argues.

## **7) Structured Dialogue**

Further, in order to avoid the so-called elite capture within public consultation, the facilitators must ensure equal opportunities to all to express themselves (Brown, 2011). Thus, this point requires an unbiased structure of participatory activities that allows for different opinions of all interested parties. In particular, despite the *when* and *who* of public participation activities, the question of *how* participants are enabled to express their opinions via multiple means of participation is vital in order to inform an inclusive process (Voss, 2014). Moreover, related to the following question of continuity and social learning, participatory process must enable the participants to engage in dialogue that allows for “[...] negotiation, open dialogue, deliberation, and consensus seeking [...]” to yield the best policy strategies, or positive-sum outcomes, that are possible within the respective setting (Newig et al., 2017).

Accordingly, all participatory activities must employ a variety of strategies that enable the equal consultation of all parties via underlying structures, such as focused discussion rounds, as one may argue.

## **8) Continuity/ Social Learning**

Finally, as one of the most decisive features, the majority of contemporary literature on participatory policy making highlights the importance of continuous, social learning and knowledge creation (Slavikova & Jilkova, 2011). In particular, in order for the participatory process to enable the adaptation of the participants to the participatory process on the one hand, and to develop an thorough understanding of the issues at hand, participatory efforts must include enabling mechanisms that allow for the adaptation of the participants to the issues at

hand (Sprain, 2016). Pivotal for the creation of knowledge is thus continuity and sufficient provision of resources and information, as one may argue.

Thus, participation requires the continuous effort for public engagement with the opportunity to develop and create knowledge and opinions over time.

## 4.5 Case selection

As the previous section has briefly elaborated the methodological framework that will be applied over the course of the study, the following section will introduce the methodological approach applied in order to choose from a multitude of possible cases that may serve for the analysis of the impact of public participation on achieving the intended results of the WFD.

In particular, for the analysis of the implementation of participatory efforts in the FRG, the author has chosen to examine the River Basin District Danube (RBDd) and the River Basin District Warnow/Peene (RBDwp). The latter is one of the smallest RBDs among all German-RBDs and is located in the northern part of Germany and is governed only by one federal state (*Land*), namely Mecklenburg Western Pomerania (RBMP, 2015). In contrast, the RBDd is one of the largest RBDs across borders, governed not only by multiple *Länder*, but multiple European member states too. As will be examined in more depth in part 5 of this thesis, the RBD Warnow/Peene and the international RBD Danube, account for only two of the total ten possible cases.

The subsequent part will briefly elaborate the reason behind the choice. In particular, the following section will briefly introduce the reasons, consequences and benefits of choosing a small-N case analysis, before introducing the respective RBDs.

The choice behind the selection of the two particular RBDs within the FRG is based on considerations regarding the advantages of a small-N research design. In particular, the selection of a limited number of cases in within the framework of QCA bares the distinctive advantage of in depth-knowledge creation and the ability to make use of all necessary data provided in a qualitative way (Mollinga & Gonhaleker, 2014). While, lacking the distinct features of large-N studies that may enable the generalization of data across the entire federal republic (Mollinga & Gonhaleker, 2014), the quantification of the respective characteristics would lead to problems of highlighting the local specificities of the respective cases, as one might argue. In turn, analysing the two cases in more-depth, based on a qualitative research design, allows for the value of certain features beyond its quantifiability. This is necessary, as

this paper argues, for the differentiation among different approaches without ignoring specific characteristics apparent in the two RBDs.

Based on those assumptions, the analysis aims at analysing the impact of participatory processes to the drafting and implementation of the RBMP while, on the one hand, allowing for the inclusion of local specificities and on the other hand, enabling some form of generalization. Therefore, one might argue for the need to include a wide range of local differences into one research design, to test the functioning of the methodological framework on more than one distinct case. Hence, the case-selection aims at introducing two very distinct cases that differ with respect to the structures and processes that are caused by the introduction of the WFD. In particular, as the provisions of the WFD require the establishment of River Basin authorities related to the physical and not administrative boundaries (EC, 2000), as well as for the increased horizontal and vertical cooperation, the examined cases should incorporate those differences in their extremes, to be able to differentiate among the specifics within each of the remaining RBDs. Therefore, the method for selection of cases is directed towards the differences, rather than the similarities among the cases, introducing a most-different research design. However, while the selection of the cases is based on the differences that may constitute the differences when consulting the public, the final outcome remains the same. Namely, the presumed influences of active participation toward the ecological, chemical and quantitative status (or potential) of all surface and groundwater bodies that are situated in the district. Hence, we may assume the need for different approaches within two very different circumstances to reach the same goal for both RBDs. However, before investigating further the two chosen cases in depth, the following section will briefly introduce the method for data selection, as a precondition for the final analysis.

## **4.6 Data Selection for QCA**

Having elaborated the method for case selection in the previous part, we must consequently identify the data that is being analysed. Consequently, the following part will briefly elaborate the method for data collection and the choice of data used for the final analysis.

As mentioned above, the author will be conducting a qualitative comparative analysis, analysing the contents provided by the RBDs, based on the reporting obligations of the EU Water Framework Directive, using the eight features of public participatory approaches for examination, highlighted in the previous section. In order to do so, this part is investigating the

documents provided by the two chosen cases, as well as the limitations they provide in terms of the subsequent analysis.

Before investigating the two chosen cases, the next section will briefly elaborate on the method and introduce the data that will be followed by a detailed analysis of the characteristics of the two cases.

The chosen data is predominantly retrieved from the second RBMP-reports for the planning and implementation phases of the three programming periods from the initiation of the WFD to the most recent RBMP-report of 2021.

The respective reports are solely based on the German implementation of the WFD and published by the German competent authorities.

In particular, the RBDwp has published three reports under the lead of the *Land Mecklenburg Western-Pomeria* (MWP). The reports have been timely published in 2009, 2015, and 2021.

The analysed reports for the RBDd consist of a total of five reports, whereas four of the reports are specifically based on the implementation of the WFD in the respective federal state, namely Baden-Württemberg and Bavaria. The four reports have been timely published in 2009, and 2015. The final RBMP, published in 2021, has been jointly conducted and published by both *Länder* and highlights all efforts undertaken in the German territory of the RBDd. All of these reports are only concerned with the implementation in Germany and do not include any participatory effort undertaken by potential member states of the same RBD.

The selection of the respective documents is based on following main reasons: Firstly, within the monitoring and reporting obligations under the WFD, each RBD is responsible for the collection and reporting of data that investigates the measures undertaken to *encourage* and *ensure* public active participation and consultation (EC, 2019c). Thus, the documents entail a detailed description of all participatory measures, including an evaluation of active participation.

Secondly, for the sake of uniformity, the analysis of each of the documents should provide, as this author argues, the possibility to compare the results and activities across the RBDs in a manner, that enables the researcher to assess the respective similarities, or differences. Only then, we may be able to generalize results and thus, make the study externally valid for the assessment of a multitude of RBDs under the same, or similar, methodological approach. In this regard, the chosen documents follow the same patterns, due to the previously mentioned reporting obligations (*see Chapter 3.3*).

Thirdly, with respect to time-period of the reporting documents, the choice behind the selection of all three programming cycles rests on one simple reason: As this study aims at evaluating the active participation and its possible impact on the status of all water bodies within the RBD, we must be able to assess the progress, or lack of progress made towards achieving these goals. Thus, one may analyse participation and possible trends within the RBD, when it comes to active participation measures, at the start of the first-, and the end of third programming -period. Finally, by analysing the RMBPs by the RBD, one may simultaneously gain an understanding of the quality of data provided by the RBDs and whether the reporting of the RBDs may be regarded as sufficient enough to assess the participatory framework applied over the entire period of the implementation of the WFD. Thus, one may argue for the opportunity of not only analyse the participatory approach conducted, but the very commitment to the reporting obligation under the WFD.

However, the chosen methodological framework, namely the eight features on the basis of which the respective reports are analysed, bare some issues with respect to the features that ultimately address the questions concerning the internal procedures and characteristics of the particular activities. For example, analysing the degree of involvement of specific interest parties under feature two, or the questions regarding the specific structures of the activities and whether they allow for equal participation requires the analysis of the opinions of the particular stakeholders. Therefore, additional data that has been collected by the RBDs, such as questionnaires concerning the stakeholder workshops, but also the written comments sent in by the stakeholders and published by the RBDs, are consulted. The access to all of these documents is provided by the website of the European Commission, the website of the particular RBDs, as well as the data collection networks WISE (EU) and *Wasserblick* (Germany) (Wise, 2022, Wasserblick, 2022).

Having introduced the selected cases, as well the method for data collection, the following part will highlight the particularities of the two chosen cases, in the context of water resource management in Germany.



## CHAPTER 5: Germany: the case overview

As one of the founding members of the contemporary European Union, the state of Germany has always been a central part of European policy and has thus, a long-standing history with implementing EU-policy frameworks into national legislation (Moss, 2004). While not being the largest country (in terms of square kilometres), Germany is one of the most populous EU countries and enjoys one of the highest GDPs across the EU (EU, 2022).

When it comes to water, the parliamentary republic shows one of the highest levels of precipitation and total availability of freshwater resources (Eurostat, 2022). However, as many places in the world, Germany increasingly suffers dry summers, which is leading to soil erosion and fire hazards across forests (DW, 2022). Nevertheless, in total, Germany accounts for nearly eight-thousand rivers, more than seven hundred lakes, about eighty coastal waters within its jurisdictional area, and about 358 000 km<sup>2</sup> of groundwater resources. Moreover, about fifty-two per cent of all surface waters are regarded as artificial or heavily altered, due to agriculture, urbanization and flood-protection (WRRL, 2021).

Despite increasing pressures through alterations in climatic conditions, Germany, as one of the leading countries when it comes to industrial production (Eurostat, 2022b), suffers large amounts of freshwater withdrawals through the industry, leading to relatively limited availabilities of freshwater resources per capita (Worldometer, 2022) and to stark contrasts concerning household and industrial use (ibid).

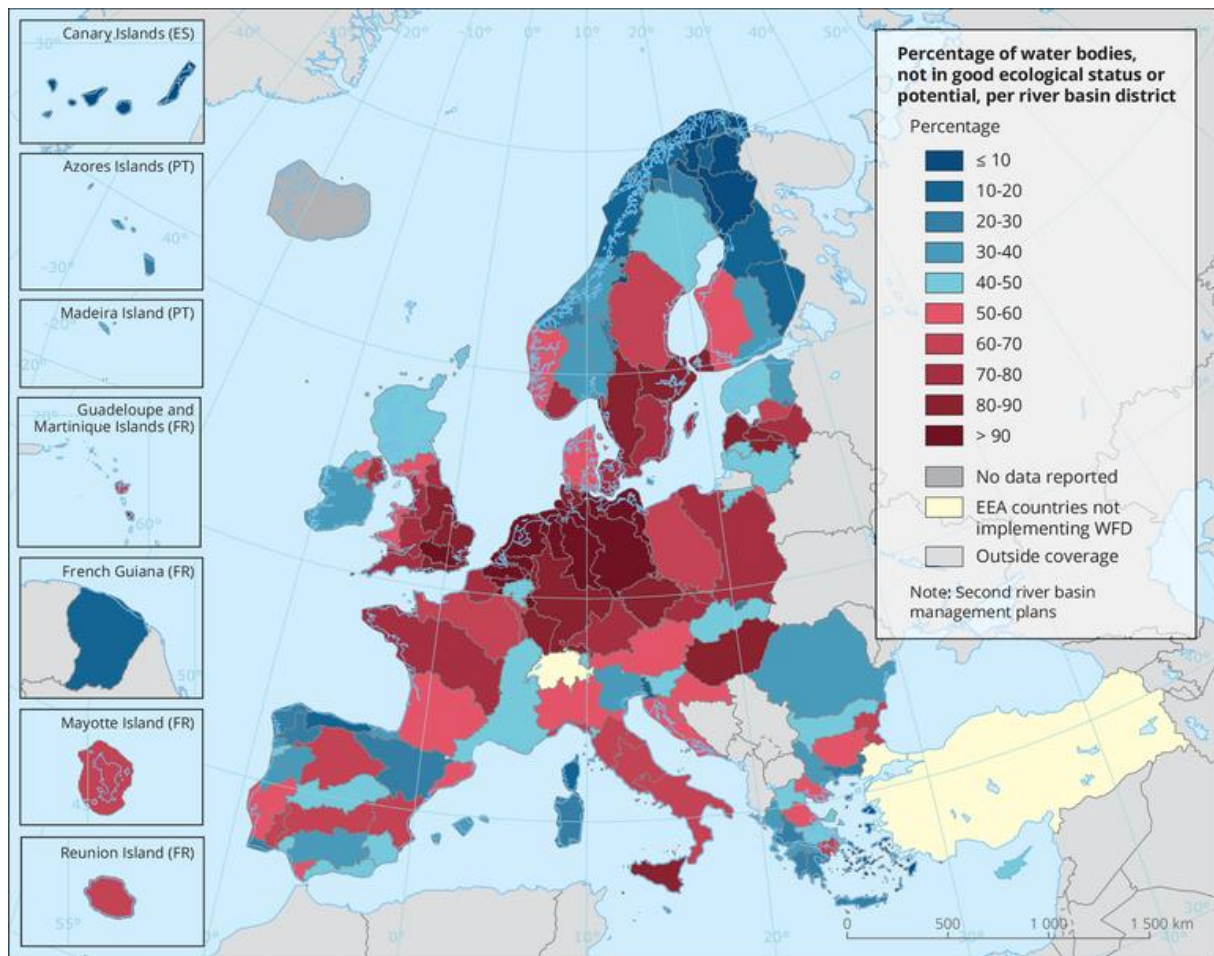
In particular, sixty-seven per cent of all surface waters are heavily impacted by industrial use, which is only exceeded by agricultural production (ibid).

Moreover, although considered a comparatively water rich country, the European Environmental Agency scores the performance of Germany for good quality waters as being overall low, with on average more than 90% of the water bodies not being in good ecological status or potential, per river basin district (between 2010 – 2015) (EEA, 2021).

In particular, as of 2021, only nine per cent of all surface waters reached the required ecological status and none achieved good chemical status, mainly due to high pressures from mercury that settles through the air, based on the production of fossil fuels (WRRL, 2021). Those substances are highly problematic due to its long-lasting effects on the environment and the danger to humans and animals (WRRL, 2021). Further, measures to combat these pressures are only effective in the long term and require often large economic resources, leading to issues of tackling these issues effectively (WRRL, 2021). Hence, according to contemporary data, we may only expect a slight increase of four per cent of the overall chemical status by 2045 (ibid).

In general, while working towards implementing the guidelines of the EU Water Framework Directive, Germany performs comparatively low as of 2021, as shown below in *Figure 3*, often due to the high impact of industrial use, as well as financing issues within the respective RBDs (EC, 2019). Moreover, as criticized by the European Commission (EC, 2019), Germany continues to have issues with establishing reference conditions for the respective water bodies and often lacks nationwide and uniform monitoring, often making the comparison between different years, as well as the analysis of trends, difficult. Consequently, understanding the development of German waters under European law appears to be even more important, informing, among other reasons, this study. Other reasons are the relatively low scoring in quality, as seen in *Figure 3*, the comparatively rigid institutional structures and jurisdictions, as well as the impact German waters have on neighbouring member states, simply due to the high amount of waters crossing the border into other countries (EC, 2019).

In order to be able to analyse the progress Germany made in respect to water quality and the relevance of the public participation process, the following part will introduce the methodological framework used to measure public participation within Germany under the umbrella of the Water Framework Directive.



Reference data: ©ESRI | ©EuroGeographics

Figure 2: Source: EEA, 2021

## 5.1 The System of Water Resource Management in Germany

The following part will briefly introduce the local background of the case study, starting by highlighting the local, regional and national specificities in the Federal Republic of Germany (FRG) in relation to water resource management in Germany, or more particular, the two chosen cases of interest. This part serves as the foundation for my subsequent case analysis and as a means for evaluating the specific cases chosen for the analysis.

With the introduction of the European Water Framework Directive, the state of Germany was forced to restructure existing institutional water management structures and align them with the provisions of the Directive (Moss, 2004). The former governance of water, divided into single administrative units based on the structure of, and governed by, the sixteen federal states (Länder), was replaced by a governance mechanism based on hydrological units. As a consequence, ten river basin districts were established, often exceeding the jurisdictional boundaries of the Länder.

### **5.1.1 The River Basin Districts**

As mentioned above, all surface and groundwater within the state of Germany have been divided in ten administrative units, namely, ten river basin management districts, covering a total of 9740 surface water bodies and 1287 ground water bodies ranging over the range of all ten districts (WRRL, 2021; EC, 2019) (*see* Figure 4). Each unit is based on the closest proximity of all water bodies to one or more large rivers, such as the Danube, the Elbe, or the Oder (WRRL, 2021). These units include all ground-, surface and coastal waters within their respective limits. For the sake of the harmonisation of results, the exchange of knowledge and expertise, as well as the coordination of joint measures, Germany has established a national commission, the “German Working Group on water issues of the Federal States and the Federal Government (LAWA)” (EC, 2019). As of the larger water bodies are often exceeding the borders of Germany, many of these units additionally require the coordination between two or more member states, leading to an increased need of joint cooperation on the national and sub-national level.

However, while the WFD aims at establishing structures that allow for the governance of water bodies, based on the interests and needs in relation to these water bodies, detached from the political boundaries that bear the danger of conflicting interest among states and the delay of decision-making due to complex governance processes, the German state has chosen to leave the governance of the river basin districts to the Länder. This requires the continuation of extensive cooperation among the Länder on the one hand and is said to have often led to issues of financing and time-management, when it comes to the implementation of measures to improve the quality of German waters (EC, 2019). Accordingly, the overall institutional restructuring marks a decisive evolution in German water resource management and has been regarded as overall successful by the European Union (EC, 2019).

When it comes to the specific RBDs, German water units may be divided into International River Basin Districts (IRBDs) that lie within the European Union and National River Basin Districts (NRBDs), as shown below in *Figure 4*.

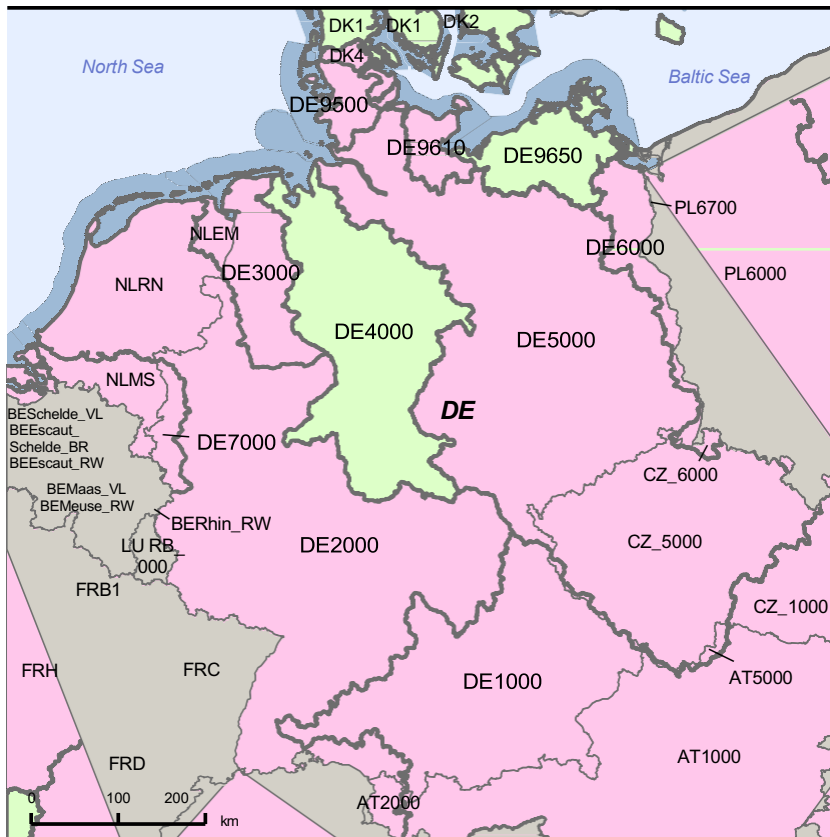


Figure 3: Division of RBDs in Germany: Source: EC, 2019

### International River Basin Districts (IRBDs)

Nearly all of the German RBDs require joint cooperation with one or more European member states.

In particular, eight of the ten RBDs exceed the borders of Germany, whereby they vastly differ in terms of the total share of water basins that actually lie within the jurisdictional boundaries of Germany (EC, 2019). Most prominently, for the Danube district (DE1000), with a size of 56.262 square kilometre<sup>1</sup> within the FRG (in contrast to 232.193 km<sup>2</sup> that are located in Romania (ICPDR, 2022), Germany accounts for only seven per cent of the total basins, while sharing responsibility with a total eighteen states, such as Austria, Switzerland, Hungary, or Romania. The Danube district covers a total of 723 surface water bodies and 190 ground water bodies within Germany without any coastal waters. It is considered the second largest river basin in the whole of Europe (ICPDR, 2022). The district is divided into three zones (the upper basin, the middle basin, and the lower basin) whereby the upper basin covers the area of the Danube from Germany to Slovakia (ICPDR, 2022). Despite the variety of surface waters that

<sup>1</sup> These numbers slightly differ between those provided by the European Commission, and those provided by Germany. According to the Ministry of the Environment (Umweltbundesamt) the district covers an area of 56184 km<sup>2</sup> in Germany.

fall into the districts range, the Danube river alone is of tremendous economic importance to the entire region, with dependent sectors ranging from agriculture, over tourism to energy production (ICPDR, 2022). As a consequence, the river suffers from a multitude of physical anthropological pressures, such as dams for hydropower, which is heavily impacting the nature of the water body, with no to very few areas in which the river can be characterised as “free flowing”. Moreover, the tremendous economic value of the Danube makes the protection of the water increasingly important, while the large variety of different interests might, in turn, complicate the decision-making process. Nationally, the Danube is located within the jurisdictional boundaries of Bavaria and Baden Wurttemberg (WRRL, 2021).

Another example is the Rhine, which, in contrast to the Danube, is considerably larger in size in terms of total km<sup>2</sup> (105.420 km<sup>2</sup>), is to fifty-four per cent located within the boundaries of the FRG. While the need for international cooperation is considerably lower in the case of the Rhine (“only” eight countries), it requires an even larger need for coordination among the *Länder* within the country (EC, 2019; WRRL, 2021). Alongside the total area, the water bodies within the district reach for over forty-two thousand kilometres. The Rhine district is located in the west of Germany and reaches from the very south of Germany to the border of the Netherlands (WRRL, 2021). With a total of thirty-seven million people, the Rhine is the covers the largest total population of all RBDs.

The following remaining six IRBDs are predominantly located in the North-East part of Germany: Schlei/Trave (95.95 per cent of total basin in FRG), Ems (84%), Elbe (65.5%), Meuse (11.6%), Odra (7.7%), and Eider (n/a)<sup>2</sup>. All of the German IRBDs are having long-standing, international agreements and permanent cooperation mechanisms, as well as a joint international River Basin Management Plan (EC, 2019). Additionally to the eight IRBDs, Germany is part of international cooperation agreements with Denmark for three other RBDs in the Danish territory.

### **National River Basin Districts (NRBDs)**

Despite the eight IRBDS, there are two NRBDs located within the FRG: Namely, the Weser (DE4000) and the Warnow/Peene (DE9610) RBDs, both being decisively different in their total area, their total population, as well as the quantity of responsible parties. In particular, the Weser RBD covers an area of 49.000 km<sup>2</sup> and a total population of approximately nine million inhabitants. The *Länder* responsible for the implementation of the WFD are North Rhein-Westphalia, Bavaria, Hesse, Bremen, Lower Saxony, Saxony-Anhalt, and Thuringia (WRRL,

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<sup>2</sup> No data available as the Danish section is part of a larger river basin (EC, 2019)

2021). In contrast, the district of Warnow/Peene, is one of the smaller districts with a coverage of 21.089 km<sup>2</sup> and only about one million inhabitants. Further, and most importantly, the RBD is the only German RBD with only one responsible party involved, Mecklenburg Western Pomerania (MWP). Further, the MWP has no transitional waters, but is located at the coastal region of Germany. The entire area consists mainly agricultural areas and forests, which leads to a vast importance of the agricultural sector within that area, when it comes to the implementation of the WFD. Whereas agricultural land is also a big factor in the Weser district, it makes up for only thirty-seven percent of the total area, in contrast to sixty-six for the Warnow/Peene RBDs (UB, 2004a, UB, 2004b).

Thus, when looking at the ten RBDs (NRBDs and IRBDs), we may, among others, easily differentiate between total area, inhabitants and extent to which these districts require informed coordination through different national and international units. As for all districts (international, national) the agricultural sector plays a major role in the area, accounting not only for the largest total area by sector, but also for major impacts on the quality of water bodies (UB, 2004a - j). Consequently, as for all districts, coordination and planning must, on the one hand, decisively take into account the needs of agricultural production, while, on the other hand, limiting the impact of agriculture to the pressures on the respective water bodies, as one might argue.

As the previous examination of the different RBDs in Germany aims at serving as the foundation for the analysis, the following part will highlight method of case selection of two cases in Germany, based on geographical, demographic and administrative factors in line with the research interest of this study.

### **5.1.2 River Basin District Warnow/Peene**

As mentioned above, the RBDwp is located in the northern part of Germany and is governed by the government of Mecklenburg-Western Pomerania (WRRL, 2021), as the competent authority (RBMPwp, 2009) As indicated by the name, the district is based on the catchment area of the two main rivers in the region, the Warnow and the Peene (RBMPwp, 2009).

Further, the outflows of the rivers are all ending in the Baltic Sea, in the north of the district (RBMPwp, 2009). Moreover, seventy-five per cent of the land area within the district is used for agricultural purposes, eighteen per cent is forest area and the remaining seven percent are cultivated (UB, 2004b). Despite the two main rivers, only small and medium sized rivers are

included in the area and play only a minor importance within the area (WRRL, 2021). In total, the area consists of about five-hundred rivers, eighty-two standing waters (such as lakes) and between twenty and twenty-one coastal waters<sup>3</sup>. The total area is divided into four planning zones: Peene, Warnow, Coastal area west, and coastal area east, each being addressed by specific measures for improving the water quality and quantity.

Regarding the general water quality, only about five per cent of all surface waters qualify as good or very good, while thirty per cent even qualify as bad (RBMPwp, 2022). That shows an improvement of five per cent since 2009 (RBMPwp, 2009). As for groundwater status, the picture appears to be similar. Ninety-two per cent of all groundwaters lack satisfying chemical quality, and seventeen per cent lack adequate quantitative status (ibid).

Regarding the demographics of the area, the RBDwp covers a total population of about one million inhabitants with a majority exceeding the age of thirty (StA, 2022). The entire area covered by the federal state is one of the areas with the highest km<sup>2</sup> per capita (ibid) and one of the lowest averages in persons per household. Additionally, MWP is the federal state with the lowest average income, compared to the RBDd with one of the highest average incomes in the FRG. In terms of level of education the MWP sores tenth among all *Länder* compared to RBDd with both *Länder* being among the highest scored *Länder* in the country. Finally, active participation enjoys little tradition in the area, having the second lowest participation in public elections (StA, 2022). Thus, the area is shaped by a low level of public participation, insufficient levels of education, low to very low income levels and issues of demographic change through aging populations. All of this can arguably be expected to directly influence the resources and willingness for active participation within the area. This stands in many ways in contrast to the RBDd, which will be elaborated in the following section.

### **5.1.3 River Basin District Danube**

As mentioned above, the Danube district covers an area of about 800.000 km<sup>2</sup> and is thus one Europe's largest RBDs, only second to the Volga. According to (RBMPb, 2015), the area makes up about ten per cent of the total European surface and inhabits more than eighty-million people (ibid). Despite being an important habitat for all sorts of animals and plants, the Danube is running through ten European countries and represents one of the most important economic routes in Europe (ibid). Hence, protecting the Danube bears a tremendous importance to the well-being of humans, animals, and the environment, as one might argue.

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<sup>3</sup> The numbers vary depending on the programming period.



Germany covers about seven per cent of the entire RBDd, with the federal state covering the majority of eighty-six per cent (ibid), from where it runs into the neighbouring Austria. Thus, national jurisdiction lies with the state of Bavaria and the second *Land* Baden-Württemberg. The respective documents – the B-level river basin management plans - drafted by those two *Länder* will be at the core of the subsequent analysis.

The German part of the RBDd covers around 723 surface waters and 190 groundwaters, among the former are the *Chiemsee*, the *Tegernsee*, and the *Königssee*, as some of the most prominent examples (RBMPb, 2015). Among the largest pressures to the well-being of the waters are agriculture and industry, followed by cultivated areas (ibid).

When it comes to further pressures resulting from contemporary climate change, the RBDd is struggling to deal with increased long-term precipitation, leading to floodings and thus, tremendous economic costs. On the other hand, generally dry summers have led to decreases in water quantity with some regions completely drying out (ibid).

Regarding the good ecological status, the authors of the third RBMP (RBMP, 2022) expects to achieve the European targets for about seventeen per cent of all surface water bodies, the rest being regarded as unlikely (RBMP, 2022). Moreover, as in the entire German area, good chemical status is not expected to be achieved for all of the water bodies within the RBD (ibid). Good chemical status for groundwater bodies, on the other hand, will most likely be achieved for about sixty per cent of all groundwaters and ninety-six per cent concerning quantitative status (ibid). Hence, similar to the RBDwp, achieving all targets defined by the WFD by 2027 will be very unlikely to impossible, mainly due to the bad chemical status within all waters (surface and groundwater), as many measures to tackle chemical status may take many years and large economic resources. However, failing the targets only increases the need to strive for their achievement, albeit to a later point in time, as one might argue.

When it comes to the demographics of both *Länder* situated within the RBDd are scoring considerably higher in all regards compared to the RBDwp.

In particular, both federal states score among the highest when it comes to persons per household, as well as total people living in the area. They have a considerably lower risk of falling into poverty (12.6 % & 13.9 % compared to 18 % of all people in MWP) and they score both considerably higher in matters of quality of education (StA, 2022). Further, voting appears to have a high importance in the area with one of the highest participation rates in elections, implying the assumption of a greater willingness to actively participate in political processes. Finally, income-levels are high and remain among the best in the entire state (StA, 2022). Thus, those two RBDs differ tremendously in two important points, while scoring similar when

it comes to the good status (or potential) of all water bodies. Firstly, the institutional structures, and thus the need for cooperation differ tremendously, with the RBDd having to coordinate action within the FRG, as well as across borders. In contrast, the RBDwp is governed only by one body, the federal state of MWP. Further, when it comes to demographics, both areas score very different when it comes to level of education, income, and voting behaviour. These three points bear some important assumptions. Firstly, the higher the level of education, the more likely a profound understanding of the issues at hand and the faster the process of knowledge creation during public participatory activities. Secondly, higher levels of income may increase the likelihood for a greater availability of resources to participate, be it the ability to afford transportation and accommodation for public activities, or the mere ability to live in closer proximity to the central public realm. Lastly, higher participation in public elections may stand for a greater willingness to participate in general public processes and bears the assumption of higher levels of public knowledge regarding political processes, but also a closer non-physical proximity to information material. All in all, these differences embody different challenges and advantages to the public participation processes and may be expected to influence the outcome of public participation. In other words, the local context may heavily influence public participation in terms of capacities, resource availabilities and willingness. Public participatory strategy should include those considerations to increase active public participation, as this author argues.

Nevertheless, having introduced the methodological framework that guides the analysis, the following part introduces the results of the analysis, followed by a brief discussion of the results.

# **CHAPTER 6: Comparative analysis of public participation**

## **6.1 Results**

The following part will briefly introduce the results that were retrieved from the documents presented in the previous part. The contents were analysed based on the questions of *who* was involved, *when* were they involved and *how* were they involved. This serves as a prerequisite for the second step of the analysis. Namely, analysing the results based on the eight criteria discussed in the method chapter (Chapter 3).

The author start the presentation of the results based on the respective RBDs, starting with RBDwp in order of the year of public participation.

### **6.1.1 Public Participation in the RBD Warnow/Peene**

By analysing the measures taken to actively involve the public into the process of the drafting of the first RBMP, which was published in 2009, one may highlight following important findings (RBMPwp, 2009).

Firstly, the participatory process is divided into three main phases for public consultation for which the public has a period of six months to voice their opinions. The three steps, or phases are as follows:

1. The first six months period, from the end of 2006 into the year 2007, was concerned with the first publication of the time-planning for the participation and planning process. Within this period, stakeholders had the opportunity to raise concerns related to any time-planning issues.
2. The second six months cycle – from the end of 2007 to 2008 – was dedicated to the consultation regarding important issues for water management.
3. The last cycle was concerned with the publication of the first drafts of the Programme of Measures and the River Basin Management Plan and lasted from the end of 2008 to 2009 and was followed by the final publication of the PoM and the RRMP.

Within these periods, the RBDs are supposed to actively encourage public consultation to all of the respective issues and to leave the opportunity for improvements and adjustments before the final version of the first RBMP.

As for the encouragement for public consultation, the RBDwp employed different strategies to inform and consult the public.

Firstly, a working group, under the umbrella of the ministries for the environment and agriculture, was founded in 2007. Part of the group were representatives of the administrative bodies for agriculture and water management, as well as the regional farmers association, experts, and impacted individuals. About seventy working-groups were established across the entire district. Further, several events on the local and regional level were hosted within buildings of the public water-management offices. No further information on the nature and structure of those events are provided.

Further, the ministry published information regarding the time-planning in advance to the consultation period, as well as detailed information concerning the procedure for public participation. The information material (namely, the time-planning document) was posted on the corresponding website of the state of MWP and was publicly available as a printed copy in the buildings of the ministry of environment (RBMPwp, 2009). All interested parties had the opportunity to submit statements in written form and via Mail to the responsible authorities. For the first period in 2007, a total of seven statements were received, which resulted in no changes to the time-planning.

As for the second period, a similar process was applied. The information concerning all important water issues was published via reports on the *Länder*-website and again in printed form in the building of the ministry and was thus publicly available for all interested stakeholders. Again, each interested stakeholder had the opportunity to submit statements via post, mail or written and submit it to the responsible authorities. A total of six statements were received, which resulted in no changes.

Finally, the last consultation period followed the same structure. The information material was published via the website and accessible in paper-form in all ministerial buildings. After the time period passed, a total of forty-nine statements were received, including several sub-statements. For each sub-statement, a detailed response was made in which possible changes and adjustments, or reasons for dismissal, respectively, were given. The statements were published via the *Länder*-website, although anonymous to the public. As for the third period, most of the statements were concerned with the general scope of the planned measures, the lack of timely-involvement of the stakeholders, and issues of the agricultural sector concerning landownership and concerns regarding the impact of the measures to the individual farmers. In general, adjustments were concerned with clarifications within the text and more detailed descriptions of the measures.

All three consultation periods - including the provision of resources and the ability to make statements - were open to every interested individual, association, or political and economic entity.

Beyond enabling the public to submit written statements, no further measures were identified in the corresponding documents, as well as the RBMPwp (2009).

The second cycle RBMP shows minor alterations in the RBDs approach for public participation. While the three periods, as well as the corresponding publication of the necessary information resources remain the same, the resources themselves have diversified. For information purposes, the responsible ministry published three reports over the course of four years in 2011, 2012 and 2014. The latter consisting of a Q&A for all WFD related topics. Further, the RBD hosted a series of regional events in which the regional communes received a series of information material for the purpose of knowledge creation. All of these events took place in 2014. Further, a working group, founded in 2007, led by the ministry for environment and agriculture, included a series of representatives of administrative bodies for agriculture and water management, as well as representatives of the regional farmers association and experts. The meetings are not open to the further public and take place once a year since 2007. Further measures were not taken.

Further, as for the three periods for public consultation (time-planning, important issues of water-management, and drafting of the PoM and the RBMP), ranging from 2012 to summer 2015, following information has been provided by the documents: Firstly, a total of two statements were received concerning time-planning, with no alterations to the documents being made. Secondly, a total of six statements concerning questions of water-management were received (including forty-seven sub-issues) which resulted in no changes. Finally, a total of 135 statements were received concerning the drafting of the PoM and the RBMP until summer 2015. The received statements were answered by the authorities of the RBD and published on the website. Most of the statements came from the agricultural sector (82), as well as single communes (21) and a few from private citizens (6). The most important issues addressed lacking details in the drafting, concerns regarding land-ownership, the impact on agricultural practices, and issues of financing. Resulting changes to the documents included clarifications in the text, and minor changes, such as detailed descriptions.

After the final period, the authorities of the RBD send out an online questionnaire to all stakeholders who submitted statements, concerning the participation process. Out of all

participants, twenty-three per cent submitted the questionnaire. The vast majority suggests improvements for the participation process, including the provision of material via the website.

The last period for public consultation for the drafting of the current PoM and RBMP followed a very similar procedure as the two previous ones, although with higher levels of participation. For the time-planning period, four statements were received, leading to no alterations in the document. By the June 2020, five statements concerning water-management issues were received, with no alterations in the documents. As for the draft of the PoM and the RBMP, a total of 367 statements were received, with a large majority coming from the agricultural sector (203) and the communes (78) and only a few private citizens (7). A total of 5100 sub-issues were raised which were answered and uploaded on the website of the RBD. The issues raised mainly concerned possible disadvantages for the agricultural sector through a planned measures, fears of issues concerning questions of land-ownership and limited participation within the process. Several changes to both documents were made, including textual adjustments and clarifications, updated maps and figures, a more detailed description of single measures, a readjustment of measures concerning the shipping industry, the cancellation of planned measures when necessary and possible and modifications to the planning of measures. Information materials included flyers and brochures. Additionally, the regional government hosted several events for public policy makers and political representatives of the communes. The first large event took place in March 2021 and consisted of four regional virtual conferences which were concerned with the information of all interested parties regarding the PoM and the RBMP. A total of 313 stakeholders from all sectors participated. Further, a symposium, ranging over four events, was hosted inviting interested parties for information purposes. All of them took place in May 2021. Further, the working group, introduced in 2007, continued to meet once a year to discuss the planning of the RBMP and the PoM. According to the documents, no further measures were taken.

This section has briefly introduced all measures taken to encourage active participation for the procedure of the drafting and publication of the PoM and RBMP under the umbrella of the WFD in three programming-periods. The public participation shows slight alterations over the three cycles while the possibility for active participation was mostly limited to the submission of statements to the regional authorities. The analysis of those documents was concerned with the question of how, when and for whom the participation-activities were accessible and how the general process was structured.

The subsequent section will present the findings from the analysis of the RBDd within the German territory. The analysis was conducted based on the same schema. Following the presentation of the results will be the discussion of the results based on the eight features for public participation, presented within chapter 3.

### **6.1.2 Public Participation in the RBD Danube**

Similar to the RBDwp, the participatory processes have been structured into three main phases, according to German law. Those three phases are consisting of the consultation regarding time-planning, the relevant important water-related issues, and the drafting of the PoM and RBMP. However, while the RBDwp is single-handedly governed by only one administrative body, namely, the regional government of MWP, the governance of the RBD Danube is somewhat more complex. Firstly, the joint international coalition is responsible for drafting and implementing the cross-country PoM and RBMP, while the single national and regional governments are responsible for the implementation and planning within their own territories, according to the international agreements of the Danube district. Thus, there exist different levels of planning for international German river basins: A-Level (Länder-basis), B-Level (inter-Länder-basis) and C-Level plans (national and international plans). While the international planning is important in regard to the entire district, this research is concerned with the participation inside the German territory. Thus, the analysis is based on four A-Level plans (for the federal states of Bavaria and Baden-Wurttemberg) and one joint B-level plan for the final programming-period.

Thus, the following section will introduce the results based on the Länder-plans, starting with the first programming period in Baden-Wurttemberg (BW).

#### **6.1.2.1 Public Participation in Baden-Wurttemberg**

As discussed above, the consultation periods for each phase are equal in every German state and do not need to be explained in detail again. For the first period, the two first steps of public consultation were combined, due to the timely completion of the second phase. Thus, the authorities for BW decided to combine the two steps in order to increase the periods for possible statements for the second step. The submitted statements were mainly targeted towards specific issues, such as the improvement of the morphology of the waters. Participation was low with only a few statements submitted (RBMPbw, 2009).

The third phase (2009) started off with four main events for the public. Each event hosting about eighty to 250 participants, which consisted of representative from politics, associations, non-governmental organisations, local interest groups, as well as private citizens. The events aimed at furthering knowledge regarding the draft documents of the PoM and the RBMP. 139 statements were submitted during the six month time-period. After the answers have been published, the participants had another chance to respond to the questions. The discussed issues were mainly regarding possible costs for industry and communes and explicit concerns regarding specific planned measures. In general, participation in form of statements was comparatively low.

Despite the possibilities to participate actively via written statements, the ministry of BW hosted a series of events and founded a series of forums in which the public was involved. In particular, in 2001, the ministry of BW established the country-council (*Landesbeirat*), which was led by the ministries of economy and agriculture and consisted of representative of administrative bodies concerned with the environment and economy, communal representatives, associations, representatives of the industry, hydro-energy, agriculture, fishing and further interest groups. The council was open to every interested party and met several times during the planning process. The aim was knowledge creation and the discussion regarding the pressing topics of the WFD and the creation of ideas for possible measures to meet the targets. By 2008, the council consisted of about sixty members (RBMPbw, 2009). Further the ministry of BW decentralised information forums, which, since 2006, are held within the entire state's territory related to the RBDd. The idea was to discuss different topics of the RBMP and the PoM related to the local expertise of the area. Within thirty districts, two to three meetings were held consisting of an introductory meeting, the discussion of the planning and ideas, and a conclusion, resulting into a total of seventy events. Those meetings were open to everyone who was interested and held in the evenings to increase participation after work. Further, experts were present for detailed questions. The ideas were collected in the end and could further be submitted to be considered during the planning process. The meetings were advertised in the local media and necessary information published on the website. As a result, alterations to the documents were made in form of detailed descriptions, clarifications, the settlement of questions regarding landownership, and local-specific improvements.

Moreover, information events, such as open discussion and lectures, were organised with an average number of about two-hundred participants. Targeted audience were communal



politicians and representatives of associations. In total about 150 events took place over the entire planning period.

Further, information was uploaded on the website in form of reports and brochures.

As for the second programming-period (RBMPbw, 2015), BW continued its participatory efforts from the former period including the hosting of the same events and councils. Public participation in form of statements for the first two phases remained low with no alterations being made to any documents.

For the third phase, sixty statements were submitted. Alterations included adjustments for regional aspects that were included into the planning. Most statements were concerned with specific suggestions, questions and requirements for the environment, climate, energy sector. For example, the agricultural associations have outlined the long process for registering alterations in measurements after measures have been implemented and whether those values are indeed mostly due to agricultural practices. The statements were submitted by a multitude of actors from the agricultural, communal, environmental associations, or tourist associations.

As the third documents entails the description of a joint approach to public participation between the two Länder BW and Bavaria, this following section will firstly discuss the documents related to the first two programming periods in Bavaria.

#### **6.1.2.2 Public Participation in Bavaria**

For the first programming period, the responsible ministry in the state of Bavaria hosted a series of events and forums for public participation. Firstly, introduced in 2002, the ministry of environment hosted the water forum Bavaria (*Wasserforum Bayern*) which included representatives of the sectors of agriculture and forests, economy, infrastructure, traffic, technology, and nutrition. Further, twenty associations from agriculture, communes, hydro-energy, tourism, etc. were included, as well as public administrations of fishery, environmental protection and historic preservation. The aim was the exchange of information, the establishment of dialogue and tailored solutions for the Bavarian point of view. Further, the water forum aimed at increasing legitimacy for the measures within the public. The forums took place one to twice a year. As a result, a total of ten forums were held by the end of 2009. The target audience was the wider public. Additionally, the forum hosted several events for informational purposes that were open to all interested parties. Information about those events were spread in the local press and on the website of the Bavarian state and its ministry for the

environment. Further, since 2005, regional forums and workshops on the local level were held in order to target public and provide the public with information regarding the participation process (RBMPb, 2009).

Further, several local round tables were established. Forty-eight were held for farmers and representatives of the Bavarian farmers association and thirty-four for representatives of cities and communes (often mayors). In total about 3500 farmers participated and discussed the planning of the RBMP and the POM. The round tables were established in all Bavarian counties.

For information purposes only, the RBDd-Bavaria published information online on the website and provided a mapping service with which everyone could see the specific measures related to an area. Further, brochures and flyers were published online. Finally, two main exhibitions were created. The first in 2009 in the context of the “Day of Water”. For these purposes, every building of the ministry of the environment hosted an exhibition with information about the WFD and the planning of the PoM and the RBMP. Another exhibition took place in seven parts and targeted different groups, from pupils to the adult private citizens (RBMPb, 2009).

As for the three phases of public consultation, forty-five statements concerning the time-planning were submitted, which resulted in no alterations. For the issues of water management, the RBDd-Bavaria received seventy-six statements. No changes were made. Within the third phase, 6889 statements were submitted to the ministry, mostly from private people (6651), followed by associations (608). The range of issues were widespread and all corresponding changes were published online (RBMPb, 2009).

The second programming period (RBMPb, 2015) consisted of the same participatory activities and structures with only slight variations in the participation-rates.

Thus, only the submitted statements are being presented here.

The first phase of public consultation resulted into seven submitted statements, which led to small changes in terms of clarifications. Similarly, seven statements were submitted for issues of water management which resulted in no changes. In contrast to the first programming-period, the third phase of the second-programming period led to only fifty-one submissions of statements, with a majority coming from associations. The issues address are mainly concerned with financing, environmental protection and specific water protection issues and are mainly based on local specificities.

### **6.1.2.3 Programming period 3: Joint activities in Bavaria and Baden-Wurttemberg**

For the joint participatory activities between Bavaria and BW, the Bavarian activities, that were discussed above, were included into the participatory process of the two Länder. From the side of BW, only the country-council (see above) was adopted for the side of BW. Thus, the structure of the events and the forms of participants remained the same, as well as the time periods of the single events (RBMPb, 2015).

In terms of the three phases, seven statements were submitted regarding the time-planning, resulting in no changes. As for the issues of water-management, twenty-five statements were submitted, and no alterations made. Regarding the third and final phase, a total of 185 statements were submitted within the given timeframe of six months. The majority of those submissions came from associations and the Hydro-energy sector. Many of the submitted statements were concerned with the lack of information material and missing clarity in the documents. Further, timely accessibility was criticized for being too complicated. Further, more measures for participation were requested.

This part has given a brief summary of the findings of the analysis of all documents discussed in the method section. In order to gain an understanding of those measures in the context of important characteristics of active public participation, the following section will be discussing the results based on the eight features that have been discussed as part of the methodological framework, as well as by consulting contemporary literature on public participation.

## **6.2 The Discussion of the research findings**

After having introduced the findings from analysing the respective documents regarding the processes of active involvement of the public in the German territory of the two RBDs Warnow/Peene and Danube, the following section will discuss and evaluate the findings based on the eight factors (representativeness/inclusivity; independence; early involvement/punctuality; influence; transparency; resource accessibility; structured dialogue; continuity/social learning). introduced by Slavikova and Jilkova (2011) and evaluated via the section regarding the methodological framework.

The discussion of the findings will follow in the same chronological order as before, starting with the RBDwp and the order of the features provided in part 4.4.

## **6.2.1 Public Participation in the River Basin District Warnow/Peene**

### **1) Representativeness/Inclusivity**

As mentioned above, the feature inclusivity is concerned with the involvement of all relevant interests into the public participation process. Thus, the participatory process applied should identify the respective stakeholders in question, as well as demonstrate the inclusion of all based on the activities employed, and the form of access granted, as one may argue. The presentation of the findings of the RBDwp demonstrates, that the involvement of all stakeholders is not limited to the opportunity of submitting statements online, or via written statements over the course of all three programming-periods. A working group consisting of representatives of public administrative bodies, the regional farmers association and experts was introduced in 2007 and met once a year in which important questions of the WFD were discussed. And thirdly, a series of events that aimed at informing the public. Whereas this working group has not had any formal decision-making power, it enabled the communication between decision-makers and interested stakeholders and the discussion of the plans concerning the PoM and the RBMP, as well as the provision of information. Thus, efforts to increase public participation via the inclusion of more stakeholders through a series of information events have intensified over the three programming periods. This observation is supported by an increasing number of statements submitted to the competent authorities, which are dominated by the farming sector. Based on the dominance of agricultural production in the area, one may assume the success of the strategies applied to reach the impacted stakeholders for public participation. However, the comparatively high numbers of participation in terms of submitted statements show the underlying issues of the participatory process applied. In particular, many statements were concerned with a lack of access to participation, as well as of concerns regarding the fears toward implications to landownership and the impact on farming practices based on the provisions of the RBMP. These uncertainties could have been solved in early stages with an improved information campaigns that address all interested and affected parties, more affectively. According to the RBMPs submitted by the RBDwp, the publication of information was limited to the publication on the respective website, and in public offices of the state of MWP. These issues did not appear to vanish. In the contrary, over the three programming-periods, an increased number of statements were submitted with persisting focus on the nature of the participatory process, as well as remaining uncertainties towards the right of the stakeholders and the negative impact of the WFD for them. When additionally considering the low tradition of political involvement of the public, lower levels of education and limited resource capacities on average, one may assume a greater need increase the efforts towards

involving the public by stronger fostering the provision of information. Further, the strong involvement on the basis of uncertainties and specific questions regarding particular impacts of these measures may have been due to the lack of opportunities for all stakeholders, to discuss and address possible questions during the planning period. By including merely a limited range of stakeholders in the working groups, only few “informed citizens” might have had the opportunity to communicate concerns beyond the submission of written statements to the authorities. Thus, in terms of representativeness, the efforts to include the public and in particular, all potentially interested parties were limited.

## **2) Independence**

Closely related to the previous section, the question of independence of the participatory process is closely linked to questions of *who* participated and *how* did they participate. While the findings of the analysis do not suggest any particular advantages of one particular group, the fact of the limited involvement of the public and the inadequate efforts to enable all potentially interested parties to resolve concerns about particular issues, might be informed by the exclusion of the uninformed public from participating within discussion-forums, as one may argue. Thus, only those with natural access to the issue of water-management policies were specifically addressed via the working groups, allowing for the participation based on a limited number of actors. Thus, while the process of public participation in the RBDwp does not explicitly exclude stakeholders from participation, the lack of encouragement for discussion raises questions of equal and unbiased participation processes, as this author argues.

## **3) Early Involvement/ Punctuality**

When considering the questions of the timing for public involvement, the RBDwp has limited the participatory process of submitting the opinions of the wider public to the mandatory time-periods by the German law. In particular, before each six-month period, the information was published online and in paper form in public buildings of the competent authority. While the timeline might be argued to be sufficient for submitting statements, it allows for little flexibility for changing plans and limits the opportunity of the stakeholder to learn about the respective issues. Further, the strict timeline does not allow for further engagement after the responses have been published. Thus, the submission of statements did not allow for further comments after they have been answered. Moreover, limiting the participatory process to three periods of six months in which statements must be submitted, there is little time for the collection of

information, the analysis of the local situation, the identification of problems and the drafting of a statement, as the author argues. This could have been resolved by the timely hosting of information events. However, those events only took place in the final period of the drafting process and did not include further discussions of specific topics. Thus, for the wider public, raising opinions was timely limited to the three periods and to the specific topics (time-planning, important issues of water-management, and the drafts of the RBMP and the PoM).

#### **4) Influence**

Assessing whether all stakeholders have had the opportunity to effectively influence policy making and whether the respective influence leads me to two, somewhat contradicting, statements. Firstly, as every statement is commented and every alteration to the respective documents is mentioned, the way those statements are implemented in the final documents of the RBMP and the PoM are very clear. On the other hands, the impact working groups have on the drafting of documents remains somewhat vague. In particular, it is not clearly indicated in the final documents of the RBMP, which points were taken directly into consideration and whether the points discussed were implemented at all. Rather, the document simply states the recognition of the mentioned topics. Thus, to stakeholders outside the working groups, it is difficult to comprehend the impact of those working groups on the planning of measures to improve water quality and quantity in the region.

#### **5) Transparency**

When it comes to questions of transparency, the RBDwp has provided all necessary information and has responded to all public statements openly. Nevertheless, the submitted statements indicate uncertainties regarding the decision-making procedure and the impact of the decision-making on issues such as landownership. While there is no indication regarding questions concerning the transparency of the procedure and the boundaries of public consultation, the clarity concerning the boundaries of public participation might also be due to the very limited nature of the process itself. However, when looking at the issue of transparency only, there is no indication of a clear failure concerning the public-participation process in the RBDwp, nor is there any reason for highlighting the efforts towards greater transparency, as I argue.

## **6) Resource Accessibility**

As the gap between expert groups and regular public citizens in terms of knowledge concerning the respective issues of water management may be considered predominant, efficient active involvement may be expected to take those differences into account when drafting the participatory activities. However, for the most part, information has been limited to standardized reports and the respective drafts, leaving the uninformed with a clear disadvantage due to the absence of expert knowledge, as one might argue. The measures, such as information events were very limited to certain periods and to only four events for each programming period. However, while very limited in their frequency, the mentioned information events can be considered as means to tackle these issues, if sufficiently tailored to the local conditions. Most of the provided online sources are written in German with few being available in other languages, leading to disadvantages of non-German-speaking stakeholders. In conclusion, especially the multitude of statements based on uncertainties indicate a greater need for clarity for specific measures and areas. Further one may highlight the demand for a broader range of activities with higher frequencies – also in different languages – to include more interested stakeholders.

## **7) Structured Dialogue**

When considering the way in which public participation activities are structured, one may closely assess the nature of the respective activities. The three consultation periods for each programming-cycle does not allow for closer assessment of the specific structure, due to it being solely based on the submission of documents. The working groups, as platforms for discussion related to the planning of the RBMP and the PoM offer more room for assessment. The working groups consist of a multitude of actors ranging from the ministry for agriculture, environment and consumer-protection to the regional administration of agriculture and water-management, associations for environmental protection and the regional farmers association. The group is supported by experts. Despite the leadership through the respective ministry as a representative of the competent authority, the information provided regarding the structure of the working group does not suggest any inherent dominance from any of the actors, which is also due to the fact that the actors involved, might all be expected to possess the same, or similar expertise in their respective fields in relation to water management. The consistent frequency of meetings additionally suggests the likelihood for a fair exchange among the actors in the long-term. However, as there is no information provided, such as questionnaires, reflecting the opinions of the participants, no clear assessment may be made. However, the other events did not entail

any incentives for dialogue, which raises the question of fair opportunities to all to participate in any form of structured dialogue and thus, to consistently raise their opinions concerning questions of water management in the area.

## **8) Continuity/Social Learning**

The final feature that is to be analysed is the question whether the applied participatory method furthers a process of continuous social learning. Similar to the previous points, this entails questions of *when*, *who* and *how*. Regarding the time-planning the publication of reports and information material and the hosting of events all happened within in very limited time-periods during the respective programming periods. Thus, efforts to increase social capacity and to further public knowledge were very limited and continuity was mainly provided through the replication of these events over the three programming-periods, with large time-gaps between them. Hence, while the working groups met at least once a year, the possibilities to continuously be informed about the ongoings of the development of the measures concerning water management were very limited over the span of twenty-two years. Consequently, despite the natural repetition by reinitiating the programming cycles, only little attention has been paid towards the continuity of the learning process regarding water-related issues.

### **6.2.1.1 Concluding considerations for the RBDwp**

The assessment of the active involvement of stakeholders based on the eight features discusses shows a predominantly adequate implementation of the process of stakeholder-participation. However, the efforts were very limited with regards to timing, social learning as well as frequency of events. Further, beyond the working groups that included only professionals in the topic-area, little opportunities were given to those who are potentially affected by the measures of the respective RBMP to discuss the issues, voice their opinions and clarify concerns. This is supported by the high amount of statements that deal with uncertainties concerning the impact of the respective measures in certain areas. The general provision of information was further limited to the state-owned websites and media sources and has not specifically target potentially interested stakeholders.

However, before being able to compare the two approaches from both case studies, the following part will assess the participation process in the case of the German territory of the River Basin District Danube.



## **6.2.2 Public participation in the River Basin District Danube**

While the presentation of findings of the RBDd has been presented in the order of the two competent authorities, the federal states of Bavaria and BW, the following assessment will base the discussion on the order of features at hand.

### **1) Representativeness/Inclusivity**

As discussed in the findings, the ministry of BW hosted a series of events that were open to a wide range of stakeholders. The country-council, founded as early as in 2001, consisted of representatives of administrative offices, representatives of the industry, the communes, agriculture, a series of associations, fishery, hydro-energy, further public and private interest groups, and was open to every interested party. Aiming at knowledge creation and the discussion of important topics at hand, the council offered a broad opportunity to stakeholders to participate. To reach the wider public across the country, the decentralised information forums offered similar opportunities with explicit focus on the inclusion of all interest stakeholders by timing the meetings according to standard working hours and structuring them into several small sessions. By advertising those meetings over several local and regional media sources, the state of BW aimed at reaching a broad range of stakeholders. Further events for informational purposes targeted communal politicians and regional associations which resulted into an average of about 200 participants over a series of 150 meetings in one programming period.

Additionally to those events, the third consultation period was introduced by a four main events for a large audience of interested stakeholders that served the purpose of enhancing the knowledge about the RBMP and the PoM. Next to associations, politicians and representatives of the private economy, every interested stakeholder could participate.

Thus, the multitude of opportunities over a prolonged period of time opened up the opportunity for everyone to participate. The result was a limited amount of statements submitted to BW with a majority addressing specific, measures related suggestions, with little to no concerning the lack of clarity or inadequate participatory opportunities. These findings suggest the efforts and effectiveness to include every interested party into the participatory process and to give every stakeholder the opportunity to clarify possible issues.

Similarly, the state of Bavaria hosted a series of events and opportunities - such as forums, working groups, round tables, regional forums and workshops, informational campaigns, and exhibitions – for public participation. Information campaigns included the involvement of local

media and information posted online. However, results of public participation rates through the submission of statements for the first period differed heavily, with a total of 6889 statements submitted, mainly by private citizens. This changed for the second programming period, with a tremendous decrease in statements submitted by private citizens. The findings suggest a large involvement of the public via several means across a long time-span and for different audiences, depending on the nature of the events. While the submission of nearly 7000 statements in the first period, mainly by private citizens, might be surprising, it might be considered to be a reflection of the encouragement of the public to participate in the decision-making process.

For the third programming period, both states' efforts were joint, whereby most of the platforms remained similar, or the same.

The findings from both states suggest intense efforts to include all interested stakeholders into the decision-making process and to enable everyone to be informed, as well as to discuss the issues at hand. Based on the evaluation criteria, one may highlight the outstanding efforts to create an inclusive process of public participation.

## **2) Independence**

The multitude of different forums and opportunities of participation and the inclusion of a wide range of actors within both federal states, as well as the often decentralised nature of the events suggest a large degree of independence of the participation processes. In particular, the events were hosted by different entities and were not only addressed towards a broad audience, but were also tailored towards different local needs among citizens and regions. Arguably, this variation contributes to a decrease of opportunities for elite capture and the dominance of certain stakeholders, as well as hampers the possibilities of single authorities to block participatory processes.

## **3) Early involvement/Punctuality**

In both *Länder* forums and committees were inducted in the very early stages from the beginning of the WFD. Moreover, as in the case of BW, early drafting of documents and their publication enabled the state to combine two of the three consultation phases in the first programming period. Moreover, all documents were published in time and at times, even with reasonable time to react to the responses to the submitted statements, after they have been published. Thus, as for the question of timing, both federal states did abide by the required rules for publication and at times even outperformed those. The events and activities hosted from

early on, giving enough time to participate beyond the submission of statements, during the drafting and evaluation phases of the RBMP.

#### **4) Influence**

Similar to the case of the RBDwp, measuring the influence on the decision-making process is somewhat more comprehensive. Despite the adherence to the regulations for consultation in the three consultation phases via responding to the submitted statements, no clear indication of how particular decisions were drafted were made. However, as the purpose of most of the events has been defined as contributing to the development of the RBMP via discussions and the voicing of opinions, while negating any decision-making power, the nature of the event suggests a better understanding of the influence of public participation over decision-making.

#### **5) Transparency**

While the submitted statements during the first programming periods do not suggest any major issues concerning transparency of the public participation process, many of the statements from the final programming period demand greater transparency and involvement in decision-making. Despite those concerns, no clear indication can be made regarding the lack of transparency during the process.

#### **6) Resource Accessibility**

Due to the multitude of events for the exchange of information and discussions, as well as several exhibitions, and information campaigns in the local media, one may highlight the attempts of both states to provide everyone with necessary informational resources. Further, interactive maps enabled every interested stakeholder to assess the decisions and measures based on their own local needs and interests. Further, meetings were hosted across both states in every district to increase access and different events were created for different age-, and interest groups. Moreover, the frequency of different events may be argued to have increased the ability of everyone at any place to participated, even via online events hosted by the ministry of environment in BW. All these measures strongly increase resource accessibility in respect to levels of education, income, and place of residency. Nevertheless, some statements indicate concerns regarding the accessibility of online resources due to poorly built websites. Further, most of the information has been available predominantly in German, with few sources being also available in English.

Moreover, no events in other languages than German have been indicated.

Thus, while comparatively developed, resource accessibility leaves room for improvement, especially when it comes to the diminishment of language barriers and professionalized online-sources.

### **7) Structured Dialogue**

The specific structures of the different events that have been highlighted, such as round tables for different interest groups in Bavaria, or the decentralised forums in BW all had a clear structure in which each part served its own purpose. Most of these events gave room for information, discussion, suggestions, and further questionings of experts. The wide range of actors involved as well as the different opportunities to attend events tailored to the needs of the different stakeholders suggest the consideration of basic structures that allow for constructive dialogue in both states, as one may argue. Additionally, when feedback was highlighted, it was generally positive towards the form of and implementation of participatory activities. Thus, one may argue for the occurrence, or at least the opportunity for all stakeholders to participate via structured dialogue.

### **8) Continuity/ Social Learning**

Finally, as has been mentioned several times above, most of the events were implemented multiple times and with long lead times ahead of the final submission of the RBMP and the PoM, sometimes starting as early as in 2001. Further, the different contexts in which information was delivered and the different forms of activities suggest enhanced rates of continuous social learning and the creation of social capital. This is supported by the quantity of measure and issue specific statements that have been submitted across all programming periods, from experts and non-professional stakeholders within the water sector alike. Thus, we may conclude that sufficient time and informational resources have been employed to enable the building profound knowledge regarding water-related issues.

## **6.3 Comparing RBD Danube and RBD Warnow/Peene**

Having assessed the two cases based on the eight features that establish the methodological framework, one may conclude two main observations. Firstly, both RBDs have implemented the basic provisions for the active involvement of all interested parties through the provision of resources, the possibility of contributing via statements, as well as the hosting of several events that allowed several stakeholders to get informed about the objectives, progress, and measures

of the decision-making process regarding the drafting of the RBMP and the PoM and thus, the implementation of the WFD. Nevertheless, beyond these similarities, both RBDs paint very different pictures when it comes to the efforts beyond the standard provisions of the WFD. Namely, we may observe a large variety of efforts in the RBDD to involve all interested parties and to provide sufficient opportunities for learning and discussing and for the early resolution of individual concerns. Further, the RBDD presented the opportunity to actively participate not only through the provision of statements, but through enabling the submission of ideas and the voicing of opinions from a very early stage. While both of the RBDs lack adequate resources for non-German-speaking stakeholders, as well as adequate online resources, the RBDwp further lacks the ability to balance those shortcomings via a multitude of approaches. Thus, without being able to argue for one single model of active participation in the context of the Water Framework Directive, comparing those two cases demonstrates strong insufficiencies of the public participation process in the River Basin District Warnow/Peene.

## CHAPTER 7: Conclusions

The thesis has analysed the implementation of participatory processes in the state of Germany under the umbrella of the European Water Framework Directive (EC/60/2000), under the premises of the importance of local participation for the successful achievement of respective policy objectives in the realm of water resource management in Europe. The paper has asked the question: “how can we identify local and regional differences in approaches to active public participation in the context of common policy-objectives?”. The question has been answered through the investigation of eight features - such as transparency, structure, or inclusiveness of the participatory processes – which has further served as the basis for answering the sub-question: “How can we understand those differences in the context of the Water Framework Directive in Germany?”. The analysis has shown that in both cases, local conditions differ vastly, requiring for a specific application of strategies addressed towards the difficulties of involving the public. Though both cases show a commitment to the obligations towards public involvement as defined by the WFD, they vary when it comes to the specific implementation. In particular, the RBDd applies a multitude of strategies to involve all interested parties into the general process of the implementation of the WFD. On the other hand, the RBDwp has struggled to adjust general measures to the issues at hand in the local context. Specifically, the RBDwp might be assumed to have, among others, greater difficulties in terms of general availability of resources, as well as the assumed interest in public participation. However, in contrast to addressing the local issues and increase efforts to involve the public in the area, it has been argued the RBDwp has focussed on the bare minimum of encouraging public participation. Thus, irrespective of the final outcome of the policy framework, the general effort towards implementing the WFD with respect to public participation has been low in the RBDwp, especially when compared to efforts in the RBDd. Thus, the study has shown the possible shortcomings while adhering to the general guidelines of the WFD.

However, the study equally shows that, in general, the obligations of the WFD are widely accepted and interest in participation in the German state is high, which leads to the assumption of a general success of involving the public into the decision-making and planning processes of the WFD. Nevertheless, as the focus of the study might be argued to be rather specific, future investigations, especially concerning the possible causality between the involvement of the public and the achievement of the goals set out by the European Union might be of decisive interest to general literature on the implementation of the WFD.

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